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## Programmable Logic Control

# Communication device Quick guide

Users for Modbus TCP & Ethernet/IP

## XGT Series



XGL-DBDT  
XGL-DBDF  
XGL-DBDH  
XEL-BSSRT  
XEL-BSSRF  
XEL-BSSRH  
GEL-TR4C/C1  
GEL-DT4C/C1  
GEL-D24C  
GEL-RY2C  
GEL-AV8C  
GEL-AC8C  
GEL-DV4C  
GEL-DC4C



### Safety Instructions

- Read this manual carefully before installing, wiring, operating, servicing or inspecting this equipment.
- Keep this manual within easy reach for quick reference.

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# Chapter 1 Overview

This user manual is a quick guide to the communication device module.

It consists of the contents necessary for communication using the general Modbus TCP and Ethernet/IP protocols rather than smart expansion.

For information on RAPIEnet or smart expansion, please refer to the [communication device user manual](#) on the SSQ website.

Prerequisite Knowledge for Understanding the Manual.

Communication device module

RAPIEnet+

Modbus TCP

Ethernet/IP

XG5000

## Chapter 2 Product specifications

### 2.1 Performance specifications

The following describes the specifications of the system configuration according to the media of the Communication device. Please refer to the table below when configuring the system.

#### 2.1.1 Expansion driver

Item		XGL-DBDT	XGL-DBDF	XGL-DBDH
Station number / IP setting method		Rotary switch, XG5000, BOOTP/DHCP		
Station number / IP setting range		Station number: Rotary switch(1 ~ 99) - When the rotary switch is set to 0, the station number setting value set by the tool (0 to 220) IP: 192.168.1.xx(xx:100 + rotary switch 1~99) - When the rotary switch is set to 0, the station number setting value set by the tool		
Maximum number of modules to be installed		12ea		
I/O Refresh size		Max input refresh size	768 bytes	
		Max output refresh size	768 bytes	
Protocol Specifications	RAPIenet	Data processing unit	Byte(8bit)	
		Max read data size	1,400 Byte	
		Max write data size	1,400 Byte	
		Max No. of connected stations per network	64 station	
	EtherNet/IP	Data processing unit	Byte(8bit)	
		Max read data size	Non-periodic tag: 1,400 Byte Non-periodic object : 1,024 Byte Cycle 1,024 Byte	
		Max write data size	Non-periodic tag: 1,400 Byte Non-periodic object : 1,024 Byte Cycle 1,024 Byte	
		Available communication type	Connection-type (Cycle) messages: Class1 Non connection type(Non-periodic ) message: Tag, Object	
		Maximum number of connections	Connection-type (Cycle) :10 Non connection type(Non-periodic ) message(Tag, Object):10	
	Modbus/TCP	Data processing unit	Word(16bit),bit	
		Max read data size	125 Word(2,000 Bits)	
		Max write data size	123 Word(1,968 Bits)	
		Maximum number of connections	64	

2.1.2 Smart I/O expansion type

Item		XEL-BSSRT	XEL-BSSRF	XEL-BSSRH
Station number / IP setting method		Rotary switch, XG5000, BOOTP/DHCP		
Station number / IP setting range		Station number: Rotary switch(1 ~ 99) - When the rotary switch is set to 0, the station number setting value set by the tool (0 to 220) IP: 192.168.1.xx(xx:100 + rotary switch 1~99) - When the rotary switch is set to 0, the station number setting value set by the tool		
Maximum number of modules to be installed		8ea		
Protocol		RAPIEnet, EtherNet/IP, Modbus-TCP, BOOTP, DHCP (RAPIEnet, EtherNet / IP can be Smart extension with XGL-EFMxB)		
I/O Refresh size		Max inputs: refresh size	512 bytes	
		Max output: refresh size	512 bytes	
Protocol Specifications	RAPIEnet	Data processing unit	Byte(8bit)	
		Max read data size	1,400 Byte	
		Max write data size	1,400 Byte	
		Max No. of connected stations per network	64 station	
	EtherNet/IP	Data processing unit	Byte(8bit)	
		Max read data size	Non-periodic tag: 1,400 Byte Non-periodic object : 1,024 Byte Cycle 1,024 Byte	
		Max write data size	Non-periodic tag: 1,400 Byte Non-periodic object : 1,024 Byte Cycle 1,024 Byte	
		Available communication type	Connection-type (Cycle) messages: Class1 Non connection type(Non-periodic ) message: Tag, Object	
		Maximum number of connections	Connection-type (Cycle) :10 Non connection type(Non-periodic ) message(Tag, Object):10	
	Modbus/TCP	Data processing unit	Word(16bit),bit	
		Max read data size	125 Word(2,000 Bits)	
		Max write data size	123 Word(1,968 Bits)	
Maximum number of connections		64		

### 2.1.3 Smart I/O block type

#### (1) Communication specifications

Item		Content	
Station number / IP setting method		Rotary switch, XG5000, BOOTP/DHCP	
Station number / IP setting range		Station number: Rotary switch(1 ~ 99) -When the rotary switch is set to 0, the station number setting value set by the tool (0 to 220) IP: 192.168.1.xx(xx:100 + rotary switch 1~99) -When the rotary switch is set to 0, the station number setting value set by the tool	
I/O Refresh size		Max inputs: refresh size	64 bytes
		Max output: refresh size	64 bytes
Protocol Specifications	RAPIenet	Data processing unit	Byte(8bit)
		Max read data size	1,400 byte
		Max write data size	1,400 byte
		Max No. of connected stations per network	64 station
	EtherNet/IP	Data processing unit	Byte(8bit)
		Max read data size	Non-periodic tag: 1,400 Byte Non-periodic object : 1,024 Byte Cycle'1,024 Byte
		Max write data size	Non-periodic tag: 1,400 Byte Non-periodic object : 1,024 Byte Cycle'1,024 Byte
		Available communication type	Connection-type (Cycle) messages: Class1 Non connection type(Non-periodic ) message: Tag, Object
		Maximum number of connections	Connection-type (Cycle) :10 Non connection type(Non-periodic ) message(Tag, Object):10
	Modbus/TCP	Data processing unit	Word(16bit),bit
		Max read data size	125 Word(2,000 Bits)
		Max write data size	123 Word(1,968 Bits)
		Maximum number of connections	64

## Chapter 3 How to use communication devices

It was written so that communication devices can be easily used through Modbus TCP and Ethernet/IP.

### 3.1 Communication device usage steps Step.1 ~ Step.8

Step	Item	Contents		Remark
1	Communication device selection	XGL-DBDx, XEL-BSSRx, GEL-xxxx		-
2	IP Setting (Station No.)	Rotary switch, XG5000, BOOTP, DHCP		Choose 1 of 4 methods
3	Driver setting	RAPIenet Disable		-
4	I/O Configuration	- XGL-DBDx (12 expansion units, maximum 768 bytes) - XEL-BSSRx (8 expansion units, maximum 512 bytes) - GEL-xxxx: I/O fixation		Check max. data size, load current
5	I/O Module Parameter setting	Set by connecting XG5000 to XGL-DBDx, XEL-BSSRx, and GEL-xxxx		-
6	Check communication device data size	- Addressing_for_comm devices.exe - Addressing_for_comm devices.xlsx - Export Ethernet/IP EDS file - Refer to Appendix P.A-1		Choose 1 of 4 methods (Refer to attached file in SSQ)
7	Check I/O detailed device	Refer to the detailed I/O data area in Appendix P.A-4		-
8	Communication settings for each protocol	Modbus TCP	Use the data size in Step.6	-
		Ethernet/IP	- Conventional EDS: Use the data size in Step.6 - Exported EDS: No need to enter data size	-

#### 3.1.1 Step-by-step details on using communication devices

\* The details of Step.1 to Step.8 were written based on XEL-BSSRx.

#### Step.1 Communication device selection

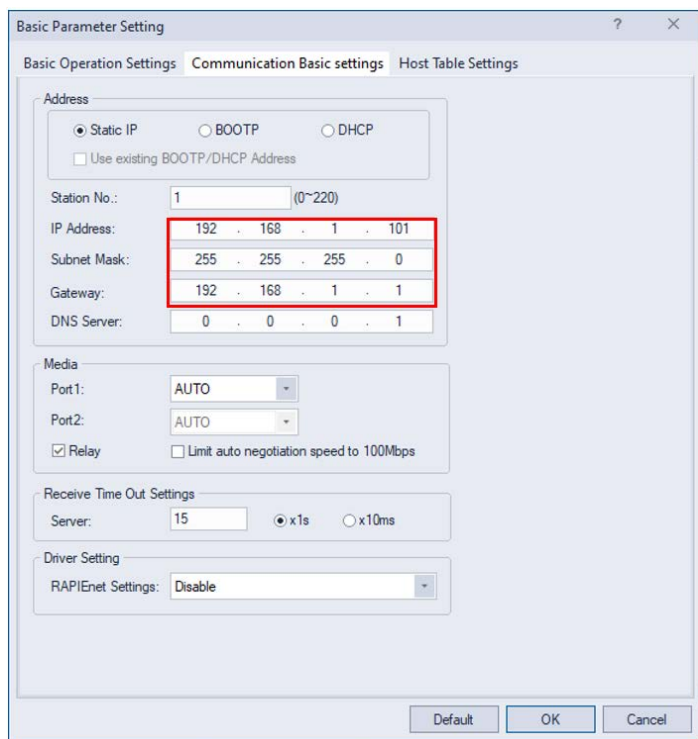
Select the communication device to use depending on the I/O support, performance, and series you want to use.

- XGK/I/R I/O : XGL-DBDT / XGL-DBDF / XGL-DBDH
- XGB I/O : XEL-BSSRT / XEL-BSSRF / XEL-BSSRH
- Block type Smart I/O : GEL-D24C / GEL-DT4C1 / GEL-DT4C / GEL-TR4C1 / GEL-TR4C / GEL-RY2C / GEL-AV8C / GEL-AC8C / GEL-DV4C / GEL-DC4C

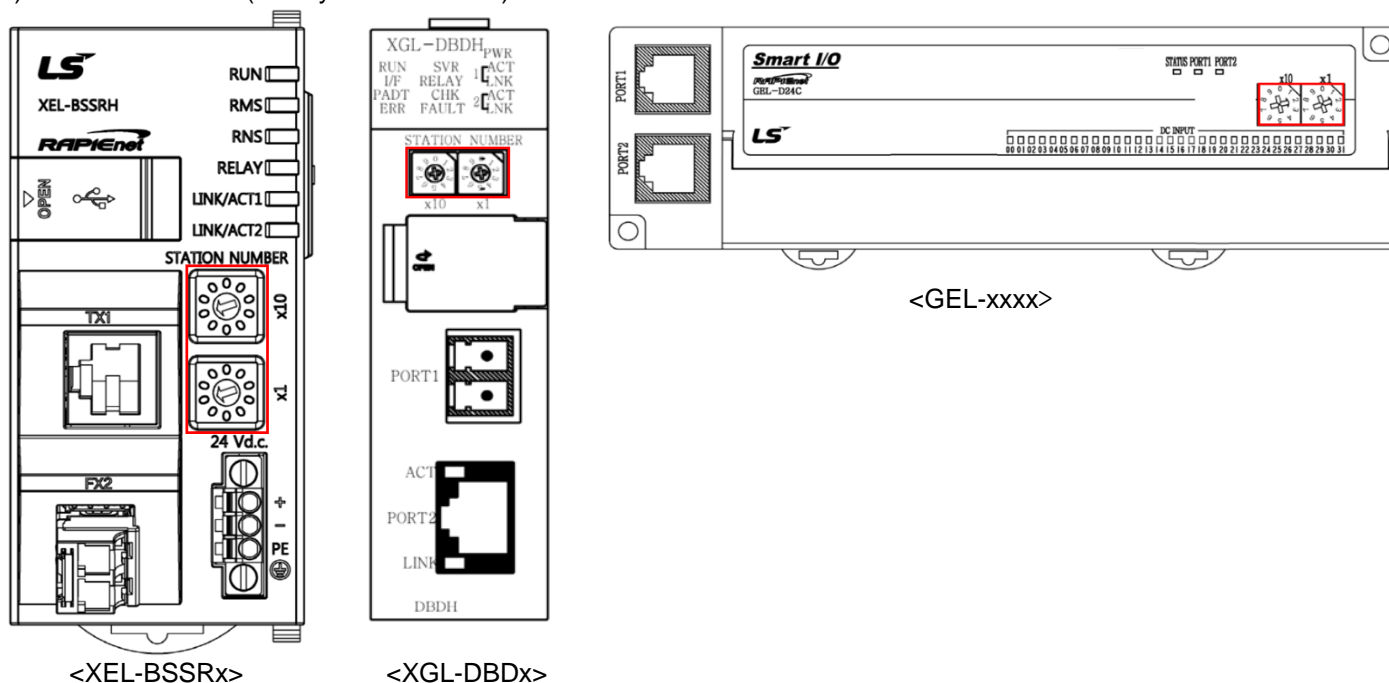
**Step.2 IP settings (Station No.)**

The station number can be set using rotary switch/XG5000, and the IP can be set using rotary switch/XG5000/BOOTP/DHCP. Among these, IP settings using XG5000 and rotary switch are shown below.

1. When the rotary switch is positioned at 0, IP: Apply the IP value set in XG5000 (select static IP allocation)  
Ex) IP: 192.168.1.101

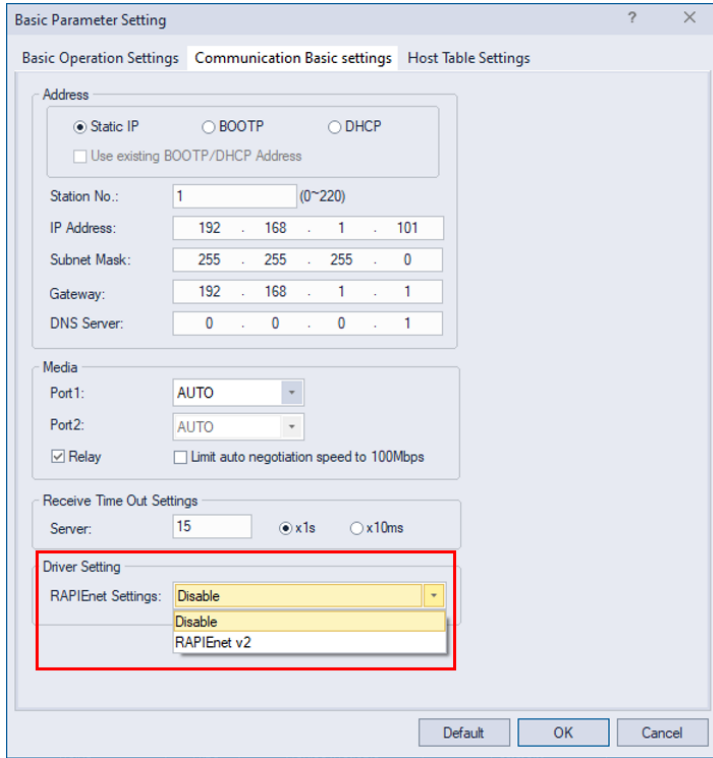


2. When the rotary switch is not positioned at 0: 192.168.1.xx (xx: 100 + Rotary switch 1~99)  
Ex) IP: 192.168.1.122 (Rotary Switch No. 22)



## Step.3 Driver setting

After connecting the XG5000 to the communication device via USB/Ethernet, change the driver setting to Disable.



RAPIenet v2 → Disable (Initial value: RAPIenet v2)

## Step.4 I/O Configuration

When configuring I/O for each communication device, pay attention to the maximum number of I/O installed and the current consumption of the communication device.

XEL-BSSRT specifications: Output current 3A, maximum expansion I/O 8 stages

→ XEL-BSSRT + I/O can be used with a current consumption of 3A or less.

XEL- BSSRT	XBF- AD04A	XBF- AD08A	XBE- DC16x	XBE- DC16x	XBE- RY16A	XBE- RY16A	XBF- DV04A	XBF- DC04C	
RUN RMS RNS RELAY L/A1 L/A2									
<b>Current consumption : 710mA</b>	120mA	105mA	40mA	40mA	440mA	440mA	110mA	70mA	= 2.075A

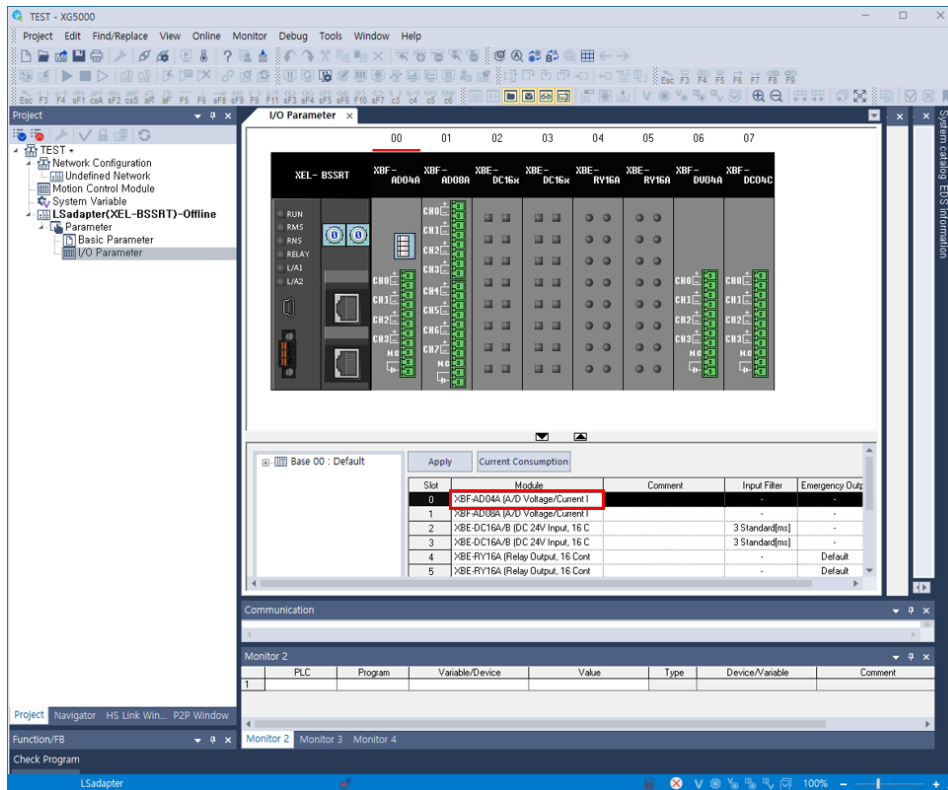
\* Current consumption  
 - XEL-BSSRT: 710mA  
 - XEL-BSSRF: 750mA  
 - XEL-BSSRH: 730mA

\* For other models, refer to the user manual for performance specifications.

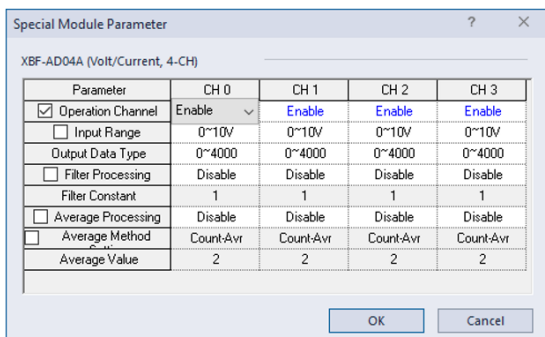
**Step.5 I/O Module parameter setting**

After completing the I/O configuration on the communication device, you must set parameters for each I/O through the communication device.

1. Connect XG5000 to the communication device via USB or Ethernet.
2. XG5000 -> Project window -> I/O parameters -> Double click module (red box).



3. Set the parameters for each I/O and click OK.



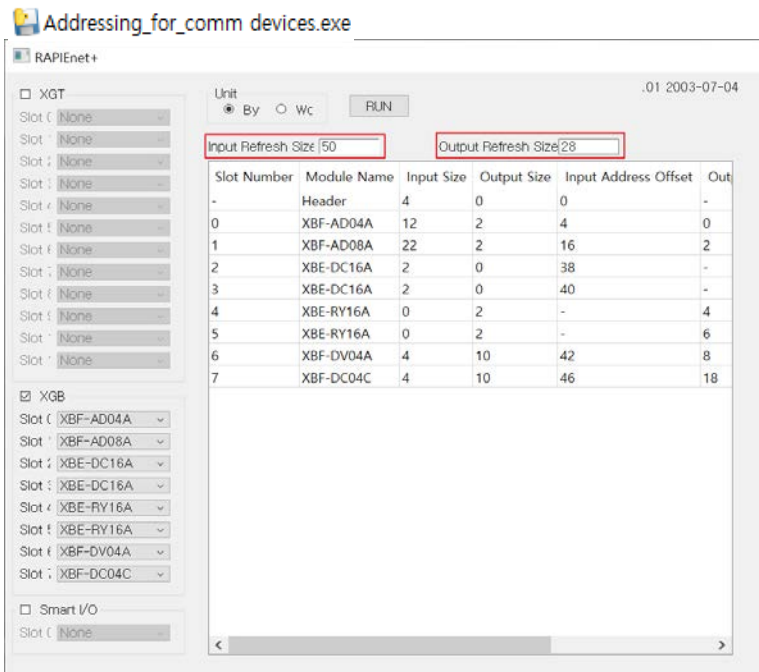
4. Click Online -> Write to apply parameters.

### Step.6 Check communication device data size

There are four ways to check the data size of a communication device.

#### 1. Addressing\_for\_comm.exe

Check the Input Refresh Size and Output Refresh Size by running the program, selecting I/O for each desired series and slot, and pressing RUN (To download the executable file, click the file name below)



#### 2. Addressing\_for\_comm devices.xlsx

"Check the Input Refresh Size and Output Refresh Size by opening the Excel sheet and selecting I/O by desired series and slot." (To download the Excel file, click the file name below)

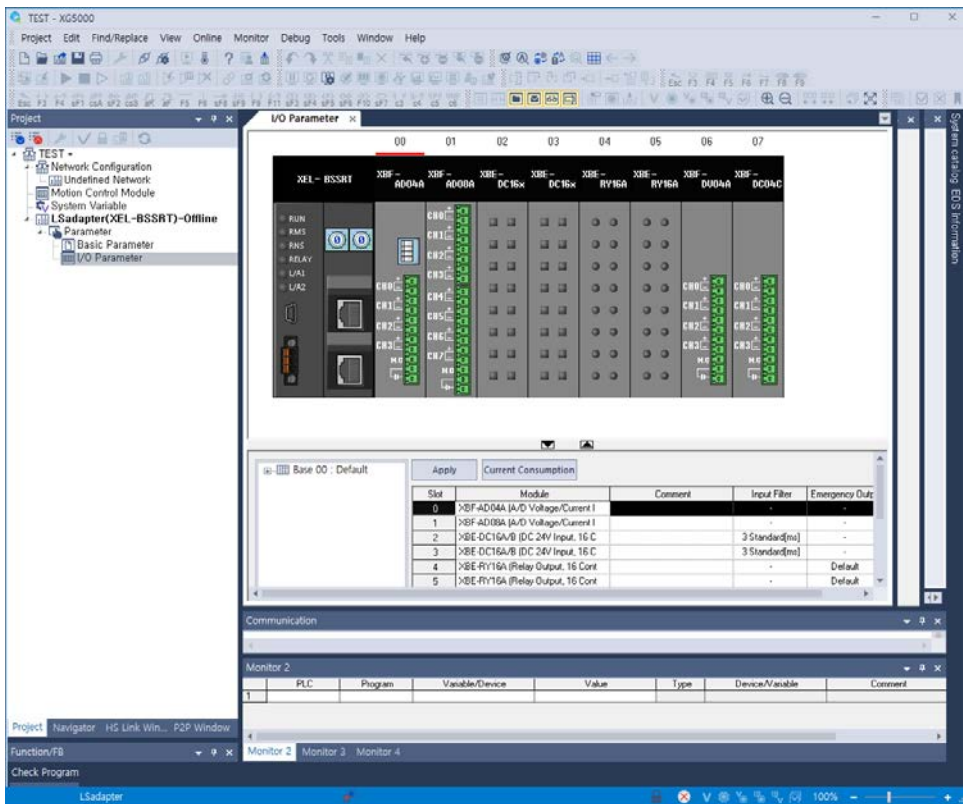
Addressing\_for\_comm devices.xlsx

SELECT -> **Expansion\_Smart\_IO**

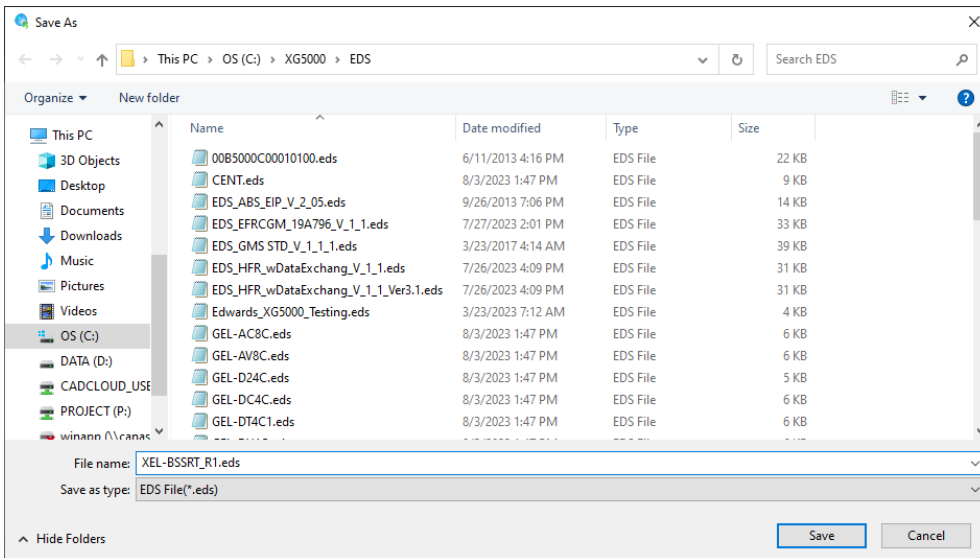
Slot	Module Name	Refresh Data [Byte]	
		Input	Output
<b>Header</b>		<b>4</b>	<b>0</b>
0	XBF-AD04A	12	2
1	XBF-AD08A	22	2
2	XBE-DC16A	2	0
3	XBE-DC16A	2	0
4	XBE-RY16A	0	2
5	XBE-RY16A	0	2
6	XBF-DV04A	4	10
7	XBF-DC04C	4	10
8		0	0
9		0	0
10		0	0
11		0	0
Total Refresh Data Size[Byte]		50	28
Total Refresh Data Size [Word]		25	14

3. Export Ethernet/IP EDS file

1) After creating a communication device project in XG5000, configure I/O in the I/O parameter window.



2) Project -> Export Ethernet/IP EDS file -> Save EDS file under a different name



3) Open the saved EDS file and check the Output Data size in Assem101 and the Input Data size in Assem102.

[Assembly]

```
Assem101 =  
    "Output Data",  
    ,  
    ,  
    0x0001,  
    "  
    8192,28;
```

```
Assem102 =  
    "Input Data",  
    ,  
    ,  
    0x0001,  
    "  
    8192,50;
```

4. Refer to Appendix P.A-1

Refer to Appendix P.A-1 for refresh data allocation size for each module.

Classification	Size of assignment data
Input refresh	4Byte (Input Header) + Sum of input data sizes of mounted modules (Digital input data, special module data read areas)
Output refresh	Sum of output data sizes of mounted modules (Digital output data, special module data write areas)

Calculate the data size by referring to the table below.

Large category	Small category	Product Name	Input [Byte]	Output [Byte]	
Smart I/O expansion	Digital module	Digital input module	XBE-DC08A	2	0
			XBE-DC16A/B	2	0
			XBE-DC32A	4	0
			XBE-AC08A	2	0
		Digital output module	XBE-TN/TP08A	0	2
			XBE-TN/TP16A	0	2
			XBE-TN/TP32A	0	4
			XBE-RY08A/B	0	2
			XBE-RY16A	0	2
			XBE-RY32A	0	4
	Digital input/output module	XBE-DR16A	2	2	
		XBE-DN32A	2	2	
	Special module	Analog input module	XBF-AD04A	12	2
			XBF-AD08A	22	2
			XBF-AD04C	26	2
		Analog output module	XBF-DV04A	4	10
			XBF-DC04A	4	10
			XBF-DC04B	4	10
			XBF-DV04C	4	10
			XBF-DC04C	4	10
			XBF-DC04D	4	10
		Analog input/output module	XBF-AH04A	12	6
		RTD input	XBF-RD04A	24	0
			XBF-RD01A	24	0
		TC input	XBF-TC04B	40	2
			XBF-TC04S	40	2
load cell		XBF-LD02S	58	6	
High speed counter module		XBF-HO02A	44	4	
	XBF-HD02A	44	4		

XBF-AD04A(12/2), XBF-AD08A(22/2), XBE-DC16A(2/0), XBE-DC16A(2/0), XBE-RY16A(0/2), XBE-RY16A(0/2), XBF-DV04A(4/10), XBF-DC04C(4/10)

Input size: Input Header 4byte +12byte +22byte +2byte +2byte +0byte +0byte +4byte +4byte = 50byte

Output size: 2byte +2byte +0byte +0byte +2byte +2byte +10byte +10byte = 28byte

### Step.7 Check I/O detailed device

The communication device manages the input and output data areas with the structure below.

Classification	Size of assignment data
Input refresh	4Byte (Input Header) + Sum of input data sizes of mounted modules (Digital input data, special module data read areas)
Output refresh	Sum of output data sizes of mounted modules (Digital output data, special module data write areas)

The fixed value of Input Header 4Byte can be checked in Appendix P.A-3 (LED status information).

#### A.2.2 XEL-BSSRx

Data address [Bit]	Content	Note										
0 -1	RUN LED (Green)	<table border="1"> <thead> <tr> <th>Data</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Off</td> </tr> <tr> <td>1</td> <td>On</td> </tr> <tr> <td>2</td> <td>Blink</td> </tr> <tr> <td>3</td> <td>Reserved</td> </tr> </tbody> </table>	Data	Status	0	Off	1	On	2	Blink	3	Reserved
Data	Status											
0	Off											
1	On											
2	Blink											
3	Reserved											
2-3	RUN LED (Red)											
4-5	RMS LED (Green)											
6-7	RMS LED (Red)											
8-9	RNS LED (Green)											
10 - 11	RNS LED (Red)											
12 - 13	RELAY LED (Green)											
14 -15	Reserved											
16 - 17	LINK/ACT1 LED (Green)											
18 - 19	LINK/ACT1 LED (Yellow)											
20 - 21	LINK/ACT2 LED (Green)											
22 -23	LINK/ACT2 LED (Yellow)											
24 - 31	Reserved											

Afterwards, the Input/Output Refresh data is listed in A.3 Refresh data in Appendix P.A-4. Please refer to it. (Basic Offset unit is Word = 2byte = 16bit)

Ex) XBF-AD04A, XBF-DV04A

- XBF-AD04A: When you want to read CH0\_DATA, access the 3rd word among the 6 input words assigned to XBF-AD04A.

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-AD04A_ERR	BIT	0.0	Analog input module: Module error
Input	XBF-AD04A_RDY	BIT	0.F	Analog input module: Module ready
Input	XBF-AD04A_CH0_ACT	BIT	1.0	Analog input module: CH0 RUN
Input	XBF-AD04A_CH1_ACT	BIT	1.1	Analog input module: CH1 RUN
Input	XBF-AD04A_CH2_ACT	BIT	1.2	Analog input module: CH2 RUN
Input	XBF-AD04A_CH3_ACT	BIT	1.3	Analog input module: CH3 RUN
Input	XBF-AD04A_CH0_DATA	Word	2	Analog input module: CH0 conversion value
Input	XBF-AD04A_CH1_DATA	Word	3	Analog input module: CH1 conversion value
Input	XBF-AD04A_CH2_DATA	Word	4	Analog input module: CH2 conversion value
Input	XBF-AD04A_CH3_DATA	Word	5	Analog input module: CH3 conversion value

<Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-AD04A_ERR_CLR	BIT	0.0	Analog input module: Error clear request

- XBF-DV04A: When writing a value to CH0 Data, you can access the 2nd word among the 5 Output Words assigned to XBF-DV04A.

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-DV04A_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	XBF-DV04A_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	XBF-DV04A_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error
Input	XBF-DV04A_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	XBF-DV04A_RDY	BIT	0.F	Analog output module: Module ready
Input	XBF-DV04A_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	XBF-DV04A_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN
Input	XBF-DV04A_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	XBF-DV04A_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN

<Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-DV04A_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	XBF-DV04A_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	XBF-DV04A_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	XBF-DV04A_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting
Output	XBF-DV04A_CH0_DATA	Word	1	Analog Output module: Channel 0 Input value
Output	XBF-DV04A_CH1_DATA	Word	2	Analog Output module: Channel 1 Input value
Output	XBF-DV04A_CH2_DATA	Word	3	Analog Output module: Channel 2 Input value
Output	XBF-DV04A_CH3_DATA	Word	4	Analog Output module: Channel 3 Input value

### Step.8 Communication settings for each protocol

1. Modbus TCP: Establish communication through Step.5 data size, Step.6 Map with device through detailed device.

When entering addresses in Modbus TCP, caution is required as follows.

Since the data size in Step.5 was calculated as a refresh area, the address needs to be changed according to the data type to fit the refresh area as shown below.

Ex) When Input Size: 25Word (50byte), Output Size: 14Word (28byte), add 0x200 to the start address as shown below.

Input start address: 0x30200, Length: 25Word

Output start address: 0x40200, Length: 14Word

\* When using devices other than Input/Output Refresh, please refer to Chapter 5 of the communication device user manual.

- Modbus data address for each device

Device	Data address		Function code		Note
	Word type	Bit type	Word type	Bit type	
I	0x0400~	0x4000~	04	02	
Q	0x0400~	0x4000~	03,06,16,23	01,05,15	
U	0x0600~	0x6000~	03,06,16,23	01,05,15	
F (Read Only)	0x0800~	0x8000~	04	02,	
F (Read/Write)	0x0A00~	0xA000~	03,06,16,23	01,05,15	
Input Refresh	0x0200~	0x2000~	04	02,	
Output Refresh	0x0200~	0x2000~	03,06,16,23	01,05,15	

- Data address for each function

Code	Function code name	Address	Note
01	Read output contact status (Read Coil Status)	0XXXX (bit-output)	Read bit
02	Read Input Status	1XXXX (bit-input)	Read bit
03	Read Holding Registers	4XXXX (word-output)	Read word
04	Read Input Registers	3XXXX (word-input)	Read word
05	Force Single Coil	0XXXX (bit-output)	Write bit
06	Preset Single Register	4XXXX (word-output)	Write word
15	Force Multiple Coils	0XXXX (bit-output)	Write bit
16	Preset Multiple Register	4XXXX (word-output)	Write word

2. Ethernet/IP

- Using existing EDS: Use Step.5 data size, and map to device through Step.6 detailed values for each I/O.
- Use exported EDS: After registering a new EDS, map it to the device through Step.6 detailed values for each I/O.

Step.5, 3. After Export Ethernet/IP EDS file, change ProdName to XEL-BSSRT □ XEL-BSSRT\_random value in the generated EDS file. If you do not change it, the exported EDS will not be registered in XG5000 because the ProdName of the existing EDS and the exported EDS are the same.

< Screen where the exported EDS is registered after changing the ProdName >

```

[File]
$ File Description Text
  DescText = "XEL-BSSRT EDS FILE";
$ File Creation Data
  CreateDate = 03-09-2018;
$ File Creation Time
  CreateTime = 08:49:15;
$ Last Modification Date
  ModDate = 03-09-2018;
$ Last Modification Time
  ModTime = 08:49:15;
$ EDS Revision
  Revision = 1.0;
  HomeURL = "http://www.ls-electric.com";

[Device]
  VendCode = 259;
  VendName = "LS ELECTRIC Co., Ltd.";
  ProdType = 12;
  ProdTypeStr = "Communications Adapter";
  ProdCode = 3001;
  MajRev = 1;
  MinRev = 1;
  ProdName = "XEL-BSSRT_R1";
        
```

The screenshot shows a window titled 'EDS information' with a tree view under 'Device'. The tree includes folders for 'Communications Adapter', 'PSS 4000', 'Anybus-S EtherNet/IP', 'Edwards XG5000 Testing', 'GS20A EtherNet/IP Card', 'IO-Link Master PFL EIP 8P IP67', 'IO-Link Master PFL EIP 8P IP69K', 'PNOZ m ES EtherNet/IP', 'STRIDE IO-Link Basic DIO8 IOL8', 'XBL-EIPT', 'XEL-BSSB', 'XEL-BSSRF', 'XEL-BSSRH', 'XEL-BSSRT', 'XEL-BSSRT\_LoadCell', and 'XEL-BSSRT\_R1'. The 'XEL-BSSRT\_R1' folder is selected and highlighted with a yellow box.

Afterwards, the fixed data size of XEL-BSSRT is confirmed in the XG5000 -> EIP -> P2P block.  
 (Data size cannot be changed in exported EDS)

Index	Channel	Operation Mode	I/O type	Connection type	Function	Parameter	Parameter contents	Conditional flag	Transmission period(ms)	Timeout	Data Type	tag settings		
												Local tag	Remote tag	Data count
0	0	Implicit Client	0.In/Out	Multicast		Parameter	T20 Tag Size:50 O2T Tag Size:28		100	0. RPI x4	ARRAY[0..49] OF BYTE	BYTE_50/M00000		50
1		Implicit Client							100		ARRAY[0..27] OF BYTE	BYTE_28/M01000		28

## Appendix

### A.1 Refresh data allocation size for each module

#### A.1.1 Assignment data for each expansion module

Large category		Small category	Device Name	Input [Byte]	Output [Byte]
Expansion drive	Digital module	Digital input module	XGI-D21A	2	0
			XGI-D22A/B	2	0
			XGI-D24A/B	4	0
			XGI-D28A/B	8	0
			XGI-A12A	2	0
			XGI-A21A/C	2	0
			XGI-D21D	2	0
		Digital output module	XGQ-RY1A	0	2
			XGQ-RY2A/B	0	2
			XGQ-TR1C	0	2
			XGQ-TR2A/B	0	2
			XGQ-TR4A/B	0	4
			XGQ-TR8A/B	0	8
			XGQ-SS2A	0	2
	Digital Input/output module	XGQ-RY1D	2	2	
	Special module	Analog input module	XGH-DT4A	2	2
			XGF-AV8A	26	2
			XGF-AC8A	26	2
			XGF-AD4S	22	2
			XGF-AD8A	26	2
			XGF-AD16A	44	2
			XGF-AC4H	22	2
		Analog output module	XGF-AW4S	22	2
			XGF-DV4A	4	20
			XGF-DV8A	4	20
			XGF-DC4A	4	20
			XGF-DC8A	4	20
XGF-DV4S			4	20	
XGF-DC4S	4		20		
Analog input/output module	XGF-DC4H	4	20		
	XGF-AH6A	14	10		
High Speed Counter module	XGF-HO2A	46	4		
	XGF-HD2A	46	4		
	XGF-HO8A	42	8		
Expansion driver	Special module	Temperature input module	XGF-RD4A	58	2
			XGF-RD4S	58	2
			XGF-TC4S	58	2
			XGF-RD8A	44	2

Large category	Small category	Device Name	Input [Byte]	Output [Byte]
	Process control module	XGF-TC4UD	36	26
		XGF-TC4RT	36	26

Large category	Small category	Product Name	Input [Byte]	Output [Byte]	
Smart I/O expansion	Digital module	Digital input module	XBE-DC08A	2	0
			XBE-DC16A/B	2	0
			XBE-DC32A	4	0
			XBE-AC08A	2	0
		Digital output module	XBE-TN/TP08A	0	2
			XBE-TN/TP16A	0	2
			XBE-TN/TP32A	0	4
			XBE-RY08A/B	0	2
		Digital input/output module	XBE-DR16A	2	2
			XBE-DN32A	2	2
	Special module	Analog input module	XBF-AD04A	12	2
			XBF-AD08A	22	2
			XBF-AD04C	26	2
		Analog output module	XBF-DV04A	4	10
			XBF-DC04A	4	10
			XBF-DC04B	4	10
			XBF-DV04C	4	10
		Analog input/output module	XBF-DC04C	4	10
			XBF-AH04A	12	6
		RTD input	XBF-RD04A	24	0
			XBF-RD01A	24	0
		TC input	XBF-TC04B	40	2
			XBF-TC04S	40	2
		load cell	XBF-LD02S	58	6
		High speed counter module	XBF-HO02A	44	4
			XBF-HD02A	44	4

## A.1.2 Smart I/O block Data allocation size

Large category	Small category	Product Name	Input [Byte]	Output [Byte]
Smart I/O block	Digital input module	GEL-D24C	4	0
	Digital output module	GEL-RY2C	0	2
		GEL-TR4C/C1	0	4
	Digital input-output module	GEL-DT4C/C1	2	2
	Analog input module	GEL-AC8C	26	2
		GEL-AV8C	26	2
	Analog output module	GEL-DC4C	4	20
		GEL-DV4C	4	20

## A.2 LED status information

In refresh data allocation, the first 4 bytes of the input refresh area consist of LED status information.

Classification	Size of assignment data
Input refresh	4Byte (Input Header) + Sum of input data sizes of mounted modules (Digital input data, special module data read areas)
Output refresh	Sum of output data sizes of mounted modules (Digital output data, special module data write areas)

The LED color (Green / Yellow / Red) in the table below indicates the LED color of the module displayed in the system diagnostics, not the color of the module LED display.

### A.2.1 XGL-DBDx

Data address [Bit]	Content	Note										
0 -1	RUN LED (Green)	<table border="1"> <thead> <tr> <th>Data</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Off</td> </tr> <tr> <td>1</td> <td>On</td> </tr> <tr> <td>2</td> <td>Blink</td> </tr> <tr> <td>3</td> <td>Reserved</td> </tr> </tbody> </table>	Data	Status	0	Off	1	On	2	Blink	3	Reserved
Data	Status											
0	Off											
1	On											
2	Blink											
3	Reserved											
2-3	RING LED (Green)											
4-5	RELAY LED (Green)											
6-7	CHK LED (Green)											
8-9	FAULT LED (Red)											
10 – 11	ERR LED (Red)											
12 - 13	LINK1 LED (Green)											
14 -15	LINK1 LED (Yellow)											
16 – 17	LINK2 LED (Green)											
18 – 19	LINK2 LED (Yellow)											
20 - 31	Reserved											

### A.2.2 XEL-BSSRx

Data address [Bit]	Content	Note										
0 -1	RUN LED (Green)	<table border="1"> <thead> <tr> <th>Data</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Off</td> </tr> <tr> <td>1</td> <td>On</td> </tr> <tr> <td>2</td> <td>Blink</td> </tr> <tr> <td>3</td> <td>Reserved</td> </tr> </tbody> </table>	Data	Status	0	Off	1	On	2	Blink	3	Reserved
Data	Status											
0	Off											
1	On											
2	Blink											
3	Reserved											
2-3	RUN LED (Red)											
4-5	RMS LED (Green)											
6-7	RMS LED (Red)											
8-9	RNS LED (Green)											
10 – 11	RNS LED (Red)											
12 – 13	RELAY LED (Green)											
14 -15	Reserved											
16 – 17	LINK/ACT1 LED (Green)											
18 – 19	LINK/ACT1 LED (Yellow)											
20 – 21	LINK/ACT2 LED (Green)											
22 -23	LINK/ACT2 LED (Yellow)											
24 – 31	Reserved											

### A.2.3 GEL-xxxx

In the table below, the PORT LED differs from the module LED display.

In the system diagnostics, if the PORT LED is GREEN ON, the 100M link up status is displayed.

Data address [Bit]	Content	Note										
0 -1	STATUS LED (Green)	<table border="1"> <thead> <tr> <th>Data</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Off</td> </tr> <tr> <td>1</td> <td>On</td> </tr> <tr> <td>2</td> <td>Blink</td> </tr> <tr> <td>3</td> <td>Reserved</td> </tr> </tbody> </table>	Data	Status	0	Off	1	On	2	Blink	3	Reserved
Data	Status											
0	Off											
1	On											
2	Blink											
3	Reserved											
2-3	STATUS LED (Red)											
4-5	PORT1 LED (Green)											
6-7	PORT1 LED (Red)											
8-9	PORT2 LED (Green)											
10 – 11	PORT2 LED (Red)											
12 - 13	LATCH LED (Green)											
14 -15	LATCH LED (Red)											
16 – 31	Reserved											

## A.3 Refresh data list

### A.3.1 XGL-DBDx

(1) XGF-AV8A

1) Refresh data

<Input>

Input/output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-AV8A_ERR	BIT	0.0	Analog input module: Module error
Input	XGF-AV8A_RDY	BIT	0.F	Analog input module: Module ready
Input	XGF-AV8A_CH0_ACT	BIT	1.0	Analog input module: CH0 RUN
Input	XGF-AV8A_CH1_ACT	BIT	1.1	Analog input module: CH1 RUN
Input	XGF-AV8A_CH2_ACT	BIT	1.2	Analog input module: CH2 RUN
Input	XGF-AV8A_CH3_ACT	BIT	1.3	Analog input module: CH3 RUN
Input	XGF-AV8A_CH4_ACT	BIT	1.4	Analog input module: CH4 RUN
Input	XGF-AV8A_CH5_ACT	BIT	1.5	Analog input module: CH5 RUN
Input	XGF-AV8A_CH6_ACT	BIT	1.6	Analog input module: CH6 RUN
Input	XGF-AV8A_CH7_ACT	BIT	1.7	Analog input module: CH7 RUN
Input	XGF-AV8A_CH0_DATA	WORD	2	Analog input module: CH0 conversion value
Input	XGF-AV8A_CH1_DATA	WORD	3	Analog input module: CH1 conversion value
Input	XGF-AV8A_CH2_DATA	WORD	4	Analog input module: CH2 conversion value
Input	XGF-AV8A_CH3_DATA	WORD	5	Analog input module: CH3 conversion value
Input	XGF-AV8A_CH4_DATA	WORD	6	Analog input module: CH4 conversion value
Input	XGF-AV8A_CH5_DATA	WORD	7	Analog input module: CH5 conversion value
Input	XGF-AV8A_CH6_DATA	WORD	8	Analog input module: CH6 conversion value
Input	XGF-AV8A_CH7_DATA	WORD	9	Analog input module: CH7 conversion value
Input	XGF-AV8A_CH0_IDD	BIT	10.0	Analog input module: CH0 input disconnection detection
Input	XGF-AV8A_CH1_IDD	BIT	10.1	Analog input module: CH1 input disconnection detection
Input	XGF-AV8A_CH2_IDD	BIT	10.2	Analog input module: CH2 input disconnection detection
Input	XGF-AV8A_CH3_IDD	BIT	10.3	Analog input module: CH3 input disconnection detection
Input	XGF-AV8A_CH4_IDD	BIT	10.4	Analog input module: CH4 input disconnection detection
Input	XGF-AV8A_CH5_IDD	BIT	10.5	Analog input module: CH5 input disconnection detection
Input	XGF-AV8A_CH6_IDD	BIT	10.6	Analog input module: CH6 input disconnection detection
Input	XGF-AV8A_CH7_IDD	BIT	10.7	Analog input module: CH7 input disconnection detection
Input	XGF-AV8A_CH0_HOOR	BIT	11.0	Analog input module: Channel 0 upper limit alarm
Input	XGF-AV8A_CH1_HOOR	BIT	11.1	Analog input module: Channel 1 upper limit alarm
Input	XGF-AV8A_CH2_HOOR	BIT	11.2	Analog input module: Channel 2 upper limit alarm
Input	XGF-AV8A_CH3_HOOR	BIT	11.3	Analog input module: Channel 3 upper limit alarm
Input	XGF-AV8A_CH4_HOOR	BIT	11.4	Analog input module: Channel 4 upper limit alarm
Input	XGF-AV8A_CH5_HOOR	BIT	11.5	Analog input module: Channel 5 upper limit alarm
Input	XGF-AV8A_CH6_HOOR	BIT	11.6	Analog input module: Channel 6 upper limit alarm
Input	XGF-AV8A_CH7_HOOR	BIT	11.7	Analog input module: Channel 7 upper limit alarm
Input	XGF-AV8A_CH0_LOOR	BIT	12.0	Analog input module: Channel 0 lower limit alarm
Input	XGF-AV8A_CH1_LOOR	BIT	12.1	Analog input module: Channel 1 lower limit alarm
Input	XGF-AV8A_CH2_LOOR	BIT	12.2	Analog input module: Channel 2 lower limit alarm
Input	XGF-AV8A_CH3_LOOR	BIT	12.3	Analog input module: Channel 3 lower limit alarm
Input	XGF-AV8A_CH4_LOOR	BIT	12.4	Analog input module: Channel 4 lower limit alarm

## Appendix

Input	XGF-AV8A_CH5_LOOR	BIT	12.5	Analog input module: Channel 5 lower limit alarm
Input	XGF-AV8A_CH6_LOOR	BIT	12.6	Analog input module: Channel 6 lower limit alarm
Input	XGF-AV8A_CH7_LOOR	BIT	12.7	Analog input module: Channel 7 lower limit alarm

### <Output>

Input/output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-AV8A_ERR_CLR	BIT	0.0	Analog input module: Error clear request

## (2) XGF-AC8A

### 1) Refresh data

#### <Input>

Input/output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-AC8A_ERR	BIT	0.0	Analog input module: Module error
Input	XGF-AC8A_RDY	BIT	0.F	Analog input module: Module ready
Input	XGF-AC8A_CH0_ACT	BIT	1.0	Analog input module: CH0 RUN
Input	XGF-AC8A_CH1_ACT	BIT	1.1	Analog input module: CH1 RUN
Input	XGF-AC8A_CH2_ACT	BIT	1.2	Analog input module: CH2 RUN
Input	XGF-AC8A_CH3_ACT	BIT	1.3	Analog input module: CH3 RUN
Input	XGF-AC8A_CH4_ACT	BIT	1.4	Analog input module: CH4 RUN
Input	XGF-AC8A_CH5_ACT	BIT	1.5	Analog input module: CH5 RUN
Input	XGF-AC8A_CH6_ACT	BIT	1.6	Analog input module: CH6 RUN
Input	XGF-AC8A_CH7_ACT	BIT	1.7	Analog input module: CH7 RUN
Input	XGF-AC8A_CH0_DATA	WORD	2	Analog input module: CH0 conversion value
Input	XGF-AC8A_CH1_DATA	WORD	3	Analog input module: CH1 conversion value
Input	XGF-AC8A_CH2_DATA	WORD	4	Analog input module: CH2 conversion value
Input	XGF-AC8A_CH3_DATA	WORD	5	Analog input module: CH3 conversion value
Input	XGF-AC8A_CH4_DATA	WORD	6	Analog input module: CH4 conversion value
Input	XGF-AC8A_CH5_DATA	WORD	7	Analog input module: CH5 conversion value
Input	XGF-AC8A_CH6_DATA	WORD	8	Analog input module: CH6 conversion value
Input	XGF-AC8A_CH7_DATA	WORD	9	Analog input module: CH7 conversion value
Input	XGF-AC8A_CH0_IDD	BIT	10.0	Analog input module: CH0 input disconnection detection
Input	XGF-AC8A_CH1_IDD	BIT	10.1	Analog input module: CH1 input disconnection detection
Input	XGF-AC8A_CH2_IDD	BIT	10.2	Analog input module: CH2 input disconnection detection
Input	XGF-AC8A_CH3_IDD	BIT	10.3	Analog input module: CH3 input disconnection detection
Input	XGF-AC8A_CH4_IDD	BIT	10.4	Analog input module: CH4 input disconnection detection
Input	XGF-AC8A_CH5_IDD	BIT	10.5	Analog input module: CH5 input disconnection detection
Input	XGF-AC8A_CH6_IDD	BIT	10.6	Analog input module: CH6 input disconnection detection
Input	XGF-AC8A_CH7_IDD	BIT	10.7	Analog input module: CH7 input disconnection detection
Input	XGF-AC8A_CH0_HOOR	BIT	11.0	Analog input module: Channel 0 upper limit alarm
Input	XGF-AC8A_CH1_HOOR	BIT	11.1	Analog input module: Channel 1 upper limit alarm
Input	XGF-AC8A_CH2_HOOR	BIT	11.2	Analog input module: Channel 2 upper limit alarm
Input	XGF-AC8A_CH3_HOOR	BIT	11.3	Analog input module: Channel 3 upper limit alarm
Input	XGF-AC8A_CH4_HOOR	BIT	11.4	Analog input module: Channel 4 upper limit alarm
Input	XGF-AC8A_CH5_HOOR	BIT	11.5	Analog input module: Channel 5 upper limit alarm
Input	XGF-AC8A_CH6_HOOR	BIT	11.6	Analog input module: Channel 6 upper limit alarm

Input	XGF-AC8A_CH7_HOOR	BIT	11.7	Analog input module: Channel 7 upper limit alarm
Input	XGF-AC8A_CH0_LOOR	BIT	12.0	Analog input module: Channel 0 lower limit alarm
Input	XGF-AC8A_CH1_LOOR	BIT	12.1	Analog input module: Channel 1 lower limit alarm
Input	XGF-AC8A_CH2_LOOR	BIT	12.2	Analog input module: Channel 2 lower limit alarm
Input	XGF-AC8A_CH3_LOOR	BIT	12.3	Analog input module: Channel 3 lower limit alarm
Input	XGF-AC8A_CH4_LOOR	BIT	12.4	Analog input module: Channel 4 lower limit alarm
Input	XGF-AC8A_CH5_LOOR	BIT	12.5	Analog input module: Channel 5 lower limit alarm
Input	XGF-AC8A_CH6_LOOR	BIT	12.6	Analog input module: Channel 6 lower limit alarm
Input	XGF-AC8A_CH7_LOOR	BIT	12.7	Analog input module: Channel 7 lower limit alarm

## &lt;Output&gt;

Input/output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-AC8A_ERR_CLR	BIT	0.0	Analog input module: Error clear request

## (3) XGF-AD8A

## 1) Refresh data

## &lt;Input&gt;

Input/Output	Variable	type	Device	Comment
Input	XGF-AD8A_ERR	BIT	0.0	Analog input module: Module error
Input	XGF-AD8A_RDY	BIT	00.F	Analog input module: Module ready
Input	XGF-AD8A_CH0_ACT	BIT	1.0	Analog input module: CH0 RUN
Input	XGF-AD8A_CH1_ACT	BIT	1.1	Analog input module: CH1 RUN
Input	XGF-AD8A_CH2_ACT	BIT	1.2	Analog input module: CH2 RUN
Input	XGF-AD8A_CH3_ACT	BIT	1.3	Analog input module: CH3 RUN
Input	XGF-AD8A_CH4_ACT	BIT	1.4	Analog input module: CH4 RUN
Input	XGF-AD8A_CH5_ACT	BIT	1.5	Analog input module: CH5 RUN
Input	XGF-AD8A_CH6_ACT	BIT	1.6	Analog input module: CH6 RUN
Input	XGF-AD8A_CH7_ACT	BIT	1.7	Analog input module: CH7 RUN
Input	XGF-AD8A_CH0_DATA	WORD	2	Analog input module: CH0 conversion value
Input	XGF-AD8A_CH1_DATA	WORD	3	Analog input module: CH1 conversion value
Input	XGF-AD8A_CH2_DATA	WORD	4	Analog input module: CH2 conversion value
Input	XGF-AD8A_CH3_DATA	WORD	5	Analog input module: CH3 conversion value
Input	XGF-AD8A_CH4_DATA	WORD	6	Analog input module: CH4 conversion value
Input	XGF-AD8A_CH5_DATA	WORD	7	Analog input module: CH5 conversion value
Input	XGF-AD8A_CH6_DATA	WORD	8	Analog input module: CH6 conversion value
Input	XGF-AD8A_CH7_DATA	WORD	9	Analog input module: CH7 conversion value
Input	XGF-AD8A_CH0_IDD	BIT	10.0	Analog input module: CH0 input disconnection detection
Input	XGF-AD8A_CH1_IDD	BIT	10.1	Analog input module: CH1 input disconnection detection
Input	XGF-AD8A_CH2_IDD	BIT	10.2	Analog input module: CH2 input disconnection detection
Input	XGF-AD8A_CH3_IDD	BIT	10.3	Analog input module: CH3 input disconnection detection
Input	XGF-AD8A_CH4_IDD	BIT	10.4	Analog input module: CH4 input disconnection detection
Input	XGF-AD8A_CH5_IDD	BIT	10.5	Analog input module: CH5 input disconnection detection
Input	XGF-AD8A_CH6_IDD	BIT	10.6	Analog input module: CH6 input disconnection detection
Input	XGF-AD8A_CH7_IDD	BIT	10.7	Analog input module: CH7 input disconnection detection
Input	XGF-AD8A_CH0_HOOR	BIT	11.0	Analog input module: Channel 0 upper limit alarm

## Appendix

Input	XGF-AD8A_CH1_HOOR	BIT	11.1	Analog input module: Channel 1 upper limit alarm
Input	XGF-AD8A_CH2_HOOR	BIT	11.2	Analog input module: Channel 2 upper limit alarm
Input	XGF-AD8A_CH3_HOOR	BIT	11.3	Analog input module: Channel 3 upper limit alarm
Input	XGF-AD8A_CH4_HOOR	BIT	11.4	Analog input module: Channel 4 upper limit alarm
Input	XGF-AD8A_CH5_HOOR	BIT	11.5	Analog input module: Channel 5 upper limit alarm
Input	XGF-AD8A_CH6_HOOR	BIT	11.6	Analog input module: Channel 6 upper limit alarm
Input	XGF-AD8A_CH7_HOOR	BIT	11.7	Analog input module: Channel 7 upper limit alarm
Input	XGF-AD8A_CH0_LOOR	BIT	12.0	Analog input module: Channel 0 lower limit alarm
Input	XGF-AD8A_CH1_LOOR	BIT	12.1	Analog input module: Channel 1 lower limit alarm
Input	XGF-AD8A_CH2_LOOR	BIT	12.2	Analog input module: Channel 2 lower limit alarm
Input	XGF-AD8A_CH3_LOOR	BIT	12.3	Analog input module: Channel 3 lower limit alarm
Input	XGF-AD8A_CH4_LOOR	BIT	12.4	Analog input module: Channel 4 lower limit alarm
Input	XGF-AD8A_CH5_LOOR	BIT	12.5	Analog input module: Channel 5 lower limit alarm
Input	XGF-AD8A_CH6_LOOR	BIT	12.6	Analog input module: Channel 6 lower limit alarm
Input	XGF-AD8A_CH7_LOOR	BIT	12.7	Analog input module: Channel 7 lower limit alarm

<Output>

Input/output	Variable	type	Device	Comment
Output	XGF-AD8A_ERR_CLR	BIT	0.0	Analog input module: Error clear request

### (4) XGF-AD16A

#### 1) Refresh data

<Input>

Input/output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-AD16A_ERR	BIT	0.0	Analog input module: Module error
Input	XGF-AD16A_RDY	BIT	0.F	Analog input module: Module ready
Input	XGF-AD16A_CH0_ACT	BIT	1.0	Analog input module: CH0 RUN
Input	XGF-AD16A_CH1_ACT	BIT	1.1	Analog input module: CH1 RUN
Input	XGF-AD16A_CH2_ACT	BIT	1.2	Analog input module: CH2 RUN
Input	XGF-AD16A_CH3_ACT	BIT	1.3	Analog input module: CH3 RUN
Input	XGF-AD16A_CH4_ACT	BIT	1.4	Analog input module: CH4 RUN
Input	XGF-AD16A_CH5_ACT	BIT	1.5	Analog input module: CH5 RUN
Input	XGF-AD16A_CH6_ACT	BIT	1.6	Analog input module: CH6 RUN
Input	XGF-AD16A_CH7_ACT	BIT	1.7	Analog input module: CH7 RUN
Input	XGF-AD16A_CH8_ACT	BIT	1.8	Analog input module: CH8 RUN
Input	XGF-AD16A_CH9_ACT	BIT	1.9	Analog input module: CH9 RUN
Input	XGF-AD16A_CH10_ACT	BIT	1.A	Analog input module: CH10 RUN
Input	XGF-AD16A_CH11_ACT	BIT	1.B	Analog input module: CH11 RUN
Input	XGF-AD16A_CH12_ACT	BIT	1.C	Analog input module: CH12 RUN
Input	XGF-AD16A_CH13_ACT	BIT	1.D	Analog input module: CH13 RUN
Input	XGF-AD16A_CH14_ACT	BIT	1.E	Analog input module: CH14 RUN
Input	XGF-AD16A_CH15_ACT	BIT	1.F	Analog input module: CH15 RUN
Input	XGF-AD16A_CH0_DATA	WORD	2	Analog input module: CH0 conversion value
Input	XGF-AD16A_CH1_DATA	WORD	3	Analog input module: CH1 conversion value
Input	XGF-AD16A_CH2_DATA	WORD	4	Analog input module: CH2 conversion value
Input	XGF-AD16A_CH3_DATA	WORD	5	Analog input module: CH3 conversion value
Input	XGF-AD16A_CH4_DATA	WORD	6	Analog input module: CH4 conversion value

Input	XGF-AD16A_CH5_DATA	WORD	7	Analog input module: CH5 conversion value
Input	XGF-AD16A_CH6_DATA	WORD	8	Analog input module: CH6 conversion value
Input	XGF-AD16A_CH7_DATA	WORD	9	Analog input module: CH7 conversion value
Input	XGF-AD16A_CH8_DATA	WORD	10	Analog input module: CH8 conversion value
Input	XGF-AD16A_CH9_DATA	WORD	11	Analog input module: CH9 conversion value
Input	XGF-AD16A_CH10_DATA	WORD	12	Analog input module: CH10 conversion value
Input	XGF-AD16A_CH11_DATA	WORD	13	Analog input module: CH11 conversion value
Input	XGF-AD16A_CH12_DATA	WORD	14	Analog input module: CH12 conversion value
Input	XGF-AD16A_CH13_DATA	WORD	15	Analog input module: CH13 conversion value
Input	XGF-AD16A_CH14_DATA	WORD	16	Analog input module: CH14 conversion value
Input	XGF-AD16A_CH15_DATA	WORD	17	Analog input module: CH15 conversion value
Input	XGF-AD16A_CH0_IDD	BIT	18.0	Analog input module: CH0 input disconnection detection
Input	XGF-AD16A_CH1_IDD	BIT	18.1	Analog input module: CH1 input disconnection detection
Input	XGF-AD16A_CH2_IDD	BIT	18.2	Analog input module: CH2 input disconnection detection
Input	XGF-AD16A_CH3_IDD	BIT	18.3	Analog input module: CH3 input disconnection detection
Input	XGF-AD16A_CH4_IDD	BIT	18.4	Analog input module: CH4 input disconnection detection
Input	XGF-AD16A_CH5_IDD	BIT	18.5	Analog input module: CH5 input disconnection detection
Input	XGF-AD16A_CH6_IDD	BIT	18.6	Analog input module: CH6 input disconnection detection
Input	XGF-AD16A_CH7_IDD	BIT	18.7	Analog input module: CH7 input disconnection detection
Input	XGF-AD16A_CH8_IDD	BIT	18.8	Analog input module: CH8 input disconnection detection
Input	XGF-AD16A_CH9_IDD	BIT	18.9	Analog input module: CH9 input disconnection detection
Input	XGF-AD16A_CH10_IDD	BIT	18.A	Analog input module: CH10 input disconnection detection
Input	XGF-AD16A_CH11_IDD	BIT	18.B	Analog input module: CH11 input disconnection detection
Input	XGF-AD16A_CH12_IDD	BIT	18.C	Analog input module: CH12 input disconnection detection
Input	XGF-AD16A_CH13_IDD	BIT	18.D	Analog input module: CH13 input disconnection detection
Input	XGF-AD16A_CH14_IDD	BIT	18.E	Analog input module: CH14 input disconnection detection
Input	XGF-AD16A_CH15_IDD	BIT	18.F	Analog input module: CH15 input disconnection detection
Input	XGF-AD16A_ERR_CLR	BIT	19.0	Analog input module: Error clear request (Reserved)
Input	XGF-AD16A_CH0_HOOR	BIT	20.0	Analog input module: Channel 0 upper limit alarm
Input	XGF-AD16A_CH1_HOOR	BIT	20.1	Analog input module: Channel 1 upper limit alarm
Input	XGF-AD16A_CH2_HOOR	BIT	20.2	Analog input module: Channel 2 upper limit alarm
Input	XGF-AD16A_CH3_HOOR	BIT	20.3	Analog input module: Channel 3 upper limit alarm
Input	XGF-AD16A_CH4_HOOR	BIT	20.4	Analog input module: Channel 4 upper limit alarm
Input	XGF-AD16A_CH5_HOOR	BIT	20.5	Analog input module: Channel 5 upper limit alarm
Input	XGF-AD16A_CH6_HOOR	BIT	20.6	Analog input module: Channel 6 upper limit alarm
Input	XGF-AD16A_CH7_HOOR	BIT	20.7	Analog input module: Channel 7 upper limit alarm
Input	XGF-AD16A_CH8_HOOR	BIT	20.8	Analog input module: Channel 8 upper limit alarm
Input	XGF-AD16A_CH9_HOOR	BIT	20.9	Analog input module: Channel 9 upper limit alarm
Input	XGF-AD16A_CH10_HOOR	BIT	20.A	Analog input module: Channel 10 upper limit alarm
Input	XGF-AD16A_CH11_HOOR	BIT	20.B	Analog input module: Channel 11 upper limit alarm
Input	XGF-AD16A_CH12_HOOR	BIT	20.C	Analog input module: Channel 12 upper limit alarm
Input	XGF-AD16A_CH13_HOOR	BIT	20.D	Analog input module: Channel 13 upper limit alarm
Input	XGF-AD16A_CH14_HOOR	BIT	20.E	Analog input module: Channel 14 upper limit alarm
Input	XGF-AD16A_CH15_HOOR	BIT	20.F	Analog input module: Channel 15 upper limit alarm
Input	XGF-AD16A_CH0_LOOR	BIT	21.0	Analog input module: Channel 0 lower limit alarm
Input	XGF-AD16A_CH1_LOOR	BIT	21.1	Analog input module: Channel 1 lower limit alarm
Input	XGF-AD16A_CH2_LOOR	BIT	21.2	Analog input module: Channel 2 lower limit alarm
Input	XGF-AD16A_CH3_LOOR	BIT	21.3	Analog input module: Channel 3 lower limit alarm
Input	XGF-AD16A_CH4_LOOR	BIT	21.4	Analog input module: Channel 4 lower limit alarm

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Input	XGF-AD16A_CH5_LOOR	BIT	21.5	Analog input module: Channel 5 lower limit alarm
Input	XGF-AD16A_CH6_LOOR	BIT	21.6	Analog input module: Channel 6 lower limit alarm
Input	XGF-AD16A_CH7_LOOR	BIT	21.7	Analog input module: Channel 7 lower limit alarm
Input	XGF-AD16A_CH8_LOOR	BIT	21.8	Analog input module: Channel 8 lower limit alarm
Input	XGF-AD16A_CH9_LOOR	BIT	21.9	Analog input module: Channel 9 lower limit alarm
Input	XGF-AD16A_CH10_LOOR	BIT	21.A	Analog input module: Channel 10 lower limit alarm
Input	XGF-AD16A_CH11_LOOR	BIT	21.B	Analog input module: Channel 11 lower limit alarm
Input	XGF-AD16A_CH12_LOOR	BIT	21.C	Analog input module: Channel 12 lower limit alarm
Input	XGF-AD16A_CH13_LOOR	BIT	21.D	Analog input module: Channel 13 lower limit alarm
Input	XGF-AD16A_CH14_LOOR	BIT	21.E	Analog input module: Channel 14 lower limit alarm
Input	XGF-AD16A_CH15_LOOR	BIT	21.F	Analog input module: Channel 15 lower limit alarm

### <Output>

Input/output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-AD16A_ERR_CRT	BIT	0.0	Analog input module: Error clear request (V1.02)

## (5) XGF-AD4S

### 1) Refresh data

#### <Input>

Input/output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-AD4S_ERR	BIT	0.0	Isolated Analog input module: Module error
Input	XGF-AD4S_RDY	BIT	0.F	Isolated Analog input module: Module ready
Input	XGF-AD4S_CH0_ACT	BIT	1.0	Isolated Analog input module: CH0 RUN
Input	XGF-AD4S_CH1_ACT	BIT	1.1	Isolated Analog input module: CH1 RUN
Input	XGF-AD4S_CH2_ACT	BIT	1.2	Isolated Analog input module: CH2 RUN
Input	XGF-AD4S_CH3_ACT	BIT	1.3	Isolated Analog input module: CH3 RUN
Input	XGF-AD4S_CH0_DATA	WORD	2	Isolated Analog input module: CH0 conversion value
Input	XGF-AD4S_CH1_DATA	WORD	3	Isolated Analog input module: CH1 conversion value
Input	XGF-AD4S_CH2_DATA	WORD	4	Isolated Analog input module: CH2 conversion value
Input	XGF-AD4S_CH3_DATA	WORD	5	Isolated Analog input module: CH3 conversion value
Input		WORD	6	Reserved
Input		WORD	7	Reserved
Input	XGF-AD4S_CH0_PAHH	BIT	8.0	Isolated Analog input module: CH0 process alarm HH
Input	XGF-AD4S_CH0_PAH	BIT	8.1	Isolated Analog input module: CH0 process alarm H
Input	XGF-AD4S_CH0_PAL	BIT	8.2	Isolated Analog input module: CH0 process alarm lower limit
Input	XGF-AD4S_CH0_PALL	BIT	8.3	Isolated Analog input module: CH0 process alarm LL
Input	XGF-AD4S_CH1_PAHH	BIT	8.4	Isolated Analog input module: CH1 process alarm HH
Input	XGF-AD4S_CH1_PAH	BIT	8.5	Isolated Analog input module: CH1 process alarm H
Input	XGF-AD4S_CH1_PAL	BIT	8.6	Isolated Analog input module: CH1 process alarm lower limit
Input	XGF-AD4S_CH1_PALL	BIT	8.7	Isolated Analog input module: CH1 process alarm LL
Input	XGF-AD4S_CH2_PAHH	BIT	8.8	Isolated Analog input module: CH2 process alarm HH
Input	XGF-AD4S_CH2_PAH	BIT	8.9	Isolated Analog input module: CH2 process alarm H
Input	XGF-AD4S_CH2_PAL	BIT	8.A	Isolated Analog input module: CH2 process alarm lower limit
Input	XGF-AD4S_CH2_PALL	BIT	8.B	Isolated Analog input module: CH2 process alarm LL
Input	XGF-AD4S_CH3_PAHH	BIT	8.C	Isolated Analog input module: CH3 process alarm HH
Input	XGF-AD4S_CH3_PAH	BIT	8.D	Isolated Analog input module: CH3 process alarm H
Input	XGF-AD4S_CH3_PAL	BIT	8.E	Isolated Analog input module: CH3 process alarm lower limit

Input	XGF-AD4S_CH3_PALL	BIT	8.F	Isolated Analog input module: CH3 process alarm LL
Input	XGF-AD4S_CH0_RAHA	BIT	9.0	Isolated Analog input module: CH0 Rate Alarm High limit
Input	XGF-AD4S_CH0_RAL	BIT	9.1	Isolated Analog input module: CH0 Rate Alarm Lower limit
Input	XGF-AD4S_CH1_RAHA	BIT	9.2	Isolated Analog input module: CH1 Rate Alarm High limit
Input	XGF-AD4S_CH1_RAL	BIT	9.3	Isolated Analog input module: CH1 Rate Alarm Lower limit
Input	XGF-AD4S_CH2_RAHA	BIT	9.4	Isolated Analog input module: CH2 Rate Alarm High limit
Input	XGF-AD4S_CH2_RAL	BIT	9.5	Isolated Analog input module: CH2 Rate Alarm Lower limit
Input	XGF-AD4S_CH3_RAHA	BIT	9.6	Isolated Analog input module: CH3 Rate Alarm High limit
Input	XGF-AD4S_CH3_RAL	BIT	9.7	Isolated Analog input module: CH3 Rate Alarm Lower limit
Input	XGF-AD4S_CH0_IDD	BIT	10.0	Isolated Analog input module: CH0 input disconnection detection
Input	XGF-AD4S_CH1_IDD	BIT	10.1	Isolated Analog input module: CH1 input disconnection detection
Input	XGF-AD4S_CH2_IDD	BIT	10.2	Isolated Analog input module: CH2 input disconnection detection
Input	XGF-AD4S_CH3_IDD	BIT	10.3	Isolated Analog input module: CH3 input disconnection detection

&lt;Output&gt;

Input/output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-AD4S_ERR_CLR	BIT	0.0	Isolated Analog input module: Error clear request

## (6) XGF-AW4S

## 1) Refresh data

&lt;Input&gt;

Input/output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-AW4SERR	BIT	0.0	2-Wire Analog Input Module: Module error
Input	XGF-AW4SRDY	BIT	0.F	2-Wire Analog Input Module: Module ready
Input	XGF-AW4SCH0_ACT	BIT	1.0	2-Wire Analog Input Module: CH0 RUN
Input	XGF-AW4SCH1_ACT	BIT	1.1	2-Wire Analog Input Module: CH1 RUN
Input	XGF-AW4SCH2_ACT	BIT	1.2	2-Wire Analog Input Module: CH2 RUN
Input	XGF-AW4SCH3_ACT	BIT	1.3	2-Wire Analog Input Module: CH3 RUN
Input	XGF-AW4SCH0_DATA	WORD	2	2-Wire Analog Input Module: CH0 conversion value
Input	XGF-AW4SCH1_DATA	WORD	3	2-Wire Analog Input Module: CH1 conversion value
Input	XGF-AW4SCH2_DATA	WORD	4	2-Wire Analog Input Module: CH2 conversion value
Input	XGF-AW4SCH3_DATA	WORD	5	2-Wire Analog Input Module: CH3 conversion value
Input		WORD	6	Reserved
Input		WORD	7	Reserved
Input	XGF-AW4SCH0_PALL	BIT	8.0	2-Wire Analog Input Module: CH0 process alarm LL
Input	XGF-AW4SCH0_PAL	BIT	8.1	2-Wire Analog Input Module: CH0 process alarm lower limit
Input	XGF-AW4SCH0_PAHA	BIT	8.2	2-Wire Analog Input Module: CH0 process alarm H
Input	XGF-AW4SCH0_PAHH	BIT	8.3	2-Wire Analog Input Module: CH0 process alarm HH
Input	XGF-AW4SCH1_PALL	BIT	8.4	2-Wire Analog Input Module: CH1 process alarm LL
Input	XGF-AW4SCH1_PAL	BIT	8.5	2-Wire Analog Input Module: CH1 process alarm lower limit
Input	XGF-AW4SCH1_PAHA	BIT	8.6	2-Wire Analog Input Module: CH1 process alarm H
Input	XGF-AW4SCH1_PAHH	BIT	8.7	2-Wire Analog Input Module: CH1 process alarm HH
Input	XGF-AW4SCH2_PALL	BIT	8.8	2-Wire Analog Input Module: CH2 process alarm LL
Input	XGF-AW4SCH2_PAL	BIT	8.9	2-Wire Analog Input Module: CH2 process alarm lower limit
Input	XGF-AW4SCH2_PAHA	BIT	8.A	2-Wire Analog Input Module: CH2 process alarm H
Input	XGF-AW4SCH2_PAHH	BIT	8.B	2-Wire Analog Input Module: CH2 process alarm HH

Input	XGF-AW4SCH3_PALL	BIT	8.C	2-Wire Analog Input Module: CH3 process alarm LL
Input	XGF-AW4SCH3_PAL	BIT	8.D	2-Wire Analog Input Module: CH3 process alarm lower limit
Input	XGF-AW4SCH3_PAH	BIT	8.E	2-Wire Analog Input Module: CH3 process alarm H
Input	XGF-AW4SCH3_PAHH	BIT	8.F	2-Wire Analog Input Module: CH3 process alarm HH
Input	XGF-AW4SCH0_RAL	BIT	9.0	2-Wire Analog Input Module: CH0 Rate Alarm Lower limit
Input	XGF-AW4SCH0_RAH	BIT	9.1	2-Wire Analog Input Module: CH0 Rate Alarm High limit
Input	XGF-AW4SCH1_RAL	BIT	9.2	2-Wire Analog Input Module: CH1 Rate Alarm Lower limit
Input	XGF-AW4SCH1_RAH	BIT	9.3	2-Wire Analog Input Module: CH1 Rate Alarm High limit
Input	XGF-AW4SCH2_RAL	BIT	9.4	2-Wire Analog Input Module: CH2 Rate Alarm Lower limit
Input	XGF-AW4SCH2_RAH	BIT	9.5	2-Wire Analog Input Module: CH2 Rate Alarm High limit
Input	XGF-AW4SCH3_RAL	BIT	9.6	2-Wire Analog Input Module: CH3 Rate Alarm Lower limit
Input	XGF-AW4SCH3_RAH	BIT	9.7	2-Wire Analog Input Module: CH3 Rate Alarm High limit
Input	XGF-AW4SCH0_IDD	BIT	10.0	2-Wire Analog Input Module: CH0 input disconnection detection
Input	XGF-AW4SCH1_IDD	BIT	10.1	2-Wire Analog Input Module: CH1 input disconnection detection
Input	XGF-AW4SCH2_IDD	BIT	10.2	2-Wire Analog Input Module: CH2 input disconnection detection
Input	XGF-AW4SCH3_IDD	BIT	10.3	2-Wire Analog Input Module: CH3 input disconnection detection

<Output>

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-AW4SERR_CLR	BIT	0.0	2-Wire Analog Input Module: Error clear request

(7) XGF-DV4A

1) Refresh data

<Input>

Input/output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-DV4A_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	XGF-DV4A_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	XGF-DV4A_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error
Input	XGF-DV4A_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	XGF-DV4A_RDY	BIT	0.F	Analog Output module: Module ready
Input	XGF-DV4A_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	XGF-DV4A_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN
Input	XGF-DV4A_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	XGF-DV4A_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN

<Output>

Input/output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-DV4A_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	XGF-DV4A_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	XGF-DV4A_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	XGF-DV4A_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting
Output	XGF-DV4A_CH0_DATA	WORD	1	Analog Output module: Channel 0 Input value
Output	XGF-DV4A_CH1_DATA	WORD	2	Analog Output module: Channel 1 Input value
Output	XGF-DV4A_CH2_DATA	WORD	3	Analog Output module: Channel 2 Input value
Output	XGF-DV4A_CH3_DATA	WORD	4	Analog Output module: Channel 3 Input value

Output		WORD	5	Reserved
Output		WORD	6	Reserved
Output		WORD	7	Reserved
Output		WORD	8	Reserved
Output		Word	9	Reserved

## (8) XGF-DC4A

## 1) Refresh data

&lt;Input&gt;

Input/output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-DC4A_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	XGF-DC4A_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	XGF-DC4A_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error
Input	XGF-DC4A_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	XGF-DC4A_RDY	BIT	0.F	Analog Output module: Module ready
Input	XGF-DC4A_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	XGF-DC4A_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN
Input	XGF-DC4A_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	XGF-DC4A_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN

&lt;Output&gt;

Input/output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-DC4A_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	XGF-DC4A_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	XGF-DC4A_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	XGF-DC4A_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting
Output	XGF-DC4A_CH0_DATA	Word	1	Analog Output module: Channel 0 Input value
Output	XGF-DC4A_CH1_DATA	WORD	2	Analog Output module: Channel 1 Input value
Output	XGF-DC4A_CH2_DATA	WORD	3	Analog Output module: Channel 2 Input value
Output	XGF-DC4A_CH3_DATA	WORD	4	Analog Output module: Channel 3 Input value
Output		WORD	5	Reserved
Output		WORD	6	Reserved
Output		WORD	7	Reserved
Output		WORD	8	Reserved
Output		WORD	9	Reserved

## (9) XGF-DV8A

## 1) Refresh data

&lt;Input&gt;

Input/output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-DV8A_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	XGF-DV8A_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	XGF-DV8A_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error

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Input	XGF-DV8A_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	XGF-DV8A_CH4_ERR	BIT	0.4	Analog Output module: Channel 4 error
Input	XGF-DV8A_CH5_ERR	BIT	0.5	Analog Output module: Channel 5 error
Input	XGF-DV8A_CH6_ERR	BIT	0.6	Analog Output module: Channel 6 error
Input	XGF-DV8A_CH7_ERR	BIT	0.7	Analog Output module: Channel 7 error
Input	XGF-DV8A_RDY	BIT	0.F	Analog Output module: Module ready
Input	XGF-DV8A_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	XGF-DV8A_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN
Input	XGF-DV8A_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	XGF-DV8A_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN
Input	XGF-DV8A_CH4_ACT	BIT	1.4	Analog Output module: CH4 RUN
Input	XGF-DV8A_CH5_ACT	BIT	1.5	Analog Output module: CH5 RUN
Input	XGF-DV8A_CH6_ACT	BIT	1.6	Analog Output module: CH6 RUN
Input	XGF-DV8A_CH7_ACT	BIT	1.7	Analog Output module: CH7 RUN

<Output>

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-DV8A_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	XGF-DV8A_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	XGF-DV8A_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	XGF-DV8A_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting
Output	XGF-DV8A_CH4_OUTEN	BIT	0.4	Analog Output module: Channel 4 output status setting
Output	XGF-DV8A_CH5_OUTEN	BIT	0.5	Analog Output module: Channel 5 output status setting
Output	XGF-DV8A_CH6_OUTEN	BIT	0.6	Analog Output module: Channel 6 output status setting
Output	XGF-DV8A_CH7_OUTEN	BIT	0.7	Analog Output module: Channel 7 output status setting
Output	XGF-DV8A_CH0_DATA	WORD	1	Analog Output module: Channel 0 Input value
Output	XGF-DV8A_CH1_DATA	WORD	2	Analog Output module: Channel 1 Input value
Output	XGF-DV8A_CH2_DATA	WORD	3	Analog Output module: Channel 2 Input value
Output	XGF-DV8A_CH3_DATA	WORD	4	Analog Output module: Channel 3 Input value
Output	XGF-DV8A_CH4_DATA	WORD	5	Analog Output module: Channel 4 Input value
Output	XGF-DV8A_CH5_DATA	WORD	6	Analog Output module: Channel 5 Input value
Output	XGF-DV8A_CH6_DATA	WORD	7	Analog Output module: Channel 6 Input value
Output	XGF-DV8A_CH7_DATA	WORD	8	Analog Output module: Channel 7 Input value
Output		WORD	9	Reserved

## (10) XGF-DC8A

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-DC8A_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	XGF-DC8A_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	XGF-DC8A_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error
Input	XGF-DC8A_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	XGF-DC8A_CH4_ERR	BIT	0.4	Analog Output module: Channel 4 error
Input	XGF-DC8A_CH5_ERR	BIT	0.5	Analog Output module: Channel 5 error
Input	XGF-DC8A_CH6_ERR	BIT	0.6	Analog Output module: Channel 6 error
Input	XGF-DC8A_CH7_ERR	BIT	0.7	Analog Output module: Channel 7 error
Input	XGF-DC8A_RDY	BIT	0.F	Analog Output module: Module ready
Input	XGF-DC8A_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	XGF-DC8A_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN
Input	XGF-DC8A_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	XGF-DC8A_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN
Input	XGF-DC8A_CH4_ACT	BIT	1.4	Analog Output module: CH4 RUN
Input	XGF-DC8A_CH5_ACT	BIT	1.5	Analog Output module: CH5 RUN
Input	XGF-DC8A_CH6_ACT	BIT	1.6	Analog Output module: CH6 RUN
Input	XGF-DC8A_CH7_ACT	BIT	1.7	Analog Output module: CH7 RUN

&lt;Output&gt;

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-DC8A_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	XGF-DC8A_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	XGF-DC8A_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	XGF-DC8A_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting
Output	XGF-DC8A_CH4_OUTEN	BIT	0.4	Analog Output module: Channel 4 output status setting
Output	XGF-DC8A_CH5_OUTEN	BIT	0.5	Analog Output module: Channel 5 output status setting
Output	XGF-DC8A_CH6_OUTEN	BIT	0.6	Analog Output module: Channel 6 output status setting
Output	XGF-DC8A_CH7_OUTEN	BIT	0.7	Analog Output module: Channel 7 output status setting
Output	XGF-DC8A_CH0_DATA	WORD	1	Analog Output module: Channel 0 Input value
Output	XGF-DC8A_CH1_DATA	WORD	2	Analog Output module: Channel 1 Input value
Output	XGF-DC8A_CH2_DATA	WORD	3	Analog Output module: Channel 2 Input value
Output	XGF-DC8A_CH3_DATA	WORD	4	Analog Output module: Channel 3 Input value
Output	XGF-DC8A_CH4_DATA	WORD	5	Analog Output module: Channel 4 Input value
Output	XGF-DC8A_CH5_DATA	WORD	6	Analog Output module: Channel 5 Input value

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Output	XGF-DC8A_CH6_DATA	WORD	7	Analog Output module: Channel 6 Input value
Output	XGF-DC8A_CH7_DATA	WORD	8	Analog Output module: Channel 7 Input value
Output		WORD	9	Reserved

### (11) XGF-DV4S

#### 1) Refresh data

##### <Input>

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-DV4S_CH0_ERR	BIT	0.0	Isolated Analog Output module: Channel 0 error
Input	XGF-DV4S_CH1_ERR	BIT	0.1	Isolated Analog Output module: Channel 1 error
Input	XGF-DV4S_CH2_ERR	BIT	0.2	Isolated Analog Output module: Channel 2 error
Input	XGF-DV4S_CH3_ERR	BIT	0.3	Isolated Analog Output module: Channel 3 error
Input	XGF-DV4S_RDY	BIT	0.F	Isolated Analog Output module: Module ready
Input	XGF-DV4S_CH0_ACT	BIT	1.0	Isolated Analog Output module: CH0 RUN
Input	XGF-DV4S_CH1_ACT	BIT	1.1	Isolated Analog Output module: CH1 RUN
Input	XGF-DV4S_CH2_ACT	BIT	1.2	Isolated Analog Output module: CH2 RUN
Input	XGF-DV4S_CH3_ACT	BIT	1.3	Isolated Analog Output module: CH3 RUN

##### <Output>

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-DV4S_CH0_OUTEN	BIT	0.0	Isolated Analog Output module: Channel 0 output status setting
Output	XGF-DV4S_CH1_OUTEN	BIT	0.1	Isolated Analog Output module: Channel 1 output status setting
Output	XGF-DV4S_CH2_OUTEN	BIT	0.2	Isolated Analog Output module: Channel 2 output status setting
Output	XGF-DV4S_CH3_OUTEN	BIT	0.3	Isolated Analog Output module: Channel 3 output status setting
Output	XGF-DV4S_CH0_DATA	WORD	1	Isolated Analog Output module: Channel 0 Input value
Output	XGF-DV4S_CH1_DATA	WORD	2	Isolated Analog Output module: Channel 1 Input value
Output	XGF-DV4S_CH2_DATA	WORD	3	Isolated Analog Output module: Channel 2 Input value
Output	XGF-DV4S_CH3_DATA	WORD	4	Isolated Analog Output module: Channel 3 Input value
Output		WORD	5	Reserved
Output		WORD	6	Reserved
Output		WORD	7	Reserved
Output		WORD	8	Reserved
Output		WORD	9	Reserved

## (12) XGF-DC4S

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-DC4S_CH0_ERR	BIT	0.0	Isolated Analog Output module: Channel 0 error
Input	XGF-DC4S_CH1_ERR	BIT	0.1	Isolated Analog Output module: Channel 1 error
Input	XGF-DC4S_CH2_ERR	BIT	0.2	Isolated Analog Output module: Channel 2 error
Input	XGF-DC4S_CH3_ERR	BIT	0.3	Isolated Analog Output module: Channel 3 error
Input	XGF-DC4S_RDY	BIT	0.F	Isolated Analog Output module: Module ready
Input	XGF-DC4S_CH0_ACT	BIT	1.0	Isolated Analog Output module: CH0 RUN
Input	XGF-DC4S_CH1_ACT	BIT	1.1	Isolated Analog Output module: CH1 RUN
Input	XGF-DC4S_CH2_ACT	BIT	1.2	Isolated Analog Output module: CH2 RUN
Input	XGF-DC4S_CH3_ACT	BIT	1.3	Isolated Analog Output module: CH3 RUN

&lt;Output&gt;

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-DC4S_CH0_OUTEN	BIT	0.0	Isolated Analog Output module: Channel 0 output status setting
Output	XGF-DC4S_CH1_OUTEN	BIT	0.1	Isolated Analog Output module: Channel 1 output status setting
Output	XGF-DC4S_CH2_OUTEN	BIT	0.2	Isolated Analog Output module: Channel 2 output status setting
Output	XGF-DC4S_CH3_OUTEN	BIT	0.3	Isolated Analog Output module: Channel 3 output status setting
Output	XGF-DC4S_CH0_DATA	WORD	1	Isolated Analog Output module: Channel 0 Input value
Output	XGF-DC4S_CH1_DATA	WORD	2	Isolated Analog Output module: Channel 1 Input value
Output	XGF-DC4S_CH2_DATA	WORD	3	Isolated Analog Output module: Channel 2 Input value
Output	XGF-DC4S_CH3_DATA	WORD	4	Isolated Analog Output module: Channel 3 Input value
Output	-	WORD	5	Reserved
Output	-	WORD	6	Reserved
Output	-	WORD	7	Reserved
Output	-	WORD	8	Reserved
Output	-	WORD	9	Reserved

## (13) XGF-AH6A

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-AH6A_AD0_ERR	BIT	0.0	Analog IO Module: Input Channel 0 error
Input	XGF-AH6A_AD1_ERR	BIT	0.1	Analog IO Module: Input Channel 1 error
Input	XGF-AH6A_AD2_ERR	BIT	0.2	Analog IO Module: Input Channel 2 error
Input	XGF-AH6A_AD3_ERR	BIT	0.3	Analog IO Module: Input Channel 3 error
Input	XGF-AH6A_DA0_ERR	BIT	0.4	Analog IO Module: Output Channel 0 error
Input	XGF-AH6A_DA1_ERR	BIT	0.5	Analog IO Module: Output Channel 1 error
Input	XGF-AH6A_RDY	BIT	0.F	Analog IO Module: Module ready
Input	XGF-AH6A_AD0_ACT	BIT	1.0	Analog IO Module: Input Channel 0 Running
Input	XGF-AH6A_AD1_ACT	BIT	1.1	Analog IO Module: Input Channel 1 Running

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Input	XGF-AH6A_AD2_ACT	BIT	1.2	Analog IO Module: Input Channel 2 Running
Input	XGF-AH6A_AD3_ACT	BIT	1.3	Analog IO Module: Input Channel 3 Running
Input	XGF-AH6A_DA0_ACT	BIT	1.4	Analog IO Module: Output Channel 0 Running
Input	XGF-AH6A_DA1_ACT	BIT	1.5	Analog IO Module: Output Channel 1 Running
Input	XGF-AH6A_AD0_DATA	WORD	2	Analog IO Module: Input Channel 0 Digital Output Data
Input	XGF-AH6A_AD1_DATA	WORD	3	Analog IO Module: Input Channel 1 Digital Output Data
Input	XGF-AH6A_AD2_DATA	WORD	4	Analog IO Module: Input Channel 2 Digital Output Data
Input	XGF-AH6A_AD3_DATA	WORD	5	Analog IO Module: Input Channel 3 Digital Output Data
Input	XGF-AH6A_AD0_IDD	BIT	6.0	Analog IO Module: Input Channel 0 Disconnection Flag
Input	XGF-AH6A_AD1_IDD	BIT	6.1	Analog IO Module: Input Channel 1 Disconnection Flag
Input	XGF-AH6A_AD2_IDD	BIT	6.2	Analog IO Module: Input Channel 2 Disconnection Flag
Input	XGF-AH6A_AD3_IDD	BIT	6.3	Analog IO Module: Input Channel 3 Disconnection Flag

<Output>

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-AH6A_ERR_CLR	BIT	0.0	Analog IO Module: Error clear request
Output	XGF-AH6A_DA0_OUTEN	BIT	1.0	Analog IO Module: Channel 0 output status setting
Output	XGF-AH6A_DA1_OUTEN	BIT	1.1	Analog IO Module: Channel 1 output status setting
Output	XGF-AH6A_DA0_DATA	WORD	2	Analog IO Module: Output Channel 0 Digital Input Data
Output	XGF-AH6A_DA1_DATA	WORD	3	Analog IO Module: Output Channel 1 Digital Input Data
Output		WORD	4	Reserved

### (14) XGF-AC4H

#### 1) Refresh data

<Input>

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Input	XGF-AC4H_ERR	BIT	0.0	HART Analog Input Module: Module error
Input	XGF-AC4H_RDY	BIT	0.F	HART Analog Input Module: Module ready
Input	XGF-AC4H_CH0_ACT	BIT	1.0	HART Analog Input Module: CH0 RUN
Input	XGF-AC4H_CH1_ACT	BIT	1.1	HART Analog Input Module: CH1 RUN
Input	XGF-AC4H_CH2_ACT	BIT	1.2	HART Analog Input Module: CH2 RUN
Input	XGF-AC4H_CH3_ACT	BIT	1.3	HART Analog Input Module: CH3 RUN
Input	XGF-AC4H_CH0_DATA	WORD	2	HART Analog Input Module: CH0 conversion value
Input	XGF-AC4H_CH1_DATA	WORD	3	HART Analog Input Module: CH1 conversion value
Input	XGF-AC4H_CH2_DATA	Word	4	HART Analog Input Module: CH2 conversion value
Input	XGF-AC4H_CH3_DATA	WORD	5	HART Analog Input Module: CH3 conversion value
Input	-	WORD	6	Reserved
Input	-	WORD	7	Reserved
Input	XGF-AC4H_CH0_PAHH	BIT	8.0	HART Analog Input Module: CH0 process alarm HH
Input	XGF-AC4H_CH0_PAH	BIT	8.1	HART Analog Input Module: CH0 process alarm H
Input	XGF-AC4H_CH0_PAL	BIT	8.2	HART Analog Input Module: CH0 process alarm lower limit
Input	XGF-AC4H_CH0_PALL	BIT	8.3	HART Analog Input Module: CH0 process alarm LL
Input	XGF-AC4H_CH1_PAHH	BIT	8.4	HART Analog Input Module: CH1 process alarm HH
Input	XGF-AC4H_CH1_PAH	BIT	8.5	HART Analog Input Module: CH1 process alarm H
Input	XGF-AC4H_CH1_PAL	BIT	8.6	HART Analog Input Module: CH1 process alarm lower limit

Input	XGF-AC4H_CH1_PALL	BIT	8.7	HART Analog Input Module: CH1 process alarm LL
Input	XGF-AC4H_CH2_PAHH	BIT	8.8	HART Analog Input Module: CH2 process alarm HH
Input	XGF-AC4H_CH2_PAH	BIT	8.9	HART Analog Input Module: CH2 process alarm H
Input	XGF-AC4H_CH2_PAL	BIT	8.A	HART Analog Input Module: CH2 process alarm lower limit
Input	XGF-AC4H_CH2_PALL	BIT	8.B	HART Analog Input Module: CH2 process alarm LL
Input	XGF-AC4H_CH3_PAHH	BIT	8.C	HART Analog Input Module: CH3 process alarm HH
Input	XGF-AC4H_CH3_PAH	BIT	8.D	HART Analog Input Module: CH3 process alarm H
Input	XGF-AC4H_CH3_PAL	BIT	8.E	HART Analog Input Module: CH3 process alarm lower limit
Input	XGF-AC4H_CH3_PALL	BIT	8.F	HART Analog Input Module: CH3 process alarm LL
Input	XGF-AC4H_CH0_RAHH	BIT	9.0	HART Analog Input Module: CH0 Rate Alarm High limit
Input	XGF-AC4H_CH0_RAL	BIT	9.1	HART Analog Input Module: CH0 Rate Alarm Lower limit
Input	XGF-AC4H_CH1_RAHH	BIT	9.2	HART Analog Input Module: CH1 Rate Alarm High limit
Input	XGF-AC4H_CH1_RAL	BIT	9.3	HART Analog Input Module: CH1 Rate Alarm Lower limit
Input	XGF-AC4H_CH2_RAHH	BIT	9.4	HART Analog Input Module: CH2 Rate Alarm High limit
Input	XGF-AC4H_CH2_RAL	BIT	9.5	HART Analog Input Module: CH2 Rate Alarm Lower limit
Input	XGF-AC4H_CH3_RAHH	BIT	9.6	HART Analog Input Module: CH3 Rate Alarm High limit
Input	XGF-AC4H_CH3_RAL	BIT	9.7	HART Analog Input Module: CH3 Rate Alarm Lower limit
Input	XGF-AC4H_CH0_IDD	BIT	10.0	HART Analog Input Module: CH0 input Disconnection Flag
Input	XGF-AC4H_CH1_IDD	BIT	10.1	HART Analog Input Module: CH1 input disconnection detection
Input	XGF-AC4H_CH2_IDD	BIT	10.2	HART Analog Input Module: CH2 input disconnection detection
Input	XGF-AC4H_CH3_IDD	BIT	10.3	HART Analog Input Module: CH3 input disconnection detection
Input	XGF-AC4H_CH0_HARTERR	BIT	10.8	HART Analog Input Module: Channel 0 HART Communication Error Flag
Input	XGF-AC4H_CH1_HARTERR	BIT	10.9	HART Analog Input Module: Channel 1 HART Communication Error Flag
Input	XGF-AC4H_CH2_HARTERR	BIT	10.A	HART Analog Input Module: Channel 2 HART Communication Error Flag
Input	XGF-AC4H_CH3_HARTERR	BIT	10.B	HART Analog Input Module: Channel 3 HART Communication Error Flag

## &lt;Output&gt;

Input/Output	Variable	type	Word(16BIT) Offset	Comment
Output	XGF-AC4H_ERR_CLR	BIT	0.0	HART Analog Input Module: Error clear request

## (15) XGF-DC4H

## 1) Refresh data

## &lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XGF-DC4H_CH0_ERR	BIT	0.0	HART Analog output module: Channel 0 error
Input	XGF-DC4H_CH1_ERR	BIT	0.1	HART Analog output module: Channel 1 error
Input	XGF-DC4H_CH2_ERR	BIT	0.2	HART Analog output module: Channel 2 error
Input	XGF-DC4H_CH3_ERR	BIT	0.3	HART Analog output module: Channel 3 error
Input	XGF-DC4H_CH0_HARTERR	BIT	0.8	HART Analog output module: Channel 0 HART

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				Communication Error Flag
Input	XGF-DC4H_CH1_HARTERR	BIT	0.9	HART Analog output module: Channel 1 HART Communication Error Flag
Input	XGF-DC4H_CH2_HARTERR	BIT	0.A	HART Analog output module: Channel 2 HART Communication Error Flag
Input	XGF-DC4H_CH3_HARTERR	BIT	0.B	HART Analog output module: Channel 3 HART Communication Error Flag
Input	XGF-DC4H_RDY	BIT	0.F	HART Analog output module: Module ready
Input	XGF-DC4H_CH0_ACT	BIT	1.0	HART Analog output module: CH0 RUN
Input	XGF-DC4H_CH1_ACT	BIT	1.1	HART Analog output module: CH1 RUN
Input	XGF-DC4H_CH2_ACT	BIT	1.2	HART Analog output module: CH2 RUN
Input	XGF-DC4H_CH3_ACT	BIT	1.3	HART Analog output module: CH3 RUN
Input	XGF-DC4H_CH0_OUTH	BIT	1.8	HART Analog output module: Channel 0 output high limit
Input	XGF-DC4H_CH0_OUTL	BIT	1.9	HART Analog output module: Channel 0 output lower limit
Input	XGF-DC4H_CH1_OUTH	BIT	1.A	HART Analog output module: Channel 1 output high limit
Input	XGF-DC4H_CH1_OUTL	BIT	1.B	HART Analog output module: Channel 1 output lower limit
Input	XGF-DC4H_CH2_OUTH	BIT	1.C	HART Analog output module: Channel 2 output high limit
Input	XGF-DC4H_CH2_OUTL	BIT	1.D	HART Analog output module: Channel 2 output lower limit
Input	XGF-DC4H_CH3_OUTH	BIT	1.E	HART Analog output module: Channel 3 output high limit
Input	XGF-DC4H_CH3_OUTL	BIT	1.F	HART Analog output module: Channel 3 output lower limit

### <Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XGF-DC4H_CH0_OUTEN	BIT	0.0	HART Analog output module: Channel 0 output status setting
Output	XGF-DC4H_CH1_OUTEN	BIT	0.1	HART Analog output module: Channel 1 output status setting
Output	XGF-DC4H_CH2_OUTEN	BIT	0.2	HART Analog output module: Channel 2 output status setting
Output	XGF-DC4H_CH3_OUTEN	BIT	0.3	HART Analog output module: Channel 3 output status setting
Output	XGF-DC4H_CH0_DATA	Word	1	HART Analog output module: Channel 0 Input value
Output	XGF-DC4H_CH1_DATA	Word	2	HART Analog output module: Channel 1 Input value
Output	XGF-DC4H_CH2_DATA	Word	3	HART Analog output module: Channel 2 Input value
Output	XGF-DC4H_CH3_DATA	Word	4	HART Analog output module: Channel 3 Input value
Output		WORD	5	Reserved
Output		WORD	6	Reserved
Output		WORD	7	Reserved
Output		WORD	8	Reserved
Output		WORD	9	Reserved

## (16) XGF-HO2A

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XGF-HO2A_CH0_DN	BIT	0.0	High Speed Counter Module: CH0 up/down counter status flag
Input	XGF-HO2A_CH0_EXTPRE	BIT	0.1	High Speed Counter Module: Channel 0 external preset command detection flag
Input	XGF-HO2A_CH0_CRY	BIT	0.3	High Speed Counter Module: Channel 0 carry value
Input	XGF-HO2A_CH0_BRW	BIT	0.4	High Speed Counter Module: Channel 0 borrow value
Input	XGF-HO2A_CH0_AUXING	BIT	0.5	High Speed Counter Module: Channel 0 auxiliary function status
Input	XGF-HO2A_CH0_CMPOUT0	BIT	0.6	High Speed Counter Module: Channel 0 compare output 0 status
Input	XGF-HO2A_CH0_CMPOUT1	BIT	0.7	High Speed Counter Module: Channel 0 compare output 1 status
Input	XGF-HO2A_CH0_ERR	BIT	0.E	High Speed Counter Module: Channel 0 error flag
Input	XGF-HO2A_RDY	BIT	0.F	High Speed Counter Module: Module ready
Input	XGF-HO2A_CH1_DN	BIT	1.0	High Speed Counter Module: CH1 up/down counter status flag
Input	XGF-HO2A_CH1_EXTPRE	BIT	1.1	High Speed Counter Module: Channel 1 external preset command detection flag
Input	XGF-HO2A_CH1_CRY	BIT	1.3	High Speed Counter Module: Channel 1 carry value
Input	XGF-HO2A_CH1_BRW	BIT	1.4	High Speed Counter Module: Channel 1 borrow value
Input	XGF-HO2A_CH1_AUXING	BIT	1.5	High Speed Counter Module: Channel 1 auxiliary function status
Input	XGF-HO2A_CH1_CMPOUT0	BIT	1.6	High Speed Counter Module: Channel 1 compare output 0 status
Input	XGF-HO2A_CH1_CMPOUT1	BIT	1.7	High Speed Counter Module: Channel 1 compare output 1 status
Input	XGF-HO2A_CH1_ERR	BIT	1.E	High Speed Counter Module: Channel 1 error flag
Input	XGF-HO2A_CH0_CNT_LV	Word	2	High Speed Counter Module: Channel 0 count value (LWORD)
Input	XGF-HO2A_CH0_CNT_HV	Word	3	High Speed Counter Module: Channel 0 count value (HWORD)
Input	XGF-HO2A_CH0_LTH_LV	Word	4	High Speed Counter Module: Channel 0 latch count value (LWORD)
Input	XGF-HO2A_CH0_LTH_HV	Word	5	High Speed Counter Module: Channel 0 latch count value (HWORD)
Input	XGF-HO2A_CH0_RNG_LV	Word	6	High Speed Counter Module: Channel 0 sampling count value (LWORD)
Input	XGF-HO2A_CH0_RNG_HV	Word	7	High Speed Counter Module: Channel 0 sampling count value (HWORD)
Input	XGF-HO2A_CH0_FRQ_LV	Word	8	High Speed Counter Module: Channel 0 input frequency value (LWORD)
Input	XGF-HO2A_CH0_FRQ_HV	Word	9	High Speed Counter Module: Channel 0 input frequency value (HWORD)
Input	XGF-HO2A_CH0_RPU_LV	Word	10	High Speed Counter Module: Channel 0 Rev./unit time

## Appendix

				value (LWORD)
Input	XGF-HO2A_CH0_RPU_HV	Word	11	High Speed Counter Module: Channel 0 Rev./unit time value (HWORD)
Input	XGF-HO2A_CH1_CNT_LV	Word	12	High Speed Counter Module: Channel 1 count value (LWORD)
Input	XGF-HO2A_CH1_CNT_HV	Word	13	High Speed Counter Module: Channel 1 count value (HWORD)
Input	XGF-HO2A_CH1_LTH_LV	Word	14	High Speed Counter Module: Channel 1 latch count value (LWORD)
Input	XGF-HO2A_CH1_LTH_HV	Word	15	High Speed Counter Module: Channel 1 latch count value (HWORD)
Input	XGF-HO2A_CH1_RNG_LV	Word	16	High Speed Counter Module: Channel 1 sampling count value (LWORD)
Input	XGF-HO2A_CH1_RNG_HV	Word	17	High Speed Counter Module: Channel 1 sampling count value (HWORD)
Input	XGF-HO2A_CH1_FRQ_LV	Word	18	High Speed Counter Module: Channel 1 input frequency value (LWORD)
Input	XGF-HO2A_CH1_FRQ_HV	Word	19	High Speed Counter Module: Channel 1 input frequency value (HWORD)
Input	XGF-HO2A_CH1_RPU_LV	Word	20	High Speed Counter Module: Channel 1 Rev./unit time value (LWORD)
Input	XGF-HO2A_CH1_RPU_HV	Word	21	High Speed Counter Module: Channel 1 Rev./unit time value (HWORD)
Input		WORD	22	Reserved

### <Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XGF-HO2A_CH0_CNTEN	BIT	0.0	High Speed Counter Module: Channel 0 enable counter command(level)
Output	XGF-HO2A_CH0_PREEN	BIT	0.1	High Speed Counter Module: Channel 0 enable preset command(Edge)
Output	XGF-HO2A_CH0_DWNCNT	BIT	0.2	High Speed Counter Module: Channel 0 up/down counter select command(Level)
Output	XGF-HO2A_CH0_AUXEN	BIT	0.3	High Speed Counter Module: Channel 0 auxiliary function request(Edge,Level)
Output	XGF-HO2A_CH0_CMPEN	BIT	0.4	High Speed Counter Module: Channel 0 compare function enable command(Level)
Output	XGF-HO2A_CH0_OUTEN	BIT	0.5	High Speed Counter Module: Channel 0 compare output signal enable command(Level)
Output	XGF-HO2A_CH0_EQ0RST	BIT	0.6	High Speed Counter Module: Channel 0 compare output 0 equal reset command (Edge)
Output	XGF-HO2A_CH0_EQ1RST	BIT	0.7	High Speed Counter Module: Channel 0 compare output 1 equal reset command (Edge)
Output	XGF-HO2A_CH0_CRYBRW_RST	BIT	0.A	High Speed Counter Module: Channel 0 carry/borrow reset command(Edge)
Output	XGF-HO2A_CH0_EXTPST_EN	BIT	0.B	High Speed Counter Module: Channel 0 preset Ext. Input enable command
Output	XGF-HO2A_CH0_EXTAUX_EN	BIT	0.C	High Speed Counter Module: Channel 0 auxiliary function Ext. input enable command

Output	XGF-HO2A_CH0_EXTPST_RST	BIT	0.D	High Speed Counter Module: Channel 0 Ext. Input preset reset command
Output	XGF-HO2A_CH1_CNTEN	BIT	1.0	High Speed Counter Module: Channel 1 enable counter command(level)
Output	XGF-HO2A_CH1_PREEN	BIT	1.1	High Speed Counter Module: Channel 1 enable preset command(Edge)
Output	XGF-HO2A_CH1_DWNCNT	BIT	1.2	High Speed Counter Module: Channel 1 up/down counter select command(Level)
Output	XGF-HO2A_CH1_AUXEN	BIT	1.3	High Speed Counter Module: Channel 1 auxiliary function enable command(Edge,Level)
Output	XGF-HO2A_CH1_CMPEN	BIT	1.4	High Speed Counter Module: Channel 1 compare function enable command(Level)
Output	XGF-HO2A_CH1_OUTEN	BIT	1.5	High Speed Counter Module: Channel 1 compare output signal enable command(Level)
Output	XGF-HO2A_CH1_EQ0RST	BIT	1.6	High Speed Counter Module: Channel 0 compare output 0 equal reset command (Edge)
Output	XGF-HO2A_CH1_EQ1RST	BIT	1.7	High Speed Counter Module: Channel 1 compare output 0 equal reset command (Edge)
Output	XGF-HO2A_CH1_CRYBRW_RST	BIT	1.A	High Speed Counter Module: Channel 1 carry/borrow reset command(Edge)
Output	XGF-HO2A_CH1_EXTPST_EN	BIT	1.B	High Speed Counter Module: Channel 1 preset Ext. Input enable command
Output	XGF-HO2A_CH1_EXTAUX_EN	BIT	1.C	High Speed Counter Module: Channel 1 auxiliary Ext. Input enable command
Output	XGF-HO2A_CH1_EXTPST_RST	BIT	1.D	High Speed Counter Module: Channel 1 Ext. Input preset reset command

## (17) XGF-HD2A

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XGF-HD2A_CH0_DN	BIT	0.0	High Speed Counter Module: CH0 up/down counter status flag
Input	XGF-HD2A_CH0_EXTPRE	BIT	0.1	High Speed Counter Module: Channel 0 external preset command detection flag
Input	XGF-HD2A_CH0_CRY	BIT	0.3	High Speed Counter Module: Channel 0 carry value
Input	XGF-HD2A_CH0_BRW	BIT	0.4	High Speed Counter Module: Channel 0 borrow value
Input	XGF-HD2A_CH0_AUXING	BIT	0.5	High Speed Counter Module: Channel 0 auxiliary function status
Input	XGF-HD2A_CH0_CMPOUT0	BIT	0.6	High Speed Counter Module: Channel 0 compare output 0 status
Input	XGF-HD2A_CH0_CMPOUT1	BIT	0.7	High Speed Counter Module: Channel 0 compare output 1 status
Input	XGF-HD2A_CH0_ERR	BIT	0.E	High Speed Counter Module: Channel 0 error flag
Input	XGF-HD2A_RDY	BIT	0.F	High Speed Counter Module: Module ready
Input	XGF-HD2A_CH1_DN	BIT	1.0	High Speed Counter Module: CH1 up/down counter status flag

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Input	XGF-HD2A_CH1_EXTPRE	BIT	1.1	High Speed Counter Module: Channel 1 external preset command detection flag
Input	XGF-HD2A_CH1_CRY	BIT	1.3	High Speed Counter Module: Channel 1 carry value
Input	XGF-HD2A_CH1_BRW	BIT	1.4	High Speed Counter Module: Channel 1 borrow value
Input	XGF-HD2A_CH1_AUXING	BIT	1.5	High Speed Counter Module: Channel 1 auxiliary function status
Input	XGF-HD2A_CH1_CMPOUT0	BIT	1.6	High Speed Counter Module: Channel 1 compare output 0 status
Input	XGF-HD2A_CH1_CMPOUT1	BIT	1.7	High Speed Counter Module: Channel 1 compare output 1 status
Input	XGF-HD2A_CH1_ERR	BIT	1.E	High Speed Counter Module: Channel 1 error flag
Input	XGF-HD2A_CH0_CNT_LV	Word	2	High Speed Counter Module: Channel 0 count value (LWORD)
Input	XGF-HD2A_CH0_CNT_HV	Word	3	High Speed Counter Module: Channel 0 count value (HWORD)
Input	XGF-HD2A_CH0_LTH_LV	Word	4	High Speed Counter Module: Channel 0 latch count value (LWORD)
Input	XGF-HD2A_CH0_LTH_HV	Word	5	High Speed Counter Module: Channel 0 latch count value (HWORD)
Input	XGF-HD2A_CH0_RNG_LV	Word	6	High Speed Counter Module: Channel 0 sampling count value (LWORD)
Input	XGF-HD2A_CH0_RNG_HV	Word	7	High Speed Counter Module: Channel 0 sampling count value (HWORD)
Input	XGF-HD2A_CH0_FRQ_LV	Word	8	High Speed Counter Module: Channel 0 input frequency value (LWORD)
Input	XGF-HD2A_CH0_FRQ_HV	Word	9	High Speed Counter Module: Channel 0 input frequency value (HWORD)
Input	XGF-HD2A_CH0_RPU_LV	Word	10	High Speed Counter Module: Channel 0 Rev./unit time value (LWORD)
Input	XGF-HD2A_CH0_RPU_HV	Word	11	High Speed Counter Module: Channel 0 Rev./unit time value (HWORD)
Input	XGF-HD2A_CH1_CNT_LV	Word	12	High Speed Counter Module: Channel 1 count value (LWORD)
Input	XGF-HD2A_CH1_CNT_HV	Word	13	High Speed Counter Module: Channel 1 count value (HWORD)
Input	XGF-HD2A_CH1_LTH_LV	Word	14	High Speed Counter Module: Channel 1 latch count value (LWORD)
Input	XGF-HD2A_CH1_LTH_HV	Word	15	High Speed Counter Module: Channel 1 latch count value (HWORD)
Input	XGF-HD2A_CH1_RNG_LV	Word	16	High Speed Counter Module: Channel 1 sampling count value (LWORD)
Input	XGF-HD2A_CH1_RNG_HV	Word	17	High Speed Counter Module: Channel 1 sampling count value (HWORD)
Input	XGF-HD2A_CH1_FRQ_LV	Word	18	High Speed Counter Module: Channel 1 input frequency value (LWORD)
Input	XGF-HD2A_CH1_FRQ_HV	Word	19	High Speed Counter Module: Channel 1 input frequency value (HWORD)
Input	XGF-HD2A_CH1_RPU_LV	Word	20	High Speed Counter Module: Channel 1 Rev./unit time value (LWORD)

Input	XGF-HD2A_CH1_RPU_HV	Word	21	High Speed Counter Module: Channel 1 Rev./unit time value (HWORD)
Input		WORD	22	Reserved

## &lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XGF-HD2A_CH0_CNTEN	BIT	0.0	High Speed Counter Module: Channel 0 enable counter command(level)
Output	XGF-HD2A_CH0_PREEN	BIT	0.1	High Speed Counter Module: Channel 0 enable preset command(Edge)
Output	XGF-HD2A_CH0_DWNCNT	BIT	0.2	High Speed Counter Module: Channel 0 up/down counter select command(Level)
Output	XGF-HD2A_CH0_AUXEN	BIT	0.3	High Speed Counter Module: Channel 0 auxiliary function request(Edge,Level)
Output	XGF-HD2A_CH0_CMPEN	BIT	0.4	High Speed Counter Module: Channel 0 compare function enable command(Level)
Output	XGF-HD2A_CH0_OUTEN	BIT	0.5	High Speed Counter Module: Channel 0 compare output signal enable command(Level)
Output	XGF-HD2A_CH0_EQ0RST	BIT	0.6	High Speed Counter Module: Channel 0 compare output 0 equal reset command (Edge)
Output	XGF-HD2A_CH0_EQ1RST	BIT	0.7	High Speed Counter Module: Channel 0 compare output 1 equal reset command (Edge)
Output	XGF-HD2A_CH0_CRYBRW_RST	BIT	0.A	High Speed Counter Module: Channel 0 carry/borrow reset command(Edge)
Output	XGF-HD2A_CH0_EXTPST_EN	BIT	0.B	High Speed Counter Module: Channel 0 preset Ext. Input enable command
Output	XGF-HD2A_CH0_EXTAUX_EN	BIT	0.C	High Speed Counter Module: Channel 0 auxiliary function Ext. input enable command
Output	XGF-HD2A_CH0_EXTPST_RST	BIT	0.D	High Speed Counter Module: Channel 0 Ext. Input preset reset command
Output	XGF-HD2A_CH1_CNTEN	BIT	1.0	High Speed Counter Module: Channel 1 enable counter command(level)
Output	XGF-HD2A_CH1_PREEN	BIT	1.1	High Speed Counter Module: Channel 1 enable preset command(Edge)
Output	XGF-HD2A_CH1_DWNCNT	BIT	1.2	High Speed Counter Module: Channel 1 up/down counter select command(Level)
Output	XGF-HD2A_CH1_AUXEN	BIT	1.3	High Speed Counter Module: Channel 1 auxiliary function enable command(Edge,Level)
Output	XGF-HD2A_CH1_CMPEN	BIT	1.4	High Speed Counter Module: Channel 1 compare function enable command(Level)
Output	XGF-HD2A_CH1_OUTEN	BIT	1.5	High Speed Counter Module: Channel 1 compare output signal enable command(Level)
Output	XGF-HD2A_CH1_EQ0RST	BIT	1.6	High Speed Counter Module: Channel 0 compare output 0 equal reset command (Edge)
Output	XGF-HD2A_CH1_EQ1RST	BIT	1.7	High Speed Counter Module: Channel 1 compare output 0 equal reset command (Edge)
Output	XGF-	BIT	1.A	High Speed Counter Module: Channel 1 carry/borrow reset

## Appendix

	HD2A_CH1_CRYBRW_RST			command(Edge)
Output	XGF- HD2A_CH1_EXTPST_EN	BIT	1.B	High Speed Counter Module: Channel 1 preset Ext. Input enable command
Output	XGF- HD2A_CH1_EXTAUX_EN	BIT	1.C	High Speed Counter Module: Channel 1 auxiliary Ext. Input enable command
Output	XGF- HD2A_CH1_EXTPST_RST	BIT	1.D	High Speed Counter Module: Channel 1 Ext. Input preset reset command

### (18) XGF-HO8A

#### 1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XGF-HO8A_CH0_DN	BIT	0.0	High Speed Counter Module: CH0 up/down counter status flag
Input	XGF-HO8A_CH0_AUXING	BIT	0.1	High Speed Counter Module: Channel 0 auxiliary function status
Input	XGF-HO8A_CH0_CRY	BIT	0.2	High Speed Counter Module: Channel 0 carry value
Input	XGF-HO8A_CH0_BRW	BIT	0.3	High Speed Counter Module: Channel 0 borrow value
Input	XGF- HO8A_CH0_CMPOUT	BIT	0.4	High Speed Counter Module: Channel 0 compare output status
Input	XGF-HO8A_CH0_ERR	BIT	0.6	High Speed Counter Module: Channel 0 error flag
Input	XGF-HO8A_CH1_DN	BIT	0.8	High Speed Counter Module: CH1 up/down counter status flag
Input	XGF-HO8A_CH1_AUXING	BIT	0.9	High Speed Counter Module: Channel 1 auxiliary function status
Input	XGF-HO8A_CH1_CRY	BIT	0.A	High Speed Counter Module: Channel 1 carry value
Input	XGF-HO8A_CH1_BRW	BIT	0.B	High Speed Counter Module: Channel 1 borrow value
Input	XGF- HO8A_CH1_CMPOUT	BIT	0.C	High Speed Counter Module: Channel 1 compare output status
Input	XGF-HO8A_CH1_ERR	BIT	0.E	High Speed Counter Module: Channel 1 error flag
Input	XGF-HO8A_RDY	BIT	0.F	High Speed Counter Module: Module ready
Input	XGF-HO8A_CH2_DN	BIT	1.0	High Speed Counter Module: CH2 up/down counter status flag
Input	XGF-HO8A_CH2_AUXING	BIT	1.1	High Speed Counter Module: Channel 2 auxiliary function status
Input	XGF-HO8A_CH2_CRY	BIT	1.2	High Speed Counter Module: Channel 2 carry value
Input	XGF-HO8A_CH2_BRW	BIT	1.3	High Speed Counter Module: Channel 2 borrow value
Input	XGF- HO8A_CH2_CMPOUT	BIT	1.4	High Speed Counter Module: Channel 2 compare output status
Input	XGF-HO8A_CH2_ERR	BIT	1.6	High Speed Counter Module: Channel 2 error flag
Input	XGF-HO8A_CH3_DN	BIT	1.8	High Speed Counter Module: CH3 up/down counter status flag
Input	XGF-HO8A_CH3_AUXING	BIT	1.9	High Speed Counter Module: Channel 3 auxiliary function status
Input	XGF-HO8A_CH3_CRY	BIT	1.A	High Speed Counter Module: Channel 3 carry value
Input	XGF-HO8A_CH3_BRW	BIT	1.B	High Speed Counter Module: Channel 3 borrow value
Input	XGF- HO8A_CH3_CMPOUT	BIT	1.C	High Speed Counter Module: Channel 3 compare output status
Input	XGF-HO8A_CH3_ERR	BIT	1.E	High Speed Counter Module: Channel 3 error flag
Input	XGF-HO8A_CH4_DN	BIT	2.0	High Speed Counter Module: CH4 up/down counter status flag

Input	XGF-HO8A_CH4_AUXING	BIT	2.1	High Speed Counter Module: Channel 4 auxiliary function status
Input	XGF-HO8A_CH4_CRY	BIT	2.2	High Speed Counter Module: Channel 4 carry value
Input	XGF-HO8A_CH4_BRW	BIT	2.3	High Speed Counter Module: Channel 4 borrow value
Input	XGF-HO8A_CH4_CMPOUT	BIT	2.4	High Speed Counter Module: Channel 4 compare output status
Input	XGF-HO8A_CH4_ERR	BIT	2.6	High Speed Counter Module: Channel 4 error flag
Input	XGF-HO8A_CH5_DN	BIT	2.8	High Speed Counter Module: CH5 up/down counter status flag
Input	XGF-HO8A_CH5_AUXING	BIT	2.9	High Speed Counter Module: Channel 5 auxiliary function status
Input	XGF-HO8A_CH5_CRY	BIT	2.A	High Speed Counter Module: Channel 5 carry value
Input	XGF-HO8A_CH5_BRW	BIT	2.B	High Speed Counter Module: Channel 5 borrow value
Input	XGF-HO8A_CH5_CMPOUT	BIT	2.C	High Speed Counter Module: Channel 5 compare output status
Input	XGF-HO8A_CH5_ERR	BIT	2.E	High Speed Counter Module: Channel 5 error flag
Input	XGF-HO8A_CH6_DN	BIT	3.0	High Speed Counter Module: CH6 up/down counter status flag
Input	XGF-HO8A_CH6_AUXING	BIT	3.1	High Speed Counter Module: Channel 6 auxiliary function status
Input	XGF-HO8A_CH6_CRY	BIT	3.2	High Speed Counter Module: Channel 6 carry value
Input	XGF-HO8A_CH6_BRW	BIT	3.3	High Speed Counter Module: Channel 6 borrow value
Input	XGF-HO8A_CH6_CMPOUT	BIT	3.4	High Speed Counter Module: Channel 6 compare output status
Input	XGF-HO8A_CH6_ERR	BIT	3.6	High Speed Counter Module: Channel 6 error flag
Input	XGF-HO8A_CH7_DN	BIT	3.8	High Speed Counter Module: CH7 up/down counter status flag
Input	XGF-HO8A_CH7_AUXING	BIT	3.9	High Speed Counter Module: Channel 7 auxiliary function status
Input	XGF-HO8A_CH7_CRY	BIT	3.A	High Speed Counter Module: Channel 7 carry value
Input	XGF-HO8A_CH7_BRW	BIT	3.B	High Speed Counter Module: Channel 7 borrow value
Input	XGF-HO8A_CH7_CMPOUT	BIT	3.C	High Speed Counter Module: Channel 7 compare output status
Input	XGF-HO8A_CH7_ERR	BIT	3.E	High Speed Counter Module: Channel 7 error flag
Input	XGF-HO8A_CH0_CNT_LV	Word	4	High Speed Counter Module: Channel 0 count value (LWORD)
Input	XGF-HO8A_CH0_CNT_HV	Word	5	High Speed Counter Module: Channel 0 count value (HWORD)
Input	XGF-HO8A_CH1_CNT_LV	Word	6	High Speed Counter Module: Channel 1 count value (LWORD)
Input	XGF-HO8A_CH1_CNT_HV	Word	7	High Speed Counter Module: Channel 1 count value (HWORD)
Input	XGF-HO8A_CH2_CNT_LV	Word	8	High Speed Counter Module: Channel 2 count value (LWORD)
Input	XGF-HO8A_CH2_CNT_HV	Word	9	High Speed Counter Module: Channel 2 count value (HWORD)
Input	XGF-HO8A_CH3_CNT_LV	Word	10	High Speed Counter Module: Channel 3 count value (LWORD)
Input	XGF-HO8A_CH3_CNT_HV	Word	11	High Speed Counter Module: Channel 3 count value (HWORD)
Input	XGF-HO8A_CH4_CNT_LV	Word	12	High Speed Counter Module: Channel 4 count value (LWORD)
Input	XGF-HO8A_CH4_CNT_HV	Word	13	High Speed Counter Module: Channel 4 count value (HWORD)
Input	XGF-HO8A_CH5_CNT_LV	Word	14	High Speed Counter Module: Channel 5 count value (LWORD)
Input	XGF-HO8A_CH5_CNT_HV	Word	15	High Speed Counter Module: Channel 5 count value (HWORD)
Input	XGF-HO8A_CH6_CNT_LV	Word	16	High Speed Counter Module: Channel 6 count value (LWORD)
Input	XGF-HO8A_CH6_CNT_HV	Word	17	High Speed Counter Module: Channel 6 count value (HWORD)
Input	XGF-HO8A_CH7_CNT_LV	Word	18	High Speed Counter Module: Channel 7 count value (LWORD)
Input	XGF-HO8A_CH7_CNT_HV	Word	19	High Speed Counter Module: Channel 7 count value (HWORD)
Input		WORD	20	Reserved

<Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XGF-HO8A_CH0_CNTEN	BIT	0.0	High Speed Counter Module: Channel 0 enable counter command(level)
Output	XGF-HO8A_CH0_DWNCNT	BIT	0.1	High Speed Counter Module: Channel 0 up/down counter select command(Level)
Output	XGF-HO8A_CH0_PREEN	BIT	0.2	High Speed Counter Module: Channel 0 enable preset command(Edge)
Output	XGF-HO8A_CH0_AUXEN	BIT	0.3	High Speed Counter Module: Channel 0 auxiliary function enable command(Edge,Level)
Output	XGF-HO8A_CH0_CRYBRW_RST	BIT	0.4	High Speed Counter Module: Channel 0 carry/borrow reset command(Edge)
Output	XGF-HO8A_CH0_CMPEN	BIT	0.5	High Speed Counter Module: Channel 0 compare function enable command(Level)
Output	XGF-HO8A_CH0_OUTEN	BIT	0.6	High Speed Counter Module: Channel 0 compare output signal enable command(Level)
Output	XGF-HO8A_CH0_EQRST	BIT	0.7	High Speed Counter Module: Channel 0 compare output 0 equal reset command (Edge)
Output	XGF-HO8A_CH1_CNTEN	BIT	0.8	High Speed Counter Module: Channel 1 enable counter command(level)
Output	XGF-HO8A_CH1_DWNCNT	BIT	0.9	High Speed Counter Module: Channel 1 up/down counter select command(Level)
Output	XGF-HO8A_CH1_PREEN	BIT	0.A	High Speed Counter Module: Channel 1 enable preset command(Edge)
Output	XGF-HO8A_CH1_AUXEN	BIT	0.B	High Speed Counter Module: Channel 1 auxiliary function enable command(Edge,Level)
Output	XGF-HO8A_CH1_CRYBRW_RST	BIT	0.C	High Speed Counter Module: Channel 1 carry/borrow reset command(Edge)
Output	XGF-HO8A_CH1_CMPEN	BIT	0.D	High Speed Counter Module: Channel 1 compare function enable command(Level)
Output	XGF-HO8A_CH1_OUTEN	BIT	0.E	High Speed Counter Module: Channel 1 compare output signal enable command(Level)
Output	XGF-HO8A_CH1_EQRST	BIT	0.F	High Speed Counter Module: Channel 1 compare output 0 equal reset command (Edge)
Output	XGF-HO8A_CH2_CNTEN	BIT	1.0	High Speed Counter Module: Channel 2 enable counter command(level)
Output	XGF-HO8A_CH2_DWNCNT	BIT	1.1	High Speed Counter Module: Channel 2 up/down counter select command(Level)
Output	XGF-HO8A_CH2_PREEN	BIT	1.2	High Speed Counter Module: Channel 2 enable preset command(Edge)
Output	XGF-HO8A_CH2_AUXEN	BIT	1.3	High Speed Counter Module: Channel 2 auxiliary function enable command(Edge,Level)
Output	XGF-HO8A_CH2_CRYBRW_RST	BIT	1.4	High Speed Counter Module: Channel 2 carry/borrow reset command(Edge)
Output	XGF-HO8A_CH2_CMPEN	BIT	1.5	High Speed Counter Module: Channel 2 compare function enable command(Level)
Output	XGF-HO8A_CH2_OUTEN	BIT	1.6	High Speed Counter Module: Channel 2 compare output signal enable command(Level)

Output	XGF-HO8A_CH2_EQRST	BIT	1.7	High Speed Counter Module: Channel 2 compare output 0 equal reset command (Edge)
Output	XGF-HO8A_CH3_CNTEN	BIT	1.8	High Speed Counter Module: Channel 3 enable counter command(level)
Output	XGF-HO8A_CH3_DWNCNT	BIT	1.9	High Speed Counter Module: Channel 3 up/down counter select command(Level)
Output	XGF-HO8A_CH3_PREEN	BIT	1.A	High Speed Counter Module: Channel 3 enable preset command(Edge)
Output	XGF-HO8A_CH3_AUXEN	BIT	1.B	High Speed Counter Module: Channel 3 auxiliary function enable command(Edge,Level)
Output	XGF-HO8A_CH3_CRYBRW_RST	BIT	1.C	High Speed Counter Module: Channel 3 carry/borrow reset command(Edge)
Output	XGF-HO8A_CH3_CMPEN	BIT	1.D	High Speed Counter Module: Channel 3 compare function enable command(Level)
Output	XGF-HO8A_CH3_OUTEN	BIT	1.E	High Speed Counter Module: Channel 3 compare output signal enable command(Level)
Output	XGF-HO8A_CH3_EQRST	BIT	1.F	High Speed Counter Module: Channel 3 compare output 0 equal reset command (Edge)
Output	XGF-HO8A_CH4_CNTEN	BIT	2.0	High Speed Counter Module: Channel 4 enable counter command(level)
Output	XGF-HO8A_CH4_DWNCNT	BIT	2.1	High Speed Counter Module: Channel 4 up/down counter select command(Level)
Output	XGF-HO8A_CH4_PREEN	BIT	2.2	High Speed Counter Module: Channel 4 enable preset command(Edge)
Output	XGF-HO8A_CH4_AUXEN	BIT	2.3	High Speed Counter Module: Channel 4 auxiliary function enable command(Edge,Level)
Output	XGF-HO8A_CH4_CRYBRW_RST	BIT	2.4	High Speed Counter Module: Channel 4 carry/borrow reset command(Edge)
Output	XGF-HO8A_CH4_CMPEN	BIT	2.5	High Speed Counter Module: Channel 4 compare function enable command(Level)
Output	XGF-HO8A_CH4_OUTEN	BIT	2.6	High Speed Counter Module: Channel 4 compare output signal enable command(Level)
Output	XGF-HO8A_CH4_EQRST	BIT	2.7	High Speed Counter Module: Channel 4 compare output 0 equal reset command (Edge)
Output	XGF-HO8A_CH5_CNTEN	BIT	2.8	High Speed Counter Module: Channel 5 enable counter command(level)
Output	XGF-HO8A_CH5_DWNCNT	BIT	2.9	High Speed Counter Module: Channel 5 up/down counter select command(Level)
Output	XGF-HO8A_CH5_PREEN	BIT	2.A	High Speed Counter Module: Channel 5 enable preset command(Edge)
Output	XGF-HO8A_CH5_AUXEN	BIT	2.B	High Speed Counter Module: Channel 5 auxiliary function enable command(Edge,Level)
Output	XGF-HO8A_CH5_CRYBRW_RST	BIT	2.C	High Speed Counter Module: Channel 5 carry/borrow reset command(Edge)
Output	XGF-HO8A_CH5_CMPEN	BIT	2.D	High Speed Counter Module: Channel 5 compare function enable command(Level)
Output	XGF-HO8A_CH5_OUTEN	BIT	2.E	High Speed Counter Module: Channel 5 compare output signal enable command(Level)
Output	XGF-HO8A_CH5_EQRST	BIT	2.F	High Speed Counter Module: Channel 5 compare output 0

				equal reset command (Edge)
Output	XGF-HO8A_CH6_CNTEN	BIT	3.0	High Speed Counter Module: Channel 6 enable counter command(Level)
Output	XGF-HO8A_CH6_DWNCNT	BIT	3.1	High Speed Counter Module: Channel 6 up/down counter select command(Level)
Output	XGF-HO8A_CH6_PREEN	BIT	3.2	High Speed Counter Module: Channel 6 enable preset command(Edge)
Output	XGF-HO8A_CH6_AUXEN	BIT	3.3	High Speed Counter Module: Channel 6 auxiliary function enable command(Edge,Level)
Output	XGF-HO8A_CH6_CRYBRW_RST	BIT	3.4	High Speed Counter Module: Channel 6 carry/borrow reset command(Edge)
Output	XGF-HO8A_CH6_CMPEN	BIT	3.5	High Speed Counter Module: Channel 6 compare function enable command(Level)
Output	XGF-HO8A_CH6_OUTEN	BIT	3.6	High Speed Counter Module: Channel 6 compare output signal enable command(Level)
Output	XGF-HO8A_CH6_EQRST	BIT	3.7	High Speed Counter Module: Channel 6 compare output 0 equal reset command (Edge)
Output	XGF-HO8A_CH7_CNTEN	BIT	3.8	High Speed Counter Module: Channel 7 enable counter command(level)
Output	XGF-HO8A_CH7_DWNCNT	BIT	3.9	High Speed Counter Module: Channel 7 up/down counter select command(Level)
Output	XGF-HO8A_CH7_PREEN	BIT	3.A	High Speed Counter Module: Channel 7 enable preset command(Edge)
Output	XGF-HO8A_CH7_AUXEN	BIT	3.B	High Speed Counter Module: Channel 7 auxiliary function enable command(Edge,Level)
Output	XGF-HO8A_CH7_CRYBRW_RST	BIT	3.C	High Speed Counter Module: Channel 7 carry/borrow reset command(Edge)
Output	XGF-HO8A_CH7_CMPEN	BIT	3.D	High Speed Counter Module: Channel 7 compare function enable command(Level)
Output	XGF-HO8A_CH7_OUTEN	BIT	3.E	High Speed Counter Module: Channel 7 compare output signal enable command(Level)
Output	XGF-HO8A_CH7_EQRST	BIT	3.F	High Speed Counter Module: Channel 7 compare output 0 equal reset command (Edge)

(19) XGF-RD8A

1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XGF-RD8A_CH0_ADJERR	BIT	0.0	RTD Input Module: Channel 0 offset/Gain error flag
Input	XGF-RD8A_CH1_ADJERR	BIT	0.1	RTD Input Module: Channel 1 offset/Gain error flag
Input	XGF-RD8A_CH2_ADJERR	BIT	0.2	RTD Input Module: Channel 2 offset/Gain error flag
Input	XGF-RD8A_CH3_ADJERR	BIT	0.3	RTD Input Module: Channel 3 offset/Gain error flag
Input	XGF-RD8A_CH4_ADJERR	BIT	0.4	RTD Input Module: Channel 4 offset/Gain error flag
Input	XGF-RD8A_CH5_ADJERR	BIT	0.5	RTD Input Module: Channel 5 offset/Gain error flag
Input	XGF-RD8A_CH6_ADJERR	BIT	0.6	RTD Input Module: Channel 6 offset/Gain error flag
Input	XGF-RD8A_CH7_ADJERR	BIT	0.7	RTD Input Module: Channel 7 offset/Gain error flag

Input	XGF-RD8A_EEPROMERR	BIT	0.D	RTD Input Module: Offset/Gain backup error flag
Input	XGF-RD8A_WDT_ERR	BIT	0.E	RTD Input Module: H/W Error Flag
Input	XGF-RD8A_RDY	BIT	0.F	RTD Input Module: Module ready
Input	XGF-RD8A_CH0_ACT	BIT	1.0	RTD Input Module: CH0 RUN
Input	XGF-RD8A_CH1_ACT	BIT	1.1	RTD Input Module: CH1 RUN
Input	XGF-RD8A_CH2_ACT	BIT	1.2	RTD Input Module: CH2 RUN
Input	XGF-RD8A_CH3_ACT	BIT	1.3	RTD Input Module: CH3 RUN
Input	XGF-RD8A_CH4_ACT	BIT	1.4	RTD Input Module: CH4 RUN
Input	XGF-RD8A_CH5_ACT	BIT	1.5	RTD Input Module: CH5 RUN
Input	XGF-RD8A_CH6_ACT	BIT	1.6	RTD Input Module: CH6 RUN
Input	XGF-RD8A_CH7_ACT	BIT	1.7	RTD Input Module: CH7 RUN
Input	XGF-RD8A_CH0_BOUT	BIT	1.8	RTD Input Module: Channel 0 disconnection flag
Input	XGF-RD8A_CH1_BOUT	BIT	1.9	RTD Input Module: Channel 1 disconnection flag
Input	XGF-RD8A_CH2_BOUT	BIT	1.A	RTD Input Module: Channel 2 disconnection flag
Input	XGF-RD8A_CH3_BOUT	BIT	1.B	RTD Input Module: Channel 3 disconnection flag
Input	XGF-RD8A_CH4_BOUT	BIT	1.C	RTD Input Module: Channel 4 disconnection flag
Input	XGF-RD8A_CH5_BOUT	BIT	1.D	RTD Input Module: Channel 5 disconnection flag
Input	XGF-RD8A_CH6_BOUT	BIT	1.E	RTD Input Module: Channel 6 disconnection flag
Input	XGF-RD8A_CH7_BOUT	BIT	1.F	RTD Input Module: Channel 7 disconnection flag
Input	XGF-RD8A_CH0_SETERR	BIT	2.0	RTD Input Module: Channel 0 error code
Input	XGF-RD8A_CH1_SETERR	BIT	2.1	RTD Input Module: Channel 1 error code
Input	XGF-RD8A_CH2_SETERR	BIT	2.2	RTD Input Module: Channel 2 error code
Input	XGF-RD8A_CH3_SETERR	BIT	2.3	RTD Input Module: Channel 3 error code
Input	XGF-RD8A_CH4_SETERR	BIT	2.4	RTD Input Module: Channel 4 error code
Input	XGF-RD8A_CH5_SETERR	BIT	2.5	RTD Input Module: Channel 5 error code
Input	XGF-RD8A_CH6_SETERR	BIT	2.6	RTD Input Module: Channel 6 error code
Input	XGF-RD8A_CH7_SETERR	BIT	2.7	RTD Input Module: Channel 7 error code
Input	XGF-RD8A_CH0_PALL	BIT	3.0	RTD Input Module: Channel 0 process alarm ultra lower limit flag
Input	XGF-RD8A_CH0_PAL	BIT	3.1	RTD Input Module: Channel 0 process alarm lower limit flag
Input	XGF-RD8A_CH0_PAH	BIT	3.2	RTD Input Module: Channel 0 process alarm upper limit flag
Input	XGF-RD8A_CH0_PAHH	BIT	3.3	RTD Input Module: Channel 0 process alarm ultra upper limit flag
Input	XGF-RD8A_CH1_PALL	BIT	3.4	RTD Input Module: Channel 1 process alarm ultra lower limit flag
Input	XGF-RD8A_CH1_PAL	BIT	3.5	RTD Input Module: Channel 1 process alarm lower limit flag
Input	XGF-RD8A_CH1_PAH	BIT	3.6	RTD Input Module: Channel 1 process alarm upper limit flag
Input	XGF-RD8A_CH1_PAHH	BIT	3.7	RTD Input Module: Channel 1 process alarm ultra upper limit flag
Input	XGF-RD8A_CH2_PALL	BIT	3.8	RTD Input Module: Channel 2 process alarm ultra lower limit flag
Input	XGF-RD8A_CH2_PAL	BIT	3.9	RTD Input Module: Channel 2 process alarm lower limit flag
Input	XGF-RD8A_CH2_PAH	BIT	3.A	RTD Input Module: Channel 2 process alarm upper limit flag
Input	XGF-RD8A_CH2_PAHH	BIT	3.B	RTD Input Module: Channel 2 process alarm ultra upper limit

## Appendix

				flag
Input	XGF-RD8A_CH3_PALL	BIT	3.C	RTD Input Module: Channel 3 process alarm ultra lower limit flag
Input	XGF-RD8A_CH3_PAL	BIT	3.D	RTD Input Module: Channel 3 process alarm lower limit flag
Input	XGF-RD8A_CH3_PAH	BIT	3.E	RTD Input Module: Channel 3 process alarm upper limit flag
Input	XGF-RD8A_CH3_PAHH	BIT	3.F	RTD Input Module: Channel 3 process alarm ultra upper limit flag
Input	XGF-RD8A_CH4_PALL	BIT	4.0	RTD Input Module: Channel 4 process alarm ultra lower limit flag
Input	XGF-RD8A_CH4_PAL	BIT	4.1	RTD Input Module: Channel 4 process alarm lower limit flag
Input	XGF-RD8A_CH4_PAH	BIT	4.2	RTD Input Module: Channel 4 process alarm upper limit flag
Input	XGF-RD8A_CH4_PAHH	BIT	4.3	RTD Input Module: Channel 4 process alarm ultra upper limit flag
Input	XGF-RD8A_CH5_PALL	BIT	4.4	RTD Input Module: Channel 5 process alarm ultra lower limit flag
Input	XGF-RD8A_CH5_PAL	BIT	4.5	RTD Input Module: Channel 5 process alarm lower limit flag
Input	XGF-RD8A_CH5_PAH	BIT	4.6	RTD Input Module: Channel 5 process alarm upper limit flag
Input	XGF-RD8A_CH5_PAHH	BIT	4.7	RTD Input Module: Channel 5 process alarm ultra upper limit flag
Input	XGF-RD8A_CH6_PALL	BIT	4.8	RTD Input Module: Channel 6 process alarm ultra lower limit flag
Input	XGF-RD8A_CH6_PAL	BIT	4.9	RTD Input Module: Channel 6 process alarm lower limit flag
Input	XGF-RD8A_CH6_PAH	BIT	4.A	RTD Input Module: Channel 6 process alarm upper limit flag
Input	XGF-RD8A_CH6_PAHH	BIT	4.B	RTD Input Module: Channel 6 process alarm ultra upper limit flag
Input	XGF-RD8A_CH7_PALL	BIT	4.C	RTD Input Module: Channel 7 process alarm ultra lower limit flag
Input	XGF-RD8A_CH7_PAL	BIT	4.D	RTD Input Module: Channel 7 process alarm lower limit flag
Input	XGF-RD8A_CH7_PAH	BIT	4.E	RTD Input Module: Channel 7 process alarm upper limit flag
Input	XGF-RD8A_CH7_PAHH	BIT	4.F	RTD Input Module: Channel 7 process alarm ultra upper limit flag
Input	XGF-RD8A_CH0_RAL	BIT	5.0	RTD Input Module: Channel 0 rate change alarm lower limit flag
Input	XGF-RD8A_CH0_RAH	BIT	5.1	RTD Input Module: Channel 0 rate change alarm upper limit flag
Input	XGF-RD8A_CH1_RAL	BIT	5.2	RTD Input Module: Channel 1 rate change alarm lower limit flag
Input	XGF-RD8A_CH1_RAH	BIT	5.3	RTD Input Module: Channel 1 rate change alarm upper limit flag
Input	XGF-RD8A_CH2_RAL	BIT	5.4	RTD Input Module: Channel 2 rate change alarm lower limit flag
Input	XGF-RD8A_CH2_RAH	BIT	5.5	RTD Input Module: Channel 2 rate change alarm upper limit flag
Input	XGF-RD8A_CH3_RAL	BIT	5.6	RTD Input Module: Channel 3 rate change alarm lower limit flag
Input	XGF-RD8A_CH3_RAH	BIT	5.7	RTD Input Module: Channel 3 rate change alarm upper limit flag
Input	XGF-RD8A_CH4_RAL	BIT	5.8	RTD Input Module: Channel 4 rate change alarm lower limit flag
Input	XGF-RD8A_CH4_RAH	BIT	5.9	RTD Input Module: Channel 4 rate change alarm upper limit flag
Input	XGF-RD8A_CH5_RAL	BIT	5.A	RTD Input Module: Channel 5 rate change alarm lower limit flag
Input	XGF-RD8A_CH5_RAH	BIT	5.B	RTD Input Module: Channel 5 rate change alarm upper limit flag
Input	XGF-RD8A_CH6_RAL	BIT	5.C	RTD Input Module: Channel 6 rate change alarm lower limit flag
Input	XGF-RD8A_CH6_RAH	BIT	5.D	RTD Input Module: Channel 6 rate change alarm upper limit flag
Input	XGF-RD8A_CH7_RAL	BIT	5.E	RTD Input Module: Channel 7 rate change alarm lower limit flag
Input	XGF-RD8A_CH7_RAH	BIT	5.F	RTD Input Module: Channel 7 rate change alarm upper limit flag
Input	XGF-RD8A_CH0_TEMP	Word	6	RTD Input Module: Channel 0 temperature data
Input	XGF-RD8A_CH1_TEMP	Word	7	RTD Input Module: Channel 1 temperature data
Input	XGF-RD8A_CH2_TEMP	Word	8	RTD Input Module: Channel 2 temperature data
Input	XGF-RD8A_CH3_TEMP	Word	9	RTD Input Module: Channel 3 temperature data

Input	XGF-RD8A_CH4_TEMP	Word	10	RTD Input Module: Channel 4 temperature data
Input	XGF-RD8A_CH5_TEMP	Word	11	RTD Input Module: Channel 5 temperature data
Input	XGF-RD8A_CH6_TEMP	Word	12	RTD Input Module: Channel 6 temperature data
Input	XGF-RD8A_CH7_TEMP	Word	13	RTD Input Module: Channel 7 temperature data
Input	XGF-RD8A_CH0_SCAL	Word	14	RTD Input Module: Channel 0 scaling data
Input	XGF-RD8A_CH1_SCAL	Word	15	RTD Input Module: Channel 1 scaling data
Input	XGF-RD8A_CH2_SCAL	Word	16	RTD Input Module: Channel 2 scaling data
Input	XGF-RD8A_CH3_SCAL	Word	17	RTD Input Module: Channel 3 scaling data
Input	XGF-RD8A_CH4_SCAL	Word	18	RTD Input Module: Channel 4 scaling data
Input	XGF-RD8A_CH5_SCAL	Word	19	RTD Input Module: Channel 5 scaling data
Input	XGF-RD8A_CH6_SCAL	Word	20	RTD Input Module: Channel 6 scaling data
Input	XGF-RD8A_CH7_SCAL	Word	21	RTD Input Module: Channel 7 scaling data

## &lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XGF-RD8A_CH0_FINDEN	BIT	0.0	RTD Input Module: Channel 0 Max./Min. search enable/disable
Output	XGF-RD8A_CH1_FINDEN	BIT	0.1	RTD Input Module: Channel 1 Max./Min. search enable/disable
Output	XGF-RD8A_CH2_FINDEN	BIT	0.2	RTD Input Module: Channel 2 Max./Min. search enable/disable
Output	XGF-RD8A_CH3_FINDEN	BIT	0.3	RTD Input Module: Channel 3 Max./Min. search enable/disable
Output	XGF-RD8A_CH4_FINDEN	BIT	0.4	RTD Input Module: Channel 4 Max./Min. search enable/disable
Output	XGF-RD8A_CH5_FINDEN	BIT	0.5	RTD Input Module: Channel 5 Max./Min. search enable/disable
Output	XGF-RD8A_CH6_FINDEN	BIT	0.6	RTD Input Module: Channel 6 Max./Min. search enable/disable
Output	XGF-RD8A_CH7_FINDEN	BIT	0.7	RTD Input Module: Channel 7 Max./Min. search enable/disable
Output	XGF-RD8A_CH0_ALMEN	BIT	0.8	RTD Input Module: Channel 0 alarm(PVA/RCA) enable/disable
Output	XGF-RD8A_CH1_ALMEN	BIT	0.9	RTD Input Module: Channel 1 alarm(PVA/RCA) enable/disable
Output	XGF-RD8A_CH2_ALMEN	BIT	0.A	RTD Input Module: Channel 2 alarm(PVA/RCA) enable/disable
Output	XGF-RD8A_CH3_ALMEN	BIT	0.B	RTD Input Module: Channel 3 alarm(PVA/RCA) enable/disable
Output	XGF-RD8A_CH4_ALMEN	BIT	0.C	RTD Input Module: Channel 4 alarm(PVA/RCA) enable/disable
Output	XGF-RD8A_CH5_ALMEN	BIT	0.D	RTD Input Module: Channel 5 alarm(PVA/RCA) enable/disable
Output	XGF-RD8A_CH6_ALMEN	BIT	0.E	RTD Input Module: Channel 6 alarm(PVA/RCA) enable/disable
Output	XGF-RD8A_CH7_ALMEN	BIT	0.F	RTD Input Module: Channel 7 alarm(PVA/RCA) enable/disable

(20) XGF-RD4A

1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XGF-RD4A_CH0_ADJERR	BIT	0.0	Temperature input module Channel 0 offset/Gain error flag
Input	XGF-RD4A_CH1_ADJERR	BIT	0.1	Temperature input module Channel 1 offset/Gain error flag
Input	XGF-RD4A_CH2_ADJERR	BIT	0.2	Temperature input module Channel 2 offset/Gain error flag
Input	XGF-RD4A_CH3_ADJERR	BIT	0.3	Temperature input module Channel 3 offset/Gain error flag
Input	XGF-RD4A_EEPROMERR	BIT	0.D	Temperature input module Offset/Gain backup error flag
Input	XGF-RD4A_WDT_ERR	BIT	0.E	Temperature input module H/W Error Flag
Input	XGF-RD4A_RDY	BIT	0.F	Temperature input module Module ready
Input	XGF-RD4A_CH0_ACT	BIT	1.0	Temperature input module CH0 RUN
Input	XGF-RD4A_CH1_ACT	BIT	1.1	Temperature input module CH1 RUN
Input	XGF-RD4A_CH2_ACT	BIT	1.2	Temperature input module CH2 RUN
Input	XGF-RD4A_CH3_ACT	BIT	1.3	Temperature input module CH3 RUN
Input	XGF-RD4A_CH0_BOUT	BIT	1.4	Temperature input module Channel 0 disconnection flag
Input	XGF-RD4A_CH1_BOUT	BIT	1.5	Temperature input module Channel 1 disconnection flag
Input	XGF-RD4A_CH2_BOUT	BIT	1.6	Temperature input module Channel 2 disconnection flag
Input	XGF-RD4A_CH3_BOUT	BIT	1.7	Temperature input module Channel 3 disconnection flag
Input	XGF-RD4A_CH0_SETERR	BIT	1.8	Temperature input module Channel 0 error code
Input	XGF-RD4A_CH1_SETERR	BIT	1.9	Temperature input module Channel 1 error code
Input	XGF-RD4A_CH2_SETERR	BIT	1.A	Temperature input module Channel 2 error code
Input	XGF-RD4A_CH3_SETERR	BIT	1.B	Temperature input module Channel 3 error code
Input	XGF-RD4A_CH0_PALL	BIT	2.0	Temperature input module Channel 0 process alarm ultra lower limit flag
Input	XGF-RD4A_CH0_PAL	BIT	2.1	Temperature input module Channel 0 process alarm lower limit flag
Input	XGF-RD4A_CH0_PAH	BIT	2.2	Temperature input module Channel 0 process alarm upper limit flag
Input	XGF-RD4A_CH0_PAHH	BIT	2.3	Temperature input module Channel 0 process alarm ultra upper limit flag
Input	XGF-RD4A_CH1_PALL	BIT	2.4	Temperature input module Channel 1 process alarm ultra lower limit flag
Input	XGF-RD4A_CH1_PAL	BIT	2.5	Temperature input module Channel 1 process alarm lower limit

				flag
Input	XGF-RD4A_CH1_PAH	BIT	2.6	Temperature input module Channel 1 process alarm upper limit flag
Input	XGF-RD4A_CH1_PAHH	BIT	2.7	Temperature input module Channel 1 process alarm ultra upper limit flag
Input	XGF-RD4A_CH2_PALL	BIT	2.8	Temperature input module Channel 2 process alarm ultra lower limit flag
Input	XGF-RD4A_CH2_PAL	BIT	2.9	Temperature input module Channel 2 process alarm lower limit flag
Input	XGF-RD4A_CH2_PAH	BIT	2.A	Temperature input module Channel 2 process alarm upper limit flag
Input	XGF-RD4A_CH2_PAHH	BIT	2.B	Temperature input module Channel 2 process alarm ultra upper limit flag
Input	XGF-RD4A_CH3_PALL	BIT	2.C	Temperature input module Channel 3 process alarm ultra lower limit flag
Input	XGF-RD4A_CH3_PAL	BIT	2.D	Temperature input module Channel 3 process alarm lower limit flag
Input	XGF-RD4A_CH3_PAH	BIT	2.E	Temperature input module Channel 3 process alarm upper limit flag
Input	XGF-RD4A_CH3_PAHH	BIT	2.F	Temperature input module Channel 3 process alarm ultra upper limit flag
Input	XGF-RD4A_CH0_RAL	BIT	3.0	Temperature input module Channel 0 rate change alarm lower limit flag
Input	XGF-RD4A_CH0_RAH	BIT	3.1	Temperature input module Channel 0 rate change alarm upper limit flag
Input	XGF-RD4A_CH1_RAL	BIT	3.4	Temperature input module Channel 1 rate change alarm lower limit flag
Input	XGF-RD4A_CH1_RAH	BIT	3.5	Temperature input module Channel 1 rate change alarm upper limit flag
Input	XGF-RD4A_CH2_RAL	BIT	3.8	Temperature input module Channel 2 rate change alarm lower limit flag
Input	XGF-RD4A_CH2_RAH	BIT	3.9	Temperature input module Channel 2 rate change alarm upper limit flag
Input	XGF-RD4A_CH3_RAL	BIT	3.C	Temperature input module Channel 3 rate change alarm lower limit flag
Input	XGF-RD4A_CH3_RAH	BIT	3.D	Temperature input module Channel 3 rate change alarm upper limit flag
Input	XGF-RD4A_CH0_TEMP	Word	4	Temperature input module Channel 0 temperature data
Input	XGF-RD4A_CH1_TEMP	Word	5	Temperature input module Channel 1 temperature data
Input	XGF-RD4A_CH2_TEMP	Word	6	Temperature input module Channel 2 temperature data
Input	XGF-RD4A_CH3_TEMP	Word	7	Temperature input module Channel 3 temperature data
Input	XGF-RD4A_CH0_SCAL	Word	8	Temperature input module Channel 0 scaling data
Input	XGF-RD4A_CH1_SCAL	Word	9	Temperature input module Channel 1 scaling data
Input	XGF-RD4A_CH2_SCAL	Word	10	Temperature input module Channel 2 scaling data
Input	XGF-RD4A_CH3_SCAL	Word	11	Temperature input module Channel 3 scaling data

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Input	XGF-RD4A_CH0_MIN	Word	12	Temperature input module Channel 0 temperature Min. data
Input	XGF-RD4A_CH0_MAX	Word	13	Temperature input module Channel 0 temperature Max. data
Input	XGF-RD4A_CH1_MIN	Word	14	Temperature input module Channel 1 temperature Min. data
Input	XGF-RD4A_CH1_MAX	Word	15	Temperature input module Channel 1 temperature Max. data
Input	XGF-RD4A_CH2_MIN	Word	16	Temperature input module Channel 2 temperature Min. data
Input	XGF-RD4A_CH2_MAX	Word	17	Temperature input module Channel 2 temperature Max. data
Input	XGF-RD4A_CH3_MIN	Word	18	Temperature input module Channel 3 temperature Min. data
Input	XGF-RD4A_CH3_MAX	Word	19	Temperature input module Channel 3 temperature Max. data
Input	XGF-RD4A_CH0_TIMEL	Word	20	Temperature input module Channel 0 data upload time
Input	XGF-RD4A_CH0_TIMEH	Word	21	Temperature input module Channel 0 data upload time
Input	XGF-RD4A_CH1_TIMEL	Word	22	Temperature input module Channel 1 data upload time
Input	XGF-RD4A_CH1_TIMEH	Word	23	Temperature input module Channel 1 data upload time
Input	XGF-RD4A_CH2_TIMEL	Word	24	Temperature input module Channel 2 data upload time
Input	XGF-RD4A_CH2_TIMEH	Word	25	Temperature input module Channel 2 data upload time
Input	XGF-RD4A_CH3_TIMEL	Word	26	Temperature input module Channel 3 data upload time
Input	XGF-RD4A_CH3_TIMEH	Word	27	Temperature input module Channel 3 data upload time
Input		WORD	28	Reserved

### <Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XGF-RD4A_CH0_FINDEN	BIT	0.0	Temperature input module Channel 0 Max./Min. search enable/disable
Output	XGF-RD4A_CH1_FINDEN	BIT	0.1	Temperature input module Channel 1 Max./Min. search enable/disable
Output	XGF-RD4A_CH2_FINDEN	BIT	0.2	Temperature input module Channel 2 Max./Min. search enable/disable
Output	XGF-RD4A_CH3_FINDEN	BIT	0.3	Temperature input module Channel 3 Max./Min. search enable/disable
Output	XGF-RD4A_CH0_ALMEN	BIT	0.4	Temperature input module Channel 0 alarm(PVA/RCA) enable/disable
Output	XGF-RD4A_CH1_ALMEN	BIT	0.5	Temperature input module Channel 1 alarm(PVA/RCA) enable/disable
Output	XGF-RD4A_CH2_ALMEN	BIT	0.6	Temperature input module Channel 2 alarm(PVA/RCA) enable/disable
Output	XGF-RD4A_CH3_ALMEN	BIT	0.7	Temperature input module Channel 3 alarm(PVA/RCA) enable/disable

## (21) XGF-RD4S

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XGF-RD4S_CH0_ADJERR	BIT	0.0	Isolated temperature input module: Channel 0 offset/Gain error flag
Input	XGF-RD4S_CH1_ADJERR	BIT	0.1	Isolated temperature input module: Channel 1 offset/Gain error flag
Input	XGF-RD4S_CH2_ADJERR	BIT	0.2	Isolated temperature input module: Channel 2 offset/Gain error flag
Input	XGF-RD4S_CH3_ADJERR	BIT	0.3	Isolated temperature input module: Channel 3 offset/Gain error flag
Input	XGF-RD4S_EEPROMERR	BIT	0.D	Isolated temperature input module: Offset/Gain backup error flag
Input	XGF-RD4S_WDT_ERR	BIT	0.E	Isolated temperature input module: H/W Error Flag
Input	XGF-RD4S_RDY	BIT	0.F	Isolated temperature input module: Module ready
Input	XGF-RD4S_CH0_ACT	BIT	1.0	Isolated temperature input module: CH0 RUN
Input	XGF-RD4S_CH1_ACT	BIT	1.1	Isolated temperature input module: CH1 RUN
Input	XGF-RD4S_CH2_ACT	BIT	1.2	Isolated temperature input module: CH2 RUN
Input	XGF-RD4S_CH3_ACT	BIT	1.3	Isolated temperature input module: CH3 RUN
Input	XGF-RD4S_CH0_BOUT	BIT	1.4	Isolated temperature input module: Channel 0 disconnection flag
Input	XGF-RD4S_CH1_BOUT	BIT	1.5	Isolated temperature input module: Channel 1 disconnection flag
Input	XGF-RD4S_CH2_BOUT	BIT	1.6	Isolated temperature input module: Channel 2 disconnection flag
Input	XGF-RD4S_CH3_BOUT	BIT	1.7	Isolated temperature input module: Channel 3 disconnection flag
Input	XGF-RD4S_CH0_SETERR	BIT	1.8	Isolated temperature input module: Channel 0 error code
Input	XGF-RD4S_CH1_SETERR	BIT	1.9	Isolated temperature input module: Channel 1 error code
Input	XGF-RD4S_CH2_SETERR	BIT	1.A	Isolated temperature input module: Channel 2 error code
Input	XGF-RD4S_CH3_SETERR	BIT	1.B	Isolated temperature input module: Channel 3 error code
Input	XGF-RD4S_CH0_PALL	BIT	2.0	Isolated temperature input module: Channel 0 process alarm ultra lower limit flag
Input	XGF-RD4S_CH0_PAL	BIT	2.1	Isolated temperature input module: Channel 0 process alarm lower limit flag
Input	XGF-RD4S_CH0_PAH	BIT	2.2	Isolated temperature input module: Channel 0 process alarm upper limit flag
Input	XGF-RD4S_CH0_PAHH	BIT	2.3	Isolated temperature input module: Channel 0 process alarm ultra upper limit flag
Input	XGF-RD4S_CH1_PALL	BIT	2.4	Isolated temperature input module: Channel 1 process alarm ultra lower limit flag
Input	XGF-RD4S_CH1_PAL	BIT	2.5	Isolated temperature input module: Channel 1 process alarm lower limit

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				flag
Input	XGF-RD4S_CH1_PAH	BIT	2.6	Isolated temperature input module: Channel 1 process alarm upper limit flag
Input	XGF-RD4S_CH1_PAHH	BIT	2.7	Isolated temperature input module: Channel 1 process alarm ultra upper limit flag
Input	XGF-RD4S_CH2_PALL	BIT	2.8	Isolated temperature input module: Channel 2 process alarm ultra lower limit flag
Input	XGF-RD4S_CH2_PAL	BIT	2.9	Isolated temperature input module: Channel 2 process alarm lower limit flag
Input	XGF-RD4S_CH2_PAH	BIT	2.A	Isolated temperature input module: Channel 2 process alarm upper limit flag
Input	XGF-RD4S_CH2_PAHH	BIT	2.B	Isolated temperature input module: Channel 2 process alarm ultra upper limit flag
Input	XGF-RD4S_CH3_PALL	BIT	2.C	Isolated temperature input module: Channel 3 process alarm ultra lower limit flag
Input	XGF-RD4S_CH3_PAL	BIT	2.D	Isolated temperature input module: Channel 3 process alarm lower limit flag
Input	XGF-RD4S_CH3_PAH	BIT	2.E	Isolated temperature input module: Channel 3 process alarm upper limit flag
Input	XGF-RD4S_CH3_PAHH	BIT	2.F	Isolated temperature input module: Channel 3 process alarm ultra upper limit flag
Input	XGF-RD4S_CH0_RAL	BIT	3.0	Isolated temperature input module: Channel 0 rate change alarm lower limit flag
Input	XGF-RD4S_CH0_RAH	BIT	3.1	Isolated temperature input module: Channel 0 rate change alarm upper limit flag
Input	XGF-RD4S_CH1_RAL	BIT	3.4	Isolated temperature input module: Channel 1 rate change alarm lower limit flag
Input	XGF-RD4S_CH1_RAH	BIT	3.5	Isolated temperature input module: Channel 1 rate change alarm upper limit flag
Input	XGF-RD4S_CH2_RAL	BIT	3.8	Isolated temperature input module: Channel 2 rate change alarm lower limit flag
Input	XGF-RD4S_CH2_RAH	BIT	3.9	Isolated temperature input module: Channel 2 rate change alarm upper limit flag
Input	XGF-RD4S_CH3_RAL	BIT	3.C	Isolated temperature input module: Channel 3 rate change alarm lower limit flag
Input	XGF-RD4S_CH3_RAH	BIT	3.D	Isolated temperature input module: Channel 3 rate change alarm upper limit flag
Input	XGF-RD4S_CH0_TEMP	Word	4	Isolated temperature input module: Channel 0 temperature data
Input	XGF-RD4S_CH1_TEMP	Word	5	Isolated temperature input module: Channel 1 temperature data
Input	XGF-RD4S_CH2_TEMP	Word	6	Isolated temperature input module: Channel 2 temperature data
Input	XGF-RD4S_CH3_TEMP	Word	7	Isolated temperature input module: Channel 3 temperature data
Input	XGF-RD4S_CH0_SCAL	Word	8	Isolated temperature input module: Channel 0 scaling data
Input	XGF-RD4S_CH1_SCAL	Word	9	Isolated temperature input module: Channel 1 scaling data

Input	XGF-RD4S_CH2_SCAL	Word	10	Isolated temperature input module: Channel 2 scaling data
Input	XGF-RD4S_CH3_SCAL	Word	11	Isolated temperature input module: Channel 3 scaling data
Input	XGF-RD4S_CH0_MIN	Word	12	Isolated temperature input module: Channel 0 temperature Min. data
Input	XGF-RD4S_CH0_MAX	Word	13	Isolated temperature input module: Channel 0 temperature Max. data
Input	XGF-RD4S_CH1_MIN	Word	14	Isolated temperature input module: Channel 1 temperature Min. data
Input	XGF-RD4S_CH1_MAX	Word	15	Isolated temperature input module: Channel 1 temperature Max. data
Input	XGF-RD4S_CH2_MIN	Word	16	Isolated temperature input module: Channel 2 temperature Min. data
Input	XGF-RD4S_CH2_MAX	Word	17	Isolated temperature input module: Channel 2 temperature Max. data
Input	XGF-RD4S_CH3_MIN	Word	18	Isolated temperature input module: Channel 3 temperature Min. data
Input	XGF-RD4S_CH3_MAX	Word	19	Isolated temperature input module: Channel 3 temperature Max. data
Input	XGF-RD4S_CH0_TIMEL	Word	20	Isolated temperature input module: Channel 0 data upload time
Input	XGF-RD4S_CH0_TIMEH	Word	21	Isolated temperature input module: Channel 0 data upload time
Input	XGF-RD4S_CH1_TIMEL	Word	22	Isolated temperature input module: Channel 1 data upload time
Input	XGF-RD4S_CH1_TIMEH	Word	23	Isolated temperature input module: Channel 1 data upload time
Input	XGF-RD4S_CH2_TIMEL	Word	24	Isolated temperature input module: Channel 2 data upload time
Input	XGF-RD4S_CH2_TIMEH	Word	25	Isolated temperature input module: Channel 2 data upload time
Input	XGF-RD4S_CH3_TIMEL	Word	26	Isolated temperature input module: Channel 3 data upload time
Input	XGF-RD4S_CH3_TIMEH	Word	27	Isolated temperature input module: Channel 3 data upload time
Input		WORD	28	Reserved

## &lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XGF-RD4S_CH0_FINDEN	BIT	0.0	Isolated temperature input module: Channel 0 Max./Min. search enable/disable
Output	XGF-RD4S_CH1_FINDEN	BIT	0.1	Isolated temperature input module: Channel 1 Max./Min. search enable/disable
Output	XGF-RD4S_CH2_FINDEN	BIT	0.2	Isolated temperature input module: Channel 2 Max./Min. search enable/disable
Output	XGF-RD4S_CH3_FINDEN	BIT	0.3	Isolated temperature input module: Channel 3 Max./Min. search enable/disable
Output	XGF-RD4S_CH0_ALMEN	BIT	0.4	Isolated temperature input module: Channel 0 alarm(PVA/RCA) enable/disable
Output	XGF-RD4S_CH1_ALMEN	BIT	0.5	Isolated temperature input module: Channel 1 alarm(PVA/RCA) enable/disable
Output	XGF-RD4S_CH2_ALMEN	BIT	0.6	Isolated temperature input module: Channel 2 alarm(PVA/RCA) enable/disable
Output	XGF-RD4S_CH3_ALMEN	BIT	0.7	Isolated temperature input module: Channel 3 alarm(PVA/RCA) enable/disable

(22) XGF-TC4S

1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XGF-TC4S_CH0_ADJERR	BIT	0.0	Isolated temperature input module: Channel 0 offset/Gain error flag
Input	XGF-TC4S_CH1_ADJERR	BIT	0.1	Isolated temperature input module: Channel 1 offset/Gain error flag
Input	XGF-TC4S_CH2_ADJERR	BIT	0.2	Isolated temperature input module: Channel 2 offset/Gain error flag
Input	XGF-TC4S_CH3_ADJERR	BIT	0.3	Isolated temperature input module: Channel 3 offset/Gain error flag
Input	XGF-TC4S_EEPROMERR	BIT	0.D	Isolated temperature input module: Offset/Gain backup error flag
Input	XGF-TC4S_WDT_ERR	BIT	0.E	Isolated temperature input module: H/W Error Flag
Input	XGF-TC4S_RDY	BIT	0.F	Isolated temperature input module: Module ready
Input	XGF-TC4S_CH0_ACT	BIT	1.0	Isolated temperature input module: CH0 RUN
Input	XGF-TC4S_CH1_ACT	BIT	1.1	Isolated temperature input module: CH1 RUN
Input	XGF-TC4S_CH2_ACT	BIT	1.2	Isolated temperature input module: CH2 RUN
Input	XGF-TC4S_CH3_ACT	BIT	1.3	Isolated temperature input module: CH3 RUN
Input	XGF-TC4S_CH0_BOUT	BIT	1.4	Isolated temperature input module: Channel 0 disconnection flag
Input	XGF-TC4S_CH1_BOUT	BIT	1.5	Isolated temperature input module: Channel 1 disconnection flag
Input	XGF-TC4S_CH2_BOUT	BIT	1.6	Isolated temperature input module: Channel 2 disconnection flag
Input	XGF-TC4S_CH3_BOUT	BIT	1.7	Isolated temperature input module: Channel 3 disconnection flag
Input	XGF-TC4S_CH0_SETERR	BIT	1.8	Isolated temperature input module: Channel 0 error code
Input	XGF-TC4S_CH1_SETERR	BIT	1.9	Isolated temperature input module: Channel 1 error code
Input	XGF-TC4S_CH2_SETERR	BIT	1.A	Isolated temperature input module: Channel 2 error code
Input	XGF-TC4S_CH3_SETERR	BIT	1.B	Isolated temperature input module: Channel 3 error code
Input	XGF-TC4S_CH0_PALL	BIT	2.0	Isolated temperature input module: Channel 0 process alarm ultra lower limit flag
Input	XGF-TC4S_CH0_PAL	BIT	2.1	Isolated temperature input module: Channel 0 process alarm lower limit flag
Input	XGF-TC4S_CH0_PAH	BIT	2.2	Isolated temperature input module: Channel 0 process alarm upper limit flag
Input	XGF-TC4S_CH0_PAHH	BIT	2.3	Isolated temperature input module: Channel 0 process alarm ultra upper limit flag
Input	XGF-TC4S_CH1_PALL	BIT	2.4	Isolated temperature input module: Channel 1 process alarm ultra lower limit flag
Input	XGF-TC4S_CH1_PAL	BIT	2.5	Isolated temperature input module: Channel 1 process alarm lower limit

				flag	
Input	XGF-TC4S_CH1_PAH	BIT	2.6	Isolated temperature flag	input module: Channel 1 process alarm upper limit
Input	XGF-TC4S_CH1_PAHH	BIT	2.7	Isolated temperature upper limit flag	input module: Channel 1 process alarm ultra
Input	XGF-TC4S_CH2_PALL	BIT	2.8	Isolated temperature limit flag	input module: Channel 2 process alarm ultra lower
Input	XGF-TC4S_CH2_PAL	BIT	2.9	Isolated temperature flag	input module: Channel 2 process alarm lower limit
Input	XGF-TC4S_CH2_PAH	BIT	2.A	Isolated temperature flag	input module: Channel 2 process alarm upper limit
Input	XGF-TC4S_CH2_PAHH	BIT	2.B	Isolated temperature upper limit flag	input module: Channel 2 process alarm ultra
Input	XGF-TC4S_CH3_PALL	BIT	2.C	Isolated temperature limit flag	input module: Channel 3 process alarm ultra lower
Input	XGF-TC4S_CH3_PAL	BIT	2.D	Isolated temperature flag	input module: Channel 3 process alarm lower limit
Input	XGF-TC4S_CH3_PAH	BIT	2.E	Isolated temperature flag	input module: Channel 3 process alarm upper limit
Input	XGF-TC4S_CH3_PAHH	BIT	2.F	Isolated temperature upper limit flag	input module: Channel 3 process alarm ultra
Input	XGF-TC4S_CH0_RAL	BIT	3.0	Isolated temperature limit flag	input module: Channel 0 rate change alarm lower
Input	XGF-TC4S_CH0_RAH	BIT	3.1	Isolated temperature limit flag	input module: Channel 0 rate change alarm upper
Input	XGF-TC4S_CH1_RAL	BIT	3.4	Isolated temperature limit flag	input module: Channel 1 rate change alarm lower
Input	XGF-TC4S_CH1_RAH	BIT	3.5	Isolated temperature limit flag	input module: Channel 1 rate change alarm upper
Input	XGF-TC4S_CH2_RAL	BIT	3.8	Isolated temperature limit flag	input module: Channel 2 rate change alarm lower
Input	XGF-TC4S_CH2_RAH	BIT	3.9	Isolated temperature limit flag	input module: Channel 2 rate change alarm upper
Input	XGF-TC4S_CH3_RAL	BIT	3.C	Isolated temperature limit flag	input module: Channel 3 rate change alarm lower
Input	XGF-TC4S_CH3_RAH	BIT	3.D	Isolated temperature limit flag	input module: Channel 3 rate change alarm upper
Input	XGF-TC4S_CH0_TEMP	Word	4	Isolated temperature	input module: Channel 0 temperature data
Input	XGF-TC4S_CH1_TEMP	Word	5	Isolated temperature	input module: Channel 1 temperature data
Input	XGF-TC4S_CH2_TEMP	Word	6	Isolated temperature	input module: Channel 2 temperature data
Input	XGF-TC4S_CH3_TEMP	Word	7	Isolated temperature	input module: Channel 3 temperature data
Input	XGF-TC4S_CH0_SCAL	Word	8	Isolated temperature	input module: Channel 0 scaling data
Input	XGF-TC4S_CH1_SCAL	Word	9	Isolated temperature	input module: Channel 1 scaling data

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Input	XGF-TC4S_CH2_SCAL	Word	10	Isolated temperature input module: Channel 2 scaling data
Input	XGF-TC4S_CH3_SCAL	Word	11	Isolated temperature input module: Channel 3 scaling data
Input	XGF-TC4S_CH0_MIN	Word	12	Isolated temperature input module: Channel 0 temperature Min. data
Input	XGF-TC4S_CH0_MAX	Word	13	Isolated temperature input module: Channel 0 temperature Max. data
Input	XGF-TC4S_CH1_MIN	Word	14	Isolated temperature input module: Channel 1 temperature Min. data
Input	XGF-TC4S_CH1_MAX	Word	15	Isolated temperature input module: Channel 1 temperature Max. data
Input	XGF-TC4S_CH2_MIN	Word	16	Isolated temperature input module: Channel 2 temperature Min. data
Input	XGF-TC4S_CH2_MAX	Word	17	Isolated temperature input module: Channel 2 temperature Max. data
Input	XGF-TC4S_CH3_MIN	Word	18	Isolated temperature input module: Channel 3 temperature Min. data
Input	XGF-TC4S_CH3_MAX	Word	19	Isolated temperature input module: Channel 3 temperature Max. data
Input	XGF-TC4S_CH0_TIMEL	Word	20	Isolated temperature input module: Channel 0 data upload time
Input	XGF-TC4S_CH0_TIMEH	Word	21	Isolated temperature input module: Channel 0 data upload time
Input	XGF-TC4S_CH1_TIMEL	Word	22	Isolated temperature input module: Channel 1 data upload time
Input	XGF-TC4S_CH1_TIMEH	Word	23	Isolated temperature input module: Channel 1 data upload time
Input	XGF-TC4S_CH2_TIMEL	Word	24	Isolated temperature input module: Channel 2 data upload time
Input	XGF-TC4S_CH2_TIMEH	Word	25	Isolated temperature input module: Channel 2 data upload time
Input	XGF-TC4S_CH3_TIMEL	Word	26	Isolated temperature input module: Channel 3 data upload time
Input	XGF-TC4S_CH3_TIMEH	Word	27	Isolated temperature input module: Channel 3 data upload time
Input		Word	28	Reserved

### <Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XGF-TC4S_CH0_FINDEN	BIT	0.0	Isolated temperature input module: Channel 0 Max./Min. search enable/disable
Output	XGF-TC4S_CH1_FINDEN	BIT	0.1	Isolated temperature input module: Channel 1 Max./Min. search enable/disable
Output	XGF-TC4S_CH2_FINDEN	BIT	0.2	Isolated temperature input module: Channel 2 Max./Min. search enable/disable
Output	XGF-TC4S_CH3_FINDEN	BIT	0.3	Isolated temperature input module: Channel 3 Max./Min. search enable/disable
Output	XGF-TC4S_CH0_ALMEN	BIT	0.4	Isolated temperature input module: Channel 0 alarm(PVA/RCA) enable/disable
Output	XGF-TC4S_CH1_ALMEN	BIT	0.5	Isolated temperature input module: Channel 1 alarm(PVA/RCA) enable/disable
Output	XGF-TC4S_CH2_ALMEN	BIT	0.6	Isolated temperature input module: Channel 2 alarm(PVA/RCA) enable/disable
Output	XGF-TC4S_CH3_ALMEN	BIT	0.7	Isolated temperature input module: Channel 3 alarm(PVA/RCA) enable/disable
Output	XGF-TC4S_CH0_RJCD5	BIT	0.8	Isolated temperature input module: Channel 0 cold

				junction compensation enable/disable
Output	XGF-TC4S_CH1_RJCDS	BIT	0.9	Isolated temperature input module: Channel 1 cold junction compensation enable/disable
Output	XGF-TC4S_CH2_RJCDS	BIT	0.A	Isolated temperature input module: Channel 2 cold junction compensation enable/disable
Output	XGF-TC4S_CH3_RJCDS	BIT	0.B	Isolated temperature input module: Channel 3 cold junction compensation enable/disable

## (23) XGF-TC4UD

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XGF-TC4UD_CH0_ACT	BIT	0.0	Temperature controller module: CH0 RUN
Input	XGF-TC4UD_CH1_ACT	BIT	0.1	Temperature controller module: CH1 RUN
Input	XGF-TC4UD_CH2_ACT	BIT	0.2	Temperature controller module: CH2 RUN
Input	XGF-TC4UD_CH3_ACT	BIT	0.3	Temperature controller module: CH3 RUN
Input	XGF-TC4UD_CH0_BOUT	BIT	0.4	Temperature controller module: Channel 0 disconnection flag
Input	XGF-TC4UD_CH1_BOUT	BIT	0.5	Temperature controller module: Channel 1 disconnection flag
Input	XGF-TC4UD_CH2_BOUT	BIT	0.6	Temperature controller module: Channel 2 disconnection flag
Input	XGF-TC4UD_CH3_BOUT	BIT	0.7	Temperature controller module: Channel 3 disconnection flag
Input	XGF-TC4UD_CH0_ADCERR	BIT	0.8	Temperature controller module: Channel 0 A/D conversion error
Input	XGF-TC4UD_CH1_ADCERR	BIT	0.9	Temperature controller module: Channel 1 A/D conversion error
Input	XGF-TC4UD_CH2_ADCERR	BIT	0.A	Temperature controller module: Channel 2 A/D conversion error
Input	XGF-TC4UD_CH3_ADCERR	BIT	0.B	Temperature controller module: Channel 3 A/D conversion error
Input	XGF-TC4UD_CHECKSUMERR	BIT	0.D	Temperature controller module: Module backup memory error
Input	XGF-TC4UD_ERR	BIT	0.E	Temperature controller module: Module error
Input	XGF-TC4UD_RDY	BIT	0.F	Temperature controller module: Module ready
Input	XGF-TC4UD_WR_ING	BIT	1.0	Temperature controller module: Parameter writing
Input	XGF-TC4UD_RD_ING	BIT	1.8	Temperature controller module: Parameter reading
Input	XGF-TC4UD_CH0_ALINHH	BIT	2.0	Temperature controller module: Channel 0 input alarm HH limit
Input	XGF-TC4UD_CH0_ALINH	BIT	2.1	Temperature controller module: Channel 0 input alarm high limit
Input	XGF-TC4UD_CH0_ALINL	BIT	2.2	Temperature controller module: Channel 0 input alarm lower limit
Input	XGF-TC4UD_CH0_ALINLL	BIT	2.3	Temperature controller module: Channel 0 input alarm LL limit
Input	XGF-TC4UD_CH0_ALHOH	BIT	2.4	Temperature controller module: Channel 0 heat output alarm upper limit
Input	XGF-TC4UD_CH0_ALHOL	BIT	2.5	Temperature controller module: Channel 0 heat output alarm

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				lower limit
Input	XGF-TC4UD_CH0_ALCOH	BIT	2.6	Temperature controller module: Channel 0 cooling output alarm upper limit
Input	XGF-TC4UD_CH0_ALCOL	BIT	2.7	Temperature controller module: Channel 0 cooling output alarm lower limit
Input	XGF-TC4UD_CH1_ALINHH	BIT	3.0	Temperature controller module: Channel 1 input alarm HH limit
Input	XGF-TC4UD_CH1_ALINH	BIT	3.1	Temperature controller module: Channel 1 input alarm high limit
Input	XGF-TC4UD_CH1_ALINL	BIT	3.2	Temperature controller module: Channel 1 input alarm lower limit
Input	XGF-TC4UD_CH1_ALINLL	BIT	3.3	Temperature controller module: Channel 1 input alarm LL limit
Input	XGF-TC4UD_CH1_ALHOH	BIT	3.4	Temperature controller module: Channel 1 heat output alarm upper limit
Input	XGF-TC4UD_CH1_ALHOL	BIT	3.5	Temperature controller module: Channel 1 heat output alarm lower limit
Input	XGF-TC4UD_CH1_ALCOH	BIT	3.6	Temperature controller module: Channel 1 cooling output alarm upper limit
Input	XGF-TC4UD_CH1_ALCOL	BIT	3.7	Temperature controller module: Channel 1 cooling output alarm lower limit
Input	XGF-TC4UD_CH2_ALINHH	BIT	4.0	Temperature controller module: Channel 2 input alarm HH limit
Input	XGF-TC4UD_CH2_ALINH	BIT	4.1	Temperature controller module: Channel 2 input alarm high limit
Input	XGF-TC4UD_CH2_ALINL	BIT	4.2	Temperature controller module: Channel 2 input alarm lower limit
Input	XGF-TC4UD_CH2_ALINLL	BIT	4.3	Temperature controller module: Channel 2 input alarm LL limit
Input	XGF-TC4UD_CH2_ALHOH	BIT	4.4	Temperature controller module: Channel 2 heat output alarm upper limit
Input	XGF-TC4UD_CH2_ALHOL	BIT	4.5	Temperature controller module: Channel 2 heat output alarm lower limit
Input	XGF-TC4UD_CH2_ALCOH	BIT	4.6	Temperature controller module: Channel 2 cooling output alarm upper limit
Input	XGF-TC4UD_CH2_ALCOL	BIT	4.7	Temperature controller module: Channel 2 cooling output alarm lower limit
Input	XGF-TC4UD_CH3_ALINHH	BIT	5.0	Temperature controller module: Channel 3 input alarm HH limit
Input	XGF-TC4UD_CH3_ALINH	BIT	5.1	Temperature controller module: Channel 3 input alarm high limit
Input	XGF-TC4UD_CH3_ALINL	BIT	5.2	Temperature controller module: Channel 3 input alarm lower limit
Input	XGF-TC4UD_CH3_ALINLL	BIT	5.3	Temperature controller module: Channel 3 input alarm LL limit
Input	XGF-TC4UD_CH3_ALHOH	BIT	5.4	Temperature controller module: Channel 3 heat output alarm upper limit
Input	XGF-TC4UD_CH3_ALHOL	BIT	5.5	Temperature controller module: Channel 3 heat output alarm lower limit
Input	XGF-TC4UD_CH3_ALCOH	BIT	5.6	Temperature controller module: Channel 3 cooling output alarm upper limit
Input	XGF-TC4UD_CH3_ALCOL	BIT	5.7	Temperature controller module: Channel 3 cooling output alarm lower limit
Input	XGF-TC4UD_CH0_PV	Word	6	Temperature controller module: Channel 0 Input value

Input	XGF-TC4UD_CH1_PV	Word	7	Temperature controller module: Channel 1 Input value
Input	XGF-TC4UD_CH2_PV	Word	8	Temperature controller module: Channel 2 Input value
Input	XGF-TC4UD_CH3_PV	Word	9	Temperature controller module: Channel 3 Input value
Input	XGF-TC4UD_CH0_HOUT	Word	10	Temperature controller module: Channel 0 heating output value
Input	XGF-TC4UD_CH1_HOUT	Word	11	Temperature controller module: Channel 1 heating output value
Input	XGF-TC4UD_CH2_HOUT	Word	12	Temperature controller module: Channel 2 heating output value
Input	XGF-TC4UD_CH3_HOUT	Word	13	Temperature controller module: Channel 3 heating output value
Input	XGF-TC4UD_CH0_COUT	Word	14	Temperature controller module: Channel 0 cooling output value
Input	XGF-TC4UD_CH1_COUT	Word	15	Temperature controller module: Channel 1 cooling output value
Input	XGF-TC4UD_CH2_COUT	Word	16	Temperature controller module: Channel 2 cooling output value
Input	XGF-TC4UD_CH3_COUT	Word	17	Temperature controller module: Channel 3 cooling output value

## &lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XGF-TC4UD_CH0_RUN	BIT	0.0	Temperature controller module: Channel 0 run command
Output	XGF-TC4UD_CH0_MAN	BIT	0.1	Temperature controller module: Channel 0 manual mode command
Output	XGF-TC4UD_CH0_ATEN	BIT	0.2	Temperature controller module: Channel 0 auto-tuning command
Output	XGF-TC4UD_CH0_EXIN	BIT	0.3	Temperature controller module: Channel 0 external input enable command
Output	XGF-TC4UD_CH1_RUN	BIT	1.0	Temperature controller module: Channel 1 run command
Output	XGF-TC4UD_CH1_MAN	BIT	1.1	Temperature controller module: Channel 1 manual mode command
Output	XGF-TC4UD_CH1_ATEN	BIT	1.2	Temperature controller module: Channel 1 auto-tuning command
Output	XGF-TC4UD_CH1_EXIN	BIT	1.3	Temperature controller module: Channel 1 external input enable command
Output	XGF-TC4UD_CH2_RUN	BIT	2.0	Temperature controller module: Channel 2 run command
Output	XGF-TC4UD_CH2_MAN	BIT	2.1	Temperature controller module: Channel 2 manual mode command
Output	XGF-TC4UD_CH2_ATEN	BIT	2.2	Temperature controller module: Channel 2 auto-tuning command
Output	XGF-TC4UD_CH2_EXIN	BIT	2.3	Temperature controller module: Channel 2 external input enable command
Output	XGF-TC4UD_CH3_RUN	BIT	3.0	Temperature controller module: Channel 3 run command
Output	XGF-TC4UD_CH3_MAN	BIT	3.1	Temperature controller module: Channel 3 manual mode command
Output	XGF-TC4UD_CH3_ATEN	BIT	3.2	Temperature controller module: Channel 3 auto-tuning command
Output	XGF-TC4UD_CH3_EXIN	BIT	3.3	Temperature controller module: Channel 3 external input enable command

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Output	XGF-TC4UD_CH0_EXINV	Word	4	Temperature controller module: Channel 0 external input data
Output	XGF-TC4UD_CH1_EXINV	Word	5	Temperature controller module: Channel 1 external input data
Output	XGF-TC4UD_CH2_EXINV	Word	6	Temperature controller module: Channel 2 external input data
Output	XGF-TC4UD_CH3_EXINV	Word	7	Temperature controller module: Channel 3 external input data
Output	XGF-TC4UD_CH0_CSET	Word	8	Temperature controller module: Channel 0 control set selection
Output	XGF-TC4UD_CH1_CSET	Word	9	Temperature controller module: Channel 1 control set selection
Output	XGF-TC4UD_CH2_CSET	Word	10	Temperature controller module: Channel 2 control set selection
Output	XGF-TC4UD_CH3_CSET	Word	11	Temperature controller module: Channel 3 control set selection
Output	XGF-TC4UD_WRITE	BIT	12.0	Temperature controller module: Parameter write command
Output	XGF-TC4UD_READ	BIT	12.8	Temperature controller module: Parameter read command

### (24) XGF-TC4RT

#### 1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XGF-TC4RT_CH0_ACT	BIT	0.0	Temperature controller module: CH0 RUN
Input	XGF-TC4RT_CH1_ACT	BIT	0.1	Temperature controller module: CH1 RUN
Input	XGF-TC4RT_CH2_ACT	BIT	0.2	Temperature controller module: CH2 RUN
Input	XGF-TC4RT_CH3_ACT	BIT	0.3	Temperature controller module: CH3 RUN
Input	XGF-TC4RT_CH0_BOUT	BIT	0.4	Temperature controller module: Channel 0 disconnection flag
Input	XGF-TC4RT_CH1_BOUT	BIT	0.5	Temperature controller module: Channel 1 disconnection flag
Input	XGF-TC4RT_CH2_BOUT	BIT	0.6	Temperature controller module: Channel 2 disconnection flag
Input	XGF-TC4RT_CH3_BOUT	BIT	0.7	Temperature controller module: Channel 3 disconnection flag
Input	XGF-TC4RT_CH0_ADCERR	BIT	0.8	Temperature controller module: Channel 0 A/D conversion error
Input	XGF-TC4RT_CH1_ADCERR	BIT	0.9	Temperature controller module: Channel 1 A/D conversion error
Input	XGF-TC4RT_CH2_ADCERR	BIT	0.A	Temperature controller module: Channel 2 A/D conversion error
Input	XGF-TC4RT_CH3_ADCERR	BIT	0.B	Temperature controller module: Channel 3 A/D conversion error
Input	XGF-TC4RT_CHECKSUMERR	BIT	0.D	Temperature controller module: Module backup memory error
Input	XGF-TC4RT_ERR	BIT	0.E	Temperature controller module: Module error
Input	XGF-TC4RT_RDY	BIT	0.F	Temperature controller module: Module ready

Input	XGF-TC4RT_WR_ING	BIT	1.0	Temperature controller module: Parameter writing
Input	XGF-TC4RT_RD_ING	BIT	1.8	Temperature controller module: Parameter reading
Input	XGF-TC4RT_CH0_ALINHH	BIT	2.0	Temperature controller module: Channel 0 input alarm HH limit
Input	XGF-TC4RT_CH0_ALINH	BIT	2.1	Temperature controller module: Channel 0 input alarm high limit
Input	XGF-TC4RT_CH0_ALINL	BIT	2.2	Temperature controller module: Channel 0 input alarm lower limit
Input	XGF-TC4RT_CH0_ALINLL	BIT	2.3	Temperature controller module: Channel 0 input alarm LL limit
Input	XGF-TC4RT_CH0_ALHOH	BIT	2.4	Temperature controller module: Channel 0 heat output alarm upper limit
Input	XGF-TC4RT_CH0_ALHOL	BIT	2.5	Temperature controller module: Channel 0 heat output alarm lower limit
Input	XGF-TC4RT_CH0_ALCOH	BIT	2.6	Temperature controller module: Channel 0 cooling output alarm upper limit
Input	XGF-TC4RT_CH0_ALCOL	BIT	2.7	Temperature controller module: Channel 0 cooling output alarm lower limit
Input	XGF-TC4RT_CH1_ALINHH	BIT	3.0	Temperature controller module: Channel 1 input alarm HH limit
Input	XGF-TC4RT_CH1_ALINH	BIT	3.1	Temperature controller module: Channel 1 input alarm high limit
Input	XGF-TC4RT_CH1_ALINL	BIT	3.2	Temperature controller module: Channel 1 input alarm lower limit
Input	XGF-TC4RT_CH1_ALINLL	BIT	3.3	Temperature controller module: Channel 1 input alarm LL limit
Input	XGF-TC4RT_CH1_ALHOH	BIT	3.4	Temperature controller module: Channel 1 heat output alarm upper limit
Input	XGF-TC4RT_CH1_ALHOL	BIT	3.5	Temperature controller module: Channel 1 heat output alarm lower limit
Input	XGF-TC4RT_CH1_ALCOH	BIT	3.6	Temperature controller module: Channel 1 cooling output alarm upper limit
Input	XGF-TC4RT_CH1_ALCOL	BIT	3.7	Temperature controller module: Channel 1 cooling output alarm lower limit
Input	XGF-TC4RT_CH2_ALINHH	BIT	4.0	Temperature controller module: Channel 2 input alarm HH limit
Input	XGF-TC4RT_CH2_ALINH	BIT	4.1	Temperature controller module: Channel 2 input alarm high limit
Input	XGF-TC4RT_CH2_ALINL	BIT	4.2	Temperature controller module: Channel 2 input alarm lower limit
Input	XGF-TC4RT_CH2_ALINLL	BIT	4.3	Temperature controller module: Channel 2 input alarm LL limit
Input	XGF-TC4RT_CH2_ALHOH	BIT	4.4	Temperature controller module: Channel 2 heat output alarm upper limit
Input	XGF-TC4RT_CH2_ALHOL	BIT	4.5	Temperature controller module: Channel 2 heat output alarm lower limit
Input	XGF-TC4RT_CH2_ALCOH	BIT	4.6	Temperature controller module: Channel 2 cooling output alarm upper limit
Input	XGF-TC4RT_CH2_ALCOL	BIT	4.7	Temperature controller module: Channel 2 cooling output alarm lower limit
Input	XGF-TC4RT_CH3_ALINHH	BIT	5.0	Temperature controller module: Channel 3 input alarm HH limit
Input	XGF-TC4RT_CH3_ALINH	BIT	5.1	Temperature controller module: Channel 3 input alarm high limit
Input	XGF-TC4RT_CH3_ALINL	BIT	5.2	Temperature controller module: Channel 3 input alarm lower limit
Input	XGF-TC4RT_CH3_ALINLL	BIT	5.3	Temperature controller module: Channel 3 input alarm LL limit

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Input	XGF-TC4RT_CH3_ALHOH	BIT	5.4	Temperature controller module: Channel 3 heat output alarm upper limit
Input	XGF-TC4RT_CH3_ALHOL	BIT	5.5	Temperature controller module: Channel 3 heat output alarm lower limit
Input	XGF-TC4RT_CH3_ALCOH	BIT	5.6	Temperature controller module: Channel 3 cooling output alarm upper limit
Input	XGF-TC4RT_CH3_ALCOL	BIT	5.7	Temperature controller module: Channel 3 cooling output alarm lower limit
Input	XGF-TC4RT_CH0_PV	Word	6	Temperature controller module: Channel 0 Input value
Input	XGF-TC4RT_CH1_PV	Word	7	Temperature controller module: Channel 1 Input value
Input	XGF-TC4RT_CH2_PV	Word	8	Temperature controller module: Channel 2 Input value
Input	XGF-TC4RT_CH3_PV	Word	9	Temperature controller module: Channel 3 Input value
Input	XGF-TC4RT_CH0_HOUT	Word	10	Temperature controller module: Channel 0 heating output value
Input	XGF-TC4RT_CH1_HOUT	Word	11	Temperature controller module: Channel 1 heating output value
Input	XGF-TC4RT_CH2_HOUT	Word	12	Temperature controller module: Channel 2 heating output value
Input	XGF-TC4RT_CH3_HOUT	Word	13	Temperature controller module: Channel 3 heating output value
Input	XGF-TC4RT_CH0_COUT	Word	14	Temperature controller module: Channel 0 cooling output value
Input	XGF-TC4RT_CH1_COUT	Word	15	Temperature controller module: Channel 1 cooling output value
Input	XGF-TC4RT_CH2_COUT	Word	16	Temperature controller module: Channel 2 cooling output value
Input	XGF-TC4RT_CH3_COUT	Word	17	Temperature controller module: Channel 3 cooling output value

### <Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XGF-TC4RT_CH0_RUN	BIT	0.0	Temperature controller module: Channel 0 run command
Output	XGF-TC4RT_CH0_MAN	BIT	0.1	Temperature controller module: Channel 0 manual mode command
Output	XGF-TC4RT_CH0_ATEN	BIT	0.2	Temperature controller module: Channel 0 auto-tuning command
Output	XGF-TC4RT_CH0_EXIN	BIT	0.3	Temperature controller module: Channel 0 external input enable command
Output	XGF-TC4RT_CH1_RUN	BIT	1.0	Temperature controller module: Channel 1 run command
Output	XGF-TC4RT_CH1_MAN	BIT	1.1	Temperature controller module: Channel 1 manual mode command
Output	XGF-TC4RT_CH1_ATEN	BIT	1.2	Temperature controller module: Channel 1 auto-tuning command
Output	XGF-TC4RT_CH1_EXIN	BIT	1.3	Temperature controller module: Channel 1 external input enable command
Output	XGF-TC4RT_CH2_RUN	BIT	2.0	Temperature controller module: Channel 2 run command
Output	XGF-TC4RT_CH2_MAN	BIT	2.1	Temperature controller module: Channel 2 manual mode command
Output	XGF-TC4RT_CH2_ATEN	BIT	2.2	Temperature controller module: Channel 2 auto-tuning command
Output	XGF-TC4RT_CH2_EXIN	BIT	2.3	Temperature controller module: Channel 2 external input enable command
Output	XGF-TC4RT_CH3_RUN	BIT	3.0	Temperature controller module: Channel 3 run command
Output	XGF-TC4RT_CH3_MAN	BIT	3.1	Temperature controller module: Channel 3 manual mode command
Output	XGF-TC4RT_CH3_ATEN	BIT	3.2	Temperature controller module: Channel 3 auto-tuning command
Output	XGF-TC4RT_CH3_EXIN	BIT	3.3	Temperature controller module: Channel 3 external input enable

				command
Output	XGF-TC4RT_CH0_EXINV	Word	4	Temperature controller module: Channel 0 external input data
Output	XGF-TC4RT_CH1_EXINV	Word	5	Temperature controller module: Channel 1 external input data
Output	XGF-TC4RT_CH2_EXINV	Word	6	Temperature controller module: Channel 2 external input data
Output	XGF-TC4RT_CH3_EXINV	Word	7	Temperature controller module: Channel 3 external input data
Output	XGF-TC4RT_CH0_CSET	Word	8	Temperature controller module: Channel 0 control set selection
Output	XGF-TC4RT_CH1_CSET	Word	9	Temperature controller module: Channel 1 control set selection
Output	XGF-TC4RT_CH2_CSET	Word	10	Temperature controller module: Channel 2 control set selection
Output	XGF-TC4RT_CH3_CSET	Word	11	Temperature controller module: Channel 3 control set selection
Output	XGF-TC4RT_WRITE	BIT	12.0	Temperature controller module: Parameter write command
Output	XGF-TC4RT_READ	BIT	12.8	Temperature controller module: Parameter read command

**A.3.2 XEL-BSSRx**

(1) XBF-AD04A

1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-AD04A_ERR	BIT	0.0	Analog input module: Module error
Input	XBF-AD04A_RDY	BIT	0.F	Analog input module: Module ready
Input	XBF-AD04A_CH0_ACT	BIT	1.0	Analog input module: CH0 RUN
Input	XBF-AD04A_CH1_ACT	BIT	1.1	Analog input module: CH1 RUN
Input	XBF-AD04A_CH2_ACT	BIT	1.2	Analog input module: CH2 RUN
Input	XBF-AD04A_CH3_ACT	BIT	1.3	Analog input module: CH3 RUN
Input	XBF-AD04A_CH0_DATA	Word	2	Analog input module: CH0 conversion value
Input	XBF-AD04A_CH1_DATA	Word	3	Analog input module: CH1 conversion value
Input	XBF-AD04A_CH2_DATA	Word	4	Analog input module: CH2 conversion value
Input	XBF-AD04A_CH3_DATA	Word	5	Analog input module: CH3 conversion value

<Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-AD04A_ERR_CLR	BIT	0.0	Analog input module: Error clear request

(2) XBF-AD04C

1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-AD04C_ERR	BIT	0.0	Analog input module: Module error
Input	XBF-AD04C_RDY	BIT	0.F	Analog input module: Module ready
Input	XBF-AD04C_CH0_ACT	BIT	1.0	Analog input module: CH0 RUN
Input	XBF-AD04C_CH1_ACT	BIT	1.1	Analog input module: CH1 RUN
Input	XBF-AD04C_CH2_ACT	BIT	1.2	Analog input module: CH2 RUN
Input	XBF-AD04C_CH3_ACT	BIT	1.3	Analog input module: CH3 RUN
Input	XBF-AD04C_CH0_ERR	BIT	1.8	Analog input module: Channel 0 error
Input	XBF-AD04C_CH1_ERR	BIT	1.9	Analog input module: Channel 1 error
Input	XBF-AD04C_CH2_ERR	BIT	1.A	Analog input module: Channel 2 error
Input	XBF-AD04C_CH3_ERR	BIT	1.B	Analog input module: Channel 3 error
Input	XBF-AD04C_CH0_DATA	Word	2	Analog input module: CH0 conversion value
Input	XBF-AD04C_CH1_DATA	Word	3	Analog input module: CH1 conversion value
Input	XBF-AD04C_CH2_DATA	Word	4	Analog input module: CH2 conversion value
Input	XBF-AD04C_CH3_DATA	Word	5	Analog input module: CH3 conversion value
Input		WORD	6	Reserved
Input		WORD	7	Reserved
Input		WORD	8	Reserved
Input		WORD	9	Reserved
Input	XBF-AD04C_CH0_IDD	BIT	10.0	Analog input module: CH0 input disconnection detection
Input	XBF-AD04C_CH1_IDD	BIT	10.1	Analog input module: CH1 input disconnection detection

Input	XBF-AD04C_CH2_IDD	BIT	10.2	Analog input module: CH2 input disconnection detection
Input	XBF-AD04C_CH3_IDD	BIT	10.3	Analog input module: CH3 input disconnection detection
Input	XBF-AD04C_CH0_HOOR	BIT	11.0	Analog input module: Channel 0 alarm upper limit
Input	XBF-AD04C_CH1_HOOR	BIT	11.1	Analog input module: Channel 1 alarm upper limit
Input	XBF-AD04C_CH2_HOOR	BIT	11.2	Analog input module: Channel 2 alarm upper limit
Input	XBF-AD04C_CH3_HOOR	BIT	11.3	Analog input module: Channel 3 alarm upper limit
Input	XBF-AD04C_CH0_LOOR	BIT	12.0	Analog input module: Channel 0 alarm lower limit
Input	XBF-AD04C_CH1_LOOR	BIT	12.1	Analog input module: Channel 1 alarm lower limit
Input	XBF-AD04C_CH2_LOOR	BIT	12.2	Analog input module: Channel 2 alarm lower limit
Input	XBF-AD04C_CH3_LOOR	BIT	12.3	Analog input module: Channel 3 alarm lower limit

&lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-AD04C_ERR_CLR	BIT	0.0	Analog input module: Error clear request

## (3) XBF-AD08A

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-AD08A_ERR	BIT	0.0	Analog input module: Module error
Input	XBF-AD08A_RDY	BIT	0.F	Analog input module: Module ready
Input	XBF-AD08A_CH0_ACT	BIT	1.0	Analog input module: CH0 RUN
Input	XBF-AD08A_CH1_ACT	BIT	1.1	Analog input module: CH1 RUN
Input	XBF-AD08A_CH2_ACT	BIT	1.2	Analog input module: CH2 RUN
Input	XBF-AD08A_CH3_ACT	BIT	1.3	Analog input module: CH3 RUN
Input	XBF-AD08A_CH4_ACT	BIT	1.4	Analog input module: CH4 RUN
Input	XBF-AD08A_CH5_ACT	BIT	1.5	Analog input module: CH5 RUN
Input	XBF-AD08A_CH6_ACT	BIT	1.6	Analog input module: CH6 RUN
Input	XBF-AD08A_CH7_ACT	BIT	1.7	Analog input module: CH7 RUN
Input	XBF-AD08A_CH0_ERR	BIT	1.8	Analog input module: Channel 0 error
Input	XBF-AD08A_CH1_ERR	BIT	1.9	Analog input module: Channel 1 error
Input	XBF-AD08A_CH2_ERR	BIT	01.A	Analog input module: Channel 2 error
Input	XBF-AD08A_CH3_ERR	BIT	01.B	Analog input module: Channel 3 error
Input	XBF-AD08A_CH4_ERR	BIT	01.C	Analog input module: Channel 4 error
Input	XBF-AD08A_CH5_ERR	BIT	01.D	Analog input module: Channel 5 error
Input	XBF-AD08A_CH6_ERR	BIT	01.E	Analog input module: Channel 6 error
Input	XBF-AD08A_CH7_ERR	BIT	01.F	Analog input module: Channel 7 error
Input	XBF-AD08A_CH0_DATA	Word	2	Analog input module: Channel 0 output value
Input	XBF-AD08A_CH1_DATA	Word	3	Analog input module: Channel 1 output value
Input	XBF-AD08A_CH2_DATA	Word	4	Analog input module: Channel 2 output value
Input	XBF-AD08A_CH3_DATA	Word	5	Analog input module: Channel 3 output value
Input	XBF-AD08A_CH4_DATA	Word	6	Analog input module: Channel 4 output value
Input	XBF-AD08A_CH5_DATA	Word	7	Analog input module: Channel 5 output value
Input	XBF-AD08A_CH6_DATA	Word	8	Analog input module: Channel 6 output value
Input	XBF-AD08A_CH7_DATA	Word	9	Analog input module: Channel 7 output value
Input	XBF-AD08A_CH0_IDD	BIT	10.0	Analog input module: Channel 0 disconnection flag
Input	XBF-AD08A_CH1_IDD	BIT	10.1	Analog input module: Channel 1 disconnection flag

Input	XBF-AD08A_CH2_IDD	BIT	10.2	Analog input module: Channel 2 disconnection flag
Input	XBF-AD08A_CH3_IDD	BIT	10.3	Analog input module: Channel 3 disconnection flag
Input	XBF-AD08A_CH4_IDD	BIT	10.4	Analog input module: Channel 4 disconnection flag
Input	XBF-AD08A_CH5_IDD	BIT	10.5	Analog input module: Channel 5 disconnection flag
Input	XBF-AD08A_CH6_IDD	BIT	10.6	Analog input module: Channel 6 disconnection flag
Input	XBF-AD08A_CH7_IDD	BIT	10.7	Analog input module: Channel 7 disconnection flag

<Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-AD08A_ERR_CLR	BIT	0.0	Analog input module: Error clear request

(4) XBF-AH04A

1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-AH04A_ERR	BIT	0.0	Analog IO Module: Module error
Input	XBF-AH04A_RDY	BIT	0.F	Analog IO Module: Module ready
Input	XBF-AH04A_AD0_ACT	BIT	1.0	Analog IO Module: Input Channel 0 Running
Input	XBF-AH04A_AD1_ACT	BIT	1.1	Analog IO Module: Input Channel 1 Running
Input	XBF-AH04A_DA0_ACT	BIT	1.2	Analog IO Module: Output Channel 0 Running
Input	XBF-AH04A_DA1_ACT	BIT	1.3	Analog IO Module: Output Channel 1 Running
Input	XBF-AH04A_AD0_IDD	BIT	1.4	Analog IO Module: Input Channel 0 Disconnection Flag
Input	XBF-AH04A_AD1_IDD	BIT	1.5	Analog IO Module: Input Channel 1 Disconnection Flag
Input	XBF-AH04A_AD0_ERR	BIT	1.8	Analog IO Module: Input Channel 0 error
Input	XBF-AH04A_AD1_ERR	BIT	1.9	Analog IO Module: Input Channel 1 error
Input	XBF-AH04A_DA0_ERR	BIT	1.A	Analog IO Module: Output Channel 0 error
Input	XBF-AH04A_DA1_ERR	BIT	1.B	Analog IO Module: Output Channel 1 error
Input		WORD	2	Reserved
Input		WORD	3	Reserved
Input	XBF-AH04A_AD0_DATA	Word	4	Analog IO Module: Input Channel 0 Digital Output Data
Input	XBF-AH04A_AD1_DATA	Word	5	Analog IO Module: Input Channel 1 Digital Output Data

<Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-AH04A_DA0_OUTEN	BIT	0.0	Analog IO Module: Output channel 0 output enable
Output	XBF-AH04A_DA1_OUTEN	BIT	0.1	Analog IO Module: Output channel 1 output enable
Output	XBF-AH04A_DA0_DATA	Word	1	Analog IO Module: Output Channel 0 Digital Input Data
Output	XBF-AH04A_DA1_DATA	Word	2	Analog IO Module: Output Channel 1 Digital Input Data

## (5) XBF-DC04A

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-DC04A_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	XBF-DC04A_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	XBF-DC04A_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error
Input	XBF-DC04A_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	XBF-DC04A_RDY	BIT	0.F	Analog Output module: Module ready
Input	XBF-DC04A_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	XBF-DC04A_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN
Input	XBF-DC04A_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	XBF-DC04A_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN

&lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-DC04A_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	XBF-DC04A_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	XBF-DC04A_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	XBF-DC04A_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting
Output	XBF-DC04A_CH0_DATA	Word	1	Analog Output module: Channel 0 Input value
Output	XBF-DC04A_CH1_DATA	Word	2	Analog Output module: Channel 1 Input value
Output	XBF-DC04A_CH2_DATA	Word	3	Analog Output module: Channel 2 Input value
Output	XBF-DC04A_CH3_DATA	Word	4	Analog Output module: Channel 3 Input value

## (6) XBF-DC04B

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-DC04B_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	XBF-DC04B_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	XBF-DC04B_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error
Input	XBF-DC04B_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	XBF-DC04B_RDY	BIT	0.F	Analog Output module: Module ready
Input	XBF-DC04B_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	XBF-DC04B_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN
Input	XBF-DC04B_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	XBF-DC04B_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN

&lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-DC04B_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	XBF-DC04B_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	XBF-DC04B_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	XBF-DC04B_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting

Output	XBF-DC04B_CH0_DATA	Word	1	Analog Output module: Channel 0 Input value
Output	XBF-DC04B_CH1_DATA	Word	2	Analog Output module: Channel 1 Input value
Output	XBF-DC04B_CH2_DATA	Word	3	Analog Output module: Channel 2 Input value
Output	XBF-DC04B_CH3_DATA	Word	4	Analog Output module: Channel 3 Input value

## (7) XBF-DC04C

### 1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-DC04C_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	XBF-DC04C_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	XBF-DC04C_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error
Input	XBF-DC04C_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	XBF-DC04C_RDY	BIT	0.F	Analog output module: Module ready
Input	XBF-DC04C_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	XBF-DC04C_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN
Input	XBF-DC04C_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	XBF-DC04C_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN
Input	XBF-DC04C_CH0_INTP	BIT	1.8	Analog Output module: Channel 0 interpolation output status
Input	XBF-DC04C_CH1_INTP	BIT	1.9	Analog Output module: Channel 1 interpolation output status
Input	XBF-DC04C_CH2_INTP	BIT	1.A	Analog output module: Channel 2 interpolation output status
Input	XBF-DC04C_CH3_INTP	BIT	1.B	Analog output module: Channel 3 interpolation output status
Input	XBF-DC04C_CH0_ODD	BIT	1.C	Analog output module: Channel 0 output disconnection flag
Input	XBF-DC04C_CH1_ODD	BIT	1.D	Analog output module: Channel 1 output disconnection flag
Input	XBF-DC04C_CH2_ODD	BIT	1.E	Analog output module: Channel 2 output disconnection flag
Input	XBF-DC04C_CH3_ODD	BIT	1.F	Analog output module: Channel 3 output disconnection flag

<Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-DC04C_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	XBF-DC04C_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	XBF-DC04C_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	XBF-DC04C_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting
Output	XBF-DC04C_CH0_DATA	Word	1	Analog Output module: Channel 0 Input value
Output	XBF-DC04C_CH1_DATA	Word	2	Analog Output module: Channel 1 Input value
Output	XBF-DC04C_CH2_DATA	Word	3	Analog Output module: Channel 2 Input value
Output	XBF-DC04C_CH3_DATA	Word	4	Analog Output module: Channel 3 Input value

## (8) XBF-DV04A

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-DV04A_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	XBF-DV04A_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	XBF-DV04A_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error
Input	XBF-DV04A_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	XBF-DV04A_RDY	BIT	0.F	Analog output module: Module ready
Input	XBF-DV04A_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	XBF-DV04A_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN
Input	XBF-DV04A_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	XBF-DV04A_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN

&lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-DV04A_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	XBF-DV04A_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	XBF-DV04A_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	XBF-DV04A_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting
Output	XBF-DV04A_CH0_DATA	Word	1	Analog Output module: Channel 0 Input value
Output	XBF-DV04A_CH1_DATA	Word	2	Analog Output module: Channel 1 Input value
Output	XBF-DV04A_CH2_DATA	Word	3	Analog Output module: Channel 2 Input value
Output	XBF-DV04A_CH3_DATA	Word	4	Analog Output module: Channel 3 Input value

## (9) XBF-DV04C

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-DV04C_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	XBF-DV04C_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	XBF-DV04C_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error
Input	XBF-DV04C_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	XBF-DV04C_RDY	BIT	0.F	Analog output module: Module ready
Input	XBF-DV04C_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	XBF-DV04C_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN
Input	XBF-DV04C_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	XBF-DV04C_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN
Input	XBF-DV04C_CH0_INTP	BIT	1.8	Analog Output module: Channel 0 interpolation output status
Input	XBF-DV04C_CH1_INTP	BIT	1.9	Analog Output module: Channel 1 interpolation output status
Input	XBF-DV04C_CH2_INTP	BIT	1.A	Analog output module: Channel 2 interpolation output status
Input	XBF-DV04C_CH3_INTP	BIT	1.B	Analog output module: Channel 3 interpolation output status

&lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-DV04C_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	XBF-DV04C_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	XBF-DV04C_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	XBF-DV04C_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting
Output	XBF-DV04C_CH0_DATA	Word	1	Analog Output module: Channel 0 Input value
Output	XBF-DV04C_CH1_DATA	Word	2	Analog Output module: Channel 1 Input value
Output	XBF-DV04C_CH2_DATA	Word	3	Analog Output module: Channel 2 Input value
Output	XBF-DV04C_CH3_DATA	Word	4	Analog Output module: Channel 3 Input value

(10) XBF-HD02A

1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-HD02A_CH0_DN	BIT	0.0	High Speed Counter Module: CH0 up/down counter status flag
Input	XBF-HD02A_CH0_EXTPRE	BIT	0.1	High Speed Counter Module: Channel 0 external preset command detection flag
Input	XBF-HD02A_CH0_CRY	BIT	0.3	High Speed Counter Module: Channel 0 carry value
Input	XBF-HD02A_CH0_BRW	BIT	0.4	High Speed Counter Module: Channel 0 borrow value
Input	XBF-HD02A_CH0_AUXING	BIT	0.5	High Speed Counter Module: Channel 0 auxiliary function status
Input	XBF-HD02A_CH0_CMPOUT0	BIT	0.6	High Speed Counter Module: Channel 0 compare output 0 status
Input	XBF-HD02A_CH0_CMPOUT1	BIT	0.7	High Speed Counter Module: Channel 0 compare output 1 status
Input	XBF-HD02A_CH0_ERR	BIT	0.E	High Speed Counter Module: Channel 0 error flag
Input	XBF-HD02A_RDY	BIT	0.F	High Speed Counter Module: Module ready
Input	XBF-HD02A_CH1_DN	BIT	1.0	High Speed Counter Module: CH1 up/down counter status flag
Input	XBF-HD02A_CH1_EXTPRE	BIT	1.1	High Speed Counter Module: Channel 1 external preset command detection flag
Input	XBF-HD02A_CH1_CRY	BIT	1.3	High Speed Counter Module: Channel 1 carry value
Input	XBF-HD02A_CH1_BRW	BIT	1.4	High Speed Counter Module: Channel 1 borrow value
Input	XBF-HD02A_CH1_AUXING	BIT	1.5	High Speed Counter Module: Channel 1 auxiliary function status
Input	XBF-HD02A_CH1_CMPOUT0	BIT	1.6	High Speed Counter Module: Channel 1 compare output 0 status
Input	XBF-HD02A_CH1_CMPOUT1	BIT	1.7	High Speed Counter Module: Channel 1 compare output 1 status
Input	XBF-HD02A_CH1_ERR	BIT	1.E	High Speed Counter Module: Channel 1 error flag
Input	XBF-HD02A_CH0_CNT_LV	Word	2	High Speed Counter Module: Channel 0 count value (LWORD)
Input	XBF-HD02A_CH0_CNT_HV	Word	3	High Speed Counter Module: Channel 0 count value (HWORD)

Input	XBF-HD02A_CH0_LTH_LV	Word	4	High Speed Counter Module: Channel 0 latch count value (LWORD)
Input	XBF-HD02A_CH0_LTH_HV	Word	5	High Speed Counter Module: Channel 0 latch count value (HWORD)
Input	XBF-HD02A_CH0_RNG_LV	Word	6	High Speed Counter Module: Channel 0 sampling count value (LWORD)
Input	XBF-HD02A_CH0_RNG_HV	Word	7	High Speed Counter Module: Channel 0 sampling count value (HWORD)
Input	XBF-HD02A_CH0_FRQ_LV	Word	8	High Speed Counter Module: Channel 0 input frequency value (LWORD)
Input	XBF-HD02A_CH0_FRQ_HV	Word	9	High Speed Counter Module: Channel 0 input frequency value (HWORD)
Input	XBF-HD02A_CH0_RPU_LV	Word	10	High Speed Counter Module: Channel 0 Rev./unit time value (LWORD)
Input	XBF-HD02A_CH0_RPU_HV	Word	11	High Speed Counter Module: Channel 0 Rev./unit time value (HWORD)
Input	XBF-HD02A_CH1_CNT_LV	Word	12	High Speed Counter Module: Channel 1 count value (LWORD)
Input	XBF-HD02A_CH1_CNT_HV	Word	13	High Speed Counter Module: Channel 1 count value (HWORD)
Input	XBF-HD02A_CH1_LTH_LV	Word	14	High Speed Counter Module: Channel 1 latch count value (LWORD)
Input	XBF-HD02A_CH1_LTH_HV	Word	15	High Speed Counter Module: Channel 1 latch count value (HWORD)
Input	XBF-HD02A_CH1_RNG_LV	Word	16	High Speed Counter Module: Channel 1 sampling count value (LWORD)
Input	XBF-HD02A_CH1_RNG_HV	Word	17	High Speed Counter Module: Channel 1 sampling count value (HWORD)
Input	XBF-HD02A_CH1_FRQ_LV	Word	18	High Speed Counter Module: Channel 1 input frequency value (LWORD)
Input	XBF-HD02A_CH1_FRQ_HV	Word	19	High Speed Counter Module: Channel 1 input frequency value (HWORD)
Input	XBF-HD02A_CH1_RPU_LV	Word	20	High Speed Counter Module: Channel 1 Rev./unit time value (LWORD)
Input	XBF-HD02A_CH1_RPU_HV	Word	21	High Speed Counter Module: Channel 1 Rev./unit time value (HWORD)

## &lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-HD02A_CH0_CNTEN	BIT	0.0	High Speed Counter Module: Channel 0 enable counter command(level)
Output	XBF-HD02A_CH0_PREEN	BIT	0.1	High Speed Counter Module: Channel 0 enable preset command(Edge)
Output	XBF-HD02A_CH0_DWNCNT	BIT	0.2	High Speed Counter Module: Channel 0 up/down counter select command(Level)
Output	XBF-HD02A_CH0_AUXEN	BIT	0.3	High Speed Counter Module: Channel 0 auxiliary function request(Edge,Level)
Output	XBF-HD02A_CH0_CMPEN	BIT	0.4	High Speed Counter Module: Channel 0 compare function enable command(Level)

## Appendix

Output	XBF-HD02A_CH0_OUTEN	BIT	0.5	High Speed Counter Module: Channel 0 compare output signal enable command(Level)
Output	XBF-HD02A_CH0_EQ0RST	BIT	0.6	High Speed Counter Module: Channel 0 compare output 0 equal reset command (Edge)
Output	XBF-HD02A_CH0_EQ1RST	BIT	0.7	High Speed Counter Module: Channel 0 compare output 1 equal reset command (Edge)
Output	XBF-HD02A_CH0_CRYBRW_RST	BIT	0.A	High Speed Counter Module: Channel 0 carry/borrow reset command(Edge)
Output	XBF-HD02A_CH0_EXTPST_EN	BIT	0.B	High Speed Counter Module: Channel 0 preset Ext. Input enable command
Output	XBF-HD02A_CH0_EXTAUX_EN	BIT	0.C	High Speed Counter Module: Channel 0 auxiliary function Ext. input enable command
Output	XBF-HD02A_CH0_EXTPST_RST	BIT	0.D	High Speed Counter Module: Channel 0 Ext. Input preset reset command
Output	XBF-HD02A_CH1_CNTEN	BIT	1.0	High Speed Counter Module: Channel 1 enable counter command(level)
Output	XBF-HD02A_CH1_PREEN	BIT	1.1	High Speed Counter Module: Channel 1 enable preset command(Edge)
Output	XBF-HD02A_CH1_DWNCNT	BIT	1.2	High Speed Counter Module: Channel 1 up/down counter select command(Level)
Output	XBF-HD02A_CH1_AUXEN	BIT	1.3	High Speed Counter Module: Channel 1 auxiliary function enable command(Edge level)
Output	XBF-HD02A_CH1_CMPEN	BIT	1.4	High Speed Counter Module: Channel 1 compare function enable command(Level)
Output	XBF-HD02A_CH1_OUTEN	BIT	1.5	High Speed Counter Module: Channel 1 compare output signal enable command(Level)
Output	XBF-HD02A_CH1_EQ0RST	BIT	1.6	High Speed Counter Module: Channel 0 compare output 0 equal reset command (Edge)
Output	XBF-HD02A_CH1_EQ1RST	BIT	1.7	High Speed Counter Module: Channel 1 compare output 1 equal reset command (Edge)
Output	XBF-HD02A_CH1_CRYBRW_RST	BIT	1.A	High Speed Counter Module: Channel 1 carry/borrow reset command(Edge)
Output	XBF-HD02A_CH1_EXTPST_EN	BIT	1.B	High Speed Counter Module: Channel 1 preset Ext. Input enable command
Output	XBF-HD02A_CH1_EXTAUX_EN	BIT	1.C	High Speed Counter Module: Channel 1 auxiliary Ext. Input enable command
Output	XBF-HD02A_CH1_EXTPST_RST	BIT	1.D	High Speed Counter Module: Channel 1 Ext. Input preset reset command

## (11) XBF-HO02A

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-HO02A_CH0_DN	BIT	0.0	High Speed Counter Module: CH0 up/down counter status flag
Input	XBF-HO02A_CH0_EXTPRE	BIT	0.1	High Speed Counter Module: Channel 0 external preset command detection flag
Input	XBF-HO02A_CH0_CRY	BIT	0.3	High Speed Counter Module: Channel 0 carry value
Input	XBF-HO02A_CH0_BRW	BIT	0.4	High Speed Counter Module: Channel 0 borrow value
Input	XBF-HO02A_CH0_AUXING	BIT	0.5	High Speed Counter Module: Channel 0 auxiliary function status
Input	XBF-HO02A_CH0_CMPOUT0	BIT	0.6	High Speed Counter Module: Channel 0 compare output 0 status
Input	XBF-HO02A_CH0_CMPOUT1	BIT	0.7	High Speed Counter Module: Channel 0 compare output 1 status
Input	XBF-HO02A_CH0_ERR	BIT	0.E	High Speed Counter Module: Channel 0 error flag
Input	XBF-HO02A_RDY	BIT	0.F	High Speed Counter Module: Module ready
Input	XBF-HO02A_CH1_DN	BIT	1.0	High Speed Counter Module: CH1 up/down counter status flag
Input	XBF-HO02A_CH1_EXTPRE	BIT	1.1	High Speed Counter Module: Channel 1 external preset command detection flag
Input	XBF-HO02A_CH1_CRY	BIT	1.3	High Speed Counter Module: Channel 1 carry value
Input	XBF-HO02A_CH1_BRW	BIT	1.4	High Speed Counter Module: Channel 1 borrow value
Input	XBF-HO02A_CH1_AUXING	BIT	1.5	High Speed Counter Module: Channel 1 auxiliary function status
Input	XBF-HO02A_CH1_CMPOUT0	BIT	1.6	High Speed Counter Module: Channel 1 compare output 0 status
Input	XBF-HO02A_CH1_CMPOUT1	BIT	1.7	High Speed Counter Module: Channel 1 compare output 1 status
Input	XBF-HO02A_CH1_ERR	BIT	1.E	High Speed Counter Module: Channel 1 error flag
Input	XBF-HO02A_CH0_CNT_LV	Word	2	High Speed Counter Module: Channel 0 count value (LWORD)
Input	XBF-HO02A_CH0_CNT_HV	Word	3	High Speed Counter Module: Channel 0 count value (HWORD)
Input	XBF-HO02A_CH0_LTH_LV	Word	4	High Speed Counter Module: Channel 0 latch count value (LWORD)
Input	XBF-HO02A_CH0_LTH_HV	Word	5	High Speed Counter Module: Channel 0 latch count value (HWORD)
Input	XBF-HO02A_CH0_RNG_LV	Word	6	High Speed Counter Module: Channel 0 sampling count value (LWORD)
Input	XBF-HO02A_CH0_RNG_HV	Word	7	High Speed Counter Module: Channel 0 sampling count value (HWORD)
Input	XBF-HO02A_CH0_FRQ_LV	Word	8	High Speed Counter Module: Channel 0 input frequency value (LWORD)
Input	XBF-HO02A_CH0_FRQ_HV	Word	9	High Speed Counter Module: Channel 0 input frequency value (HWORD)

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Input	XBF-HO02A_CH0_RPU_LV	Word	10	High Speed Counter Module: Channel 0 Rev./unit time value (LWORD)
Input	XBF-HO02A_CH0_RPU_HV	Word	11	High Speed Counter Module: Channel 0 Rev./unit time value (HWORD)
Input	XBF-HO02A_CH1_CNT_LV	Word	12	High Speed Counter Module: Channel 1 count value (LWORD)
Input	XBF-HO02A_CH1_CNT_HV	Word	13	High Speed Counter Module: Channel 1 count value (HWORD)
Input	XBF-HO02A_CH1_LTH_LV	Word	14	High Speed Counter Module: Channel 1 latch count value (LWORD)
Input	XBF-HO02A_CH1_LTH_HV	Word	15	High Speed Counter Module: Channel 1 latch count value (HWORD)
Input	XBF-HO02A_CH1_RNG_LV	Word	16	High Speed Counter Module: Channel 1 sampling count value (LWORD)
Input	XBF-HO02A_CH1_RNG_HV	Word	17	High Speed Counter Module: Channel 1 sampling count value (HWORD)
Input	XBF-HO02A_CH1_FRQ_LV	Word	18	High Speed Counter Module: Channel 1 input frequency value (LWORD)
Input	XBF-HO02A_CH1_FRQ_HV	Word	19	High Speed Counter Module: Channel 1 input frequency value (HWORD)
Input	XBF-HO02A_CH1_RPU_LV	Word	20	High Speed Counter Module: Channel 1 Rev./unit time value (LWORD)
Input	XBF-HO02A_CH1_RPU_HV	Word	21	High Speed Counter Module: Channel 1 Rev./unit time value (HWORD)

### <Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-HO02A_CH0_CNTEN	BIT	0.0	High Speed Counter Module: Channel 0 enable counter command(level)
Output	XBF-HO02A_CH0_PREEN	BIT	0.1	High Speed Counter Module: Channel 0 enable preset command(Edge)
Output	XBF-HO02A_CH0_DWNCNT	BIT	0.2	High Speed Counter Module: Channel 0 up/down counter select command(Level)
Output	XBF-HO02A_CH0_AUXEN	BIT	0.3	High Speed Counter Module: Channel 0 auxiliary function request(Edge,Level)
Output	XBF-HO02A_CH0_CMPEN	BIT	0.4	High Speed Counter Module: Channel 0 compare function enable command(Level)
Output	XBF-HO02A_CH0_OUTEN	BIT	0.5	High Speed Counter Module: Channel 0 compare output signal enable command(Level)
Output	XBF-HO02A_CH0_EQ0RST	BIT	0.6	High Speed Counter Module: Channel 0 compare output 0 equal reset command (Edge)
Output	XBF-HO02A_CH0_EQ1RST	BIT	0.7	High Speed Counter Module: Channel 0 compare output 1 equal reset command (Edge)
Output	XBF-HO02A_CH0_CRYBRW_RST	BIT	0.A	High Speed Counter Module: Channel 0 carry/borrow reset command(Edge)
Output	XBF-HO02A_CH0_EXTPST_EN	BIT	0.B	High Speed Counter Module: Channel 0 preset Ext. Input enable command
Output	XBF-HO02A_CH0_EXTAUX_EN	BIT	0.C	High Speed Counter Module: Channel 0 auxiliary function Ext. input enable command

Output	XBF-HO02A_CH0_EXTPST_RST	BIT	0.D	High Speed Counter Module: Channel 0 Ext. Input preset reset command
Output	XBF-HO02A_CH1_CNTEN	BIT	1.0	High Speed Counter Module: Channel 1 enable counter command(level)
Output	XBF-HO02A_CH1_PREEN	BIT	1.1	High Speed Counter Module: Channel 1 enable preset command(Edge)
Output	XBF-HO02A_CH1_DWNCNT	BIT	1.2	High Speed Counter Module: Channel 1 up/down counter select command(Level)
Output	XBF-HO02A_CH1_AUXEN	BIT	1.3	High Speed Counter Module: Channel 1 auxiliary function enable command(Edge,Level)
Output	XBF-HO02A_CH1_CMPEN	BIT	1.4	High Speed Counter Module: Channel 1 compare function enable command(Level)
Output	XBF-HO02A_CH1_OUTEN	BIT	1.5	High Speed Counter Module: Channel 1 compare output signal enable command(Level)
Output	XBF-HO02A_CH1_EQ0RST	BIT	1.6	High Speed Counter Module: Channel 0 compare output 0 equal reset command (Edge)
Output	XBF-HO02A_CH1_EQ1RST	BIT	1.7	High Speed Counter Module: Channel 1 compare output 1 equal reset command (Edge)
Output	XBF-HO02A_CH1_CRYBRW_RST	BIT	1.A	High Speed Counter Module: Channel 1 carry/borrow reset command(Edge)
Output	XBF-HO02A_CH1_EXTPST_EN	BIT	1.B	High Speed Counter Module: Channel 1 preset Ext. Input enable command
Output	XBF-HO02A_CH1_EXTAUX_EN	BIT	1.C	High Speed Counter Module: Channel 1 auxiliary Ext. Input enable command
Output	XBF-HO02A_CH1_EXTPST_RST	BIT	1.D	High Speed Counter Module: Channel 1 Ext. Input preset reset command

## (12) XBF-RD01A

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-RD01A_ERR	BIT	0.0	Temperature input module : Module error
Input	XBF-RD01A_RDY	BIT	0.F	Temperature input module : Module ready
Input	XBF-RD01A_CH0_ACT	BIT	1.0	Temperature input module : Channel 0 RUN
Input	XBF-RD01A_CH0_BOUT	BIT	1.4	Temperature input module : Channel 0 disconnection
Input		WORD	2	Reserved
Input		WORD	3	Reserved
Input	XBF-RD01A_CH0_TEMP	Word	4	Temperature input module : Channel 0 temperature data
Input		WORD	5	Reserved
Input		WORD	6	Reserved
Input		WORD	7	Reserved
Input	XBF-RD01A_CH0_SCAL	Word	8	Temperature input module : Channel 0 scaling data
Input		WORD	9	Reserved
Input		WORD	10	Reserved
Input		WORD	11	Reserved

(13) XBF-RD04A

1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-RD04A_ERR	BIT	0.0	Temperature input module : Module error
Input	XBF-RD04A_RDY	BIT	0.F	Temperature input module : Module ready
Input	XBF-RD04A_CH0_ACT	BIT	1.0	Temperature input module : Channel 0 RUN
Input	XBF-RD04A_CH1_ACT	BIT	1.1	Temperature input module : Channel 1 RUN
Input	XBF-RD04A_CH2_ACT	BIT	1.2	Temperature input module : Channel 2 RUN
Input	XBF-RD04A_CH3_ACT	BIT	1.3	Temperature input module : Channel 3 RUN
Input	XBF-RD04A_CH0_BOUT	BIT	1.4	Temperature input module : Channel 0 disconnection
Input	XBF-RD04A_CH1_BOUT	BIT	1.5	Temperature input module : Channel 1 disconnection
Input	XBF-RD04A_CH2_BOUT	BIT	1.6	Temperature input module : Channel 2 disconnection
Input	XBF-RD04A_CH3_BOUT	BIT	1.7	Temperature input module : Channel 3 disconnection
Input		WORD	2	Reserved
Input		WORD	3	Reserved
Input	XBF-RD04A_CH0_TEMP	Word	4	Temperature input module : Channel 0 temperature data
Input	XBF-RD04A_CH1_TEMP	Word	5	Temperature input module : Channel 1 temperature data
Input	XBF-RD04A_CH2_TEMP	Word	6	Temperature input module : Channel 2 temperature data
Input	XBF-RD04A_CH3_TEMP	Word	7	Temperature input module : Channel 3 temperature data
Input	XBF-RD04A_CH0_SCAL	Word	8	Temperature input module : Channel 0 scaling data
Input	XBF-RD04A_CH1_SCAL	Word	9	Temperature input module : Channel 1 scaling data
Input	XBF-RD04A_CH2_SCAL	Word	10	Temperature input module : Channel 2 scaling data
Input	XBF-RD04A_CH3_SCAL	Word	11	Temperature input module : Channel 3 scaling data

(14) XBF-TC04S

1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-TC04S_CH0_ADJERR	BIT	0.0	Temperature input module : Channel 0 offset/gain error flag
Input	XBF-TC04S_CH1_ADJERR	BIT	0.1	Temperature input module : Channel 1 offset/gain error flag
Input	XBF-TC04S_CH2_ADJERR	BIT	0.2	Temperature input module : Channel 2 offset/gain error flag
Input	XBF-TC04S_CH3_ADJERR	BIT	0.3	Temperature input module : Channel 3 offset/gain error flag
Input	XBF-TC04S_EXT_PWR_ERR	BIT	0.C	Temperature input module : External power error
Input	XBF-TC04S_EEPROMERR	BIT	0.D	Temperature input module : Offset/gain backup error flag
Input	XBF-TC04S_WDT_ERR	BIT	0.E	Temperature input module: H/W error Flag
Input	XBF-TC04S_RDY	BIT	0.F	Temperature input module : Module ready
Input	XBF-TC04S_CH0_ACT	BIT	1.0	Temperature input module : Channel 0 RUN
Input	XBF-TC04S_CH1_ACT	BIT	1.1	Temperature input module : Channel 1 RUN
Input	XBF-TC04S_CH2_ACT	BIT	1.2	Temperature input module : Channel 2 RUN

Input	XBF-TC04S_CH3_ACT	BIT	1.3	Temperature input module : Channel 3 RUN
Input	XBF-TC04S_CH0_BOUT	BIT	1.4	Temperature input module : Channel 0 disconnection
Input	XBF-TC04S_CH1_BOUT	BIT	1.5	Temperature input module : Channel 1 disconnection
Input	XBF-TC04S_CH2_BOUT	BIT	1.6	Temperature input module : Channel 2 disconnection
Input	XBF-TC04S_CH3_BOUT	BIT	1.7	Temperature input module : Channel 3 disconnection
Input	XBF-TC04S_CH0_SETERR	BIT	1.8	Temperature input module : Channel 0 error code
Input	XBF-TC04S_CH1_SETERR	BIT	1.9	Temperature input module : Channel 1 error code
Input	XBF-TC04S_CH2_SETERR	BIT	1.A	Temperature input module : Channel 2 error code
Input	XBF-TC04S_CH3_SETERR	BIT	1.B	Temperature input module : Channel 3 error code
Input	-	WORD	2	Reserved
Input	-	WORD	3	Reserved
Input	XBF-TC04S_CH0_TEMP	Word	4	Temperature input module : Channel 0 temperature data
Input	XBF-TC04S_CH1_TEMP	Word	5	Temperature input module : Channel 1 temperature data
Input	XBF-TC04S_CH2_TEMP	Word	6	Temperature input module : Channel 2 temperature data
Input	XBF-TC04S_CH3_TEMP	Word	7	Temperature input module : Channel 3 temperature data
Input	XBF-TC04S_CH0_SCAL	Word	8	Temperature input module : Channel 0 scaling data
Input	XBF-TC04S_CH1_SCAL	Word	9	Temperature input module : Channel 1 scaling data
Input	XBF-TC04S_CH2_SCAL	Word	10	Temperature input module : Channel 2 scaling data
Input	XBF-TC04S_CH3_SCAL	Word	11	Temperature input module : Channel 3 scaling data
Input	XBF-TC04S_CH0_MIN	Word	12	Temperature input module : Channel 0 Min. data
Input	XBF-TC04S_CH0_MAX	Word	13	Temperature input module : Channel 0 Max. data
Input	XBF-TC04S_CH1_MIN	Word	14	Temperature input module : Channel 1 Min. data
Input	XBF-TC04S_CH1_MAX	Word	15	Temperature input module : Channel 1 Max. data
Input	XBF-TC04S_CH2_MIN	Word	16	Temperature input module : Channel 2 Min. data
Input	XBF-TC04S_CH2_MAX	Word	17	Temperature input module : Channel 2 Max. data
Input	XBF-TC04S_CH3_MIN	Word	18	Temperature input module : Channel 3 Min. data
Input	XBF-TC04S_CH3_MAX	Word	19	Temperature input module : Channel 3 Max. data

## &lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-TC04S_CH0_FINDEN	BIT	0.0	Temperature input module : Channel 0 Max./Min. search enable/disable
Output	XBF-TC04S_CH1_FINDEN	BIT	0.1	Temperature input module : Channel 1 Max./Min. search enable/disable
Output	XBF-TC04S_CH2_FINDEN	BIT	0.2	Temperature input module : Channel 2 Max./Min. search enable/disable
Output	XBF-TC04S_CH3_FINDEN	BIT	0.3	Temperature input module : Channel 3 Max./Min. search enable/disable
Output	XBF-TC04S_CH0_RJCDS	BIT	0.8	Temperature input module : Channel 0 cold junction compensation enable/disable
Output	XBF-TC04S_CH1_RJCDS	BIT	0.9	Temperature input module : Channel 1 cold junction compensation enable/disable
Output	XBF-TC04S_CH2_RJCDS	BIT	0.A	Temperature input module : Channel 2 cold junction compensation enable/disable
Output	XBF-TC04S_CH3_RJCDS	BIT	0.B	Temperature input module : Channel 3 cold junction compensation enable/disable

(15) XBF-TC04B

1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-TC04B_CH0_ADJERR	BIT	0.0	Temperature input module : Channel 0 offset/gain error flag
Input	XBF-TC04B_CH1_ADJERR	BIT	0.1	Temperature input module : Channel 1 offset/gain error flag
Input	XBF-TC04B_CH2_ADJERR	BIT	0.2	Temperature input module : Channel 2 offset/gain error flag
Input	XBF-TC04B_CH3_ADJERR	BIT	0.3	Temperature input module : Channel 3 offset/gain error flag
Input	XBF-TC04B_EXT_PWR_ERR	BIT	0.C	Temperature input module : External power error
Input	XBF-TC04B_EEPROMERR	BIT	0.D	Temperature input module : Offset/gain backup error flag
Input	XBF-TC04B_WDT_ERR	BIT	0.E	Temperature input module: H/W error Flag
Input	XBF-TC04B_RDY	BIT	0.F	Temperature input module : Module ready
Input	XBF-TC04B_CH0_ACT	BIT	1.0	Temperature input module : Channel 0 RUN
Input	XBF-TC04B_CH1_ACT	BIT	1.1	Temperature input module : Channel 1 RUN
Input	XBF-TC04B_CH2_ACT	BIT	1.2	Temperature input module : Channel 2 RUN
Input	XBF-TC04B_CH3_ACT	BIT	1.3	Temperature input module : Channel 3 RUN
Input	XBF-TC04B_CH0_BOUT	BIT	1.4	Temperature input module : Channel 0 disconnection
Input	XBF-TC04B_CH1_BOUT	BIT	1.5	Temperature input module : Channel 1 disconnection
Input	XBF-TC04B_CH2_BOUT	BIT	1.6	Temperature input module : Channel 2 disconnection
Input	XBF-TC04B_CH3_BOUT	BIT	1.7	Temperature input module : Channel 3 disconnection
Input	XBF-TC04B_CH0_SETERR	BIT	1.8	Temperature input module : Channel 0 error code
Input	XBF-TC04B_CH1_SETERR	BIT	1.9	Temperature input module : Channel 1 error code
Input	XBF-TC04B_CH2_SETERR	BIT	1.A	Temperature input module : Channel 2 error code
Input	XBF-TC04B_CH3_SETERR	BIT	1.B	Temperature input module : Channel 3 error code
Input		WORD	2	Reserved
Input		WORD	3	Reserved
Input	XBF-TC04B_CH0_TEMP	Word	4	Temperature input module : Channel 0 temperature data
Input	XBF-TC04B_CH1_TEMP	Word	5	Temperature input module : Channel 1 temperature data
Input	XBF-TC04B_CH2_TEMP	Word	6	Temperature input module : Channel 2 temperature data
Input	XBF-TC04B_CH3_TEMP	Word	7	Temperature input module : Channel 3 temperature data
Input	XBF-TC04B_CH0_SCAL	Word	8	Temperature input module : Channel 0 scaling data
Input	XBF-TC04B_CH1_SCAL	Word	9	Temperature input module : Channel 1 scaling data
Input	XBF-TC04B_CH2_SCAL	Word	10	Temperature input module : Channel 2 scaling data
Input	XBF-TC04B_CH3_SCAL	Word	11	Temperature input module : Channel 3 scaling data
Input	XBF-TC04B_CH0_MIN	Word	12	Temperature input module : Channel 0 Min. data
Input	XBF-TC04B_CH0_MAX	Word	13	Temperature input module : Channel 0 Max. data
Input	XBF-TC04B_CH1_MIN	Word	14	Temperature input module : Channel 1 Min. data
Input	XBF-TC04B_CH1_MAX	Word	15	Temperature input module : Channel 1 Max. data
Input	XBF-TC04B_CH2_MIN	Word	16	Temperature input module : Channel 2 Min. data
Input	XBF-TC04B_CH2_MAX	Word	17	Temperature input module : Channel 2 Max. data
Input	XBF-TC04B_CH3_MIN	Word	18	Temperature input module : Channel 3 Min. data
Input	XBF-TC04B_CH3_MAX	Word	19	Temperature input module : Channel 3 Max. data

<Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-TC04B_CH0_FINDEN	BIT	0.0	Temperature input module : Channel 0 Max./Min. search enable/disable

Output	XBF-TC04B_CH1_FINDEN	BIT	0.1	Temperature input module : Channel 1 Max./Min. search enable/disable
Output	XBF-TC04B_CH2_FINDEN	BIT	0.2	Temperature input module : Channel 2 Max./Min. search enable/disable
Output	XBF-TC04B_CH3_FINDEN	BIT	0.3	Temperature input module : Channel 3 Max./Min. search enable/disable
Output	XBF-TC04B_CH0_RJCDS	BIT	0.8	Temperature input module : Channel 0 cold junction compensation enable/disable
Output	XBF-TC04B_CH1_RJCDS	BIT	0.9	Temperature input module : Channel 1 cold junction compensation enable/disable
Output	XBF-TC04B_CH2_RJCDS	BIT	0.A	Temperature input module : Channel 2 cold junction compensation enable/disable
Output	XBF-TC04B_CH3_RJCDS	BIT	0.B	Temperature input module : Channel 3 cold junction compensation enable/disable

## (16) XBF-LD02S

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	XBF-LD02S_ERR	BIT	0.0	Loadcell input module Module error
Input	XBF-LD02S_RDY	BIT	0.F	Loadcell input module Module ready
Input	XBF-LD02S_CH0_RUN	BIT	1.0	Loadcell input module CH0 RUN
Input	XBF-LD02S_CH1_RUN	BIT	1.1	Loadcell input module CH1 RUN
Input	XBF-LD02S_CH0_CALMOD	BIT	1.8	Loadcell input module Channel 0 calibration status
Input	XBF-LD02S_CH1_CALMOD	BIT	1.9	Loadcell input module Channel 1 calibration status
Input	XBF-LD02S_CH0_ERR	BIT	1.E	Loadcell input module Channel 0 error
Input	XBF-LD02S_CH1_ERR	BIT	1.F	Loadcell input module Channel 1 error
Input	XBF-LD02S_CH0_STBL	BIT	2.0	Loadcell input module Channel 0 stable status
Input	XBF-LD02S_CH1_STBL	BIT	2.1	Loadcell input module Channel 1 stable status
Input	XBF-LD02S_CH0_ZERO	BIT	2.2	Loadcell input module Channel 0 zero status
Input	XBF-LD02S_CH1_ZERO	BIT	2.3	Loadcell input module Channel 1 zero status
Input	XBF-LD02S_CH0_COMPLETE	BIT	2.4	Loadcell input module Channel 0 weighing complete status
Input	XBF-LD02S_CH1_COMPLETE	BIT	2.5	Loadcell input module Channel 1 weighing complete status
Input	XBF-LD02S_CH0_SP1	BIT	2.6	Loadcell input module Channel 0 step1 status
Input	XBF-LD02S_CH0_SP2	BIT	2.7	Loadcell input module Channel 0 step2 status
Input	XBF-LD02S_CH0_SP3	BIT	2.8	Loadcell input module Channel 0 step3 status
Input	XBF-LD02S_CH0_UNDER	BIT	2.9	Loadcell input module Channel 0 lack status
Input	XBF-LD02S_CH0_OVER	BIT	2.A	Loadcell input module Channel 0 over status
Input	XBF-LD02S_CH1_SP1	BIT	2.B	Loadcell input module Channel 1 step1 status
Input	XBF-LD02S_CH1_SP2	BIT	2.C	Loadcell input module Channel 1 step2 status
Input	XBF-LD02S_CH1_SP3	BIT	2.D	Loadcell input module Channel 1 step3 status
Input	XBF-LD02S_CH1_UNDER	BIT	2.E	Loadcell input module Channel 1 lack status
Input	XBF-LD02S_CH1_OVER	BIT	2.F	Loadcell input module Channel 1 over status
Input	XBF-LD02S_CH0_ZCALEND	BIT	3.0	Loadcell input module Channel 0 zero calibration status
Input	XBF-LD02S_CH1_ZCALEND	BIT	3.1	Loadcell input module Channel 1 zero calibration status
Input	XBF-LD02S_CH0_SCALEND	BIT	3.2	Loadcell input module Channel 0 span calibration status

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Input	XBF-LD02S_CH1_SCALEND	BIT	3.3	Loadcell input module Channel 1 span calibration status
Input	XBF-LD02S_CH0_CAEND	BIT	3.4	Loadcell input module Channel 0 save complete flag
Input	XBF-LD02S_CH1_CAEND	BIT	3.5	Loadcell input module Channel 1 save complete flag
Input	XBF-LD02S_CH0_EQUCALEND	BIT	3.6	Loadcell input module Channel 0 equivalent calibration status
Input	XBF-LD02S_CH1_EQUCALEND	BIT	3.7	Loadcell input module Channel 1 equivalent calibration status
Input	XBF-LD02S_CH0_ZSET	BIT	4.0	Loadcell input module Channel 0 zero setting status
Input	XBF-LD02S_CH1_ZSET	BIT	4.1	Loadcell input module Channel 1 zero setting status
Input	XBF-LD02S_CH0_ZRST	BIT	4.2	Loadcell input module Channel 0 zero reset status
Input	XBF-LD02S_CH1_ZRST	BIT	4.3	Loadcell input module Channel 1 zero reset status
Input	XBF-LD02S_CH0_TSET	BIT	4.4	Loadcell input module Channel 0 tare setting status
Input	XBF-LD02S_CH1_TSET	BIT	4.5	Loadcell input module Channel 1 tare setting status
Input	XBF-LD02S_CH0_WEIGHTHLD	BIT	4.6	Loadcell input module Channel 0 output hold status
Input	XBF-LD02S_CH1_WEIGHTHLD	BIT	4.7	Loadcell input module Channel 1 output hold status
Input	XBF-LD02S_CH0_MINMAXHLD	BIT	4.8	Loadcell input module Channel 0 Min./Max. hold status
Input	XBF-LD02S_CH1_MINMAXHLD	BIT	4.9	Loadcell input module Channel 1 Min./Max. hold status
Input	XBF-LD02S_CH0_NEARZERO	BIT	4.A	Loadcell input module Channel 0 near zero status
Input	XBF-LD02S_CH1_NEARZERO	BIT	4.B	Loadcell input module Channel 1 near zero status
Input	XBF-LD02S_CH0_GRSMINUS	BIT	4.C	Loadcell input module Channel 0 gross weight negative status
Input	XBF-LD02S_CH1_GRSMINUS	BIT	4.D	Loadcell input module Channel 1 gross weight negative status
Input	XBF-LD02S_CH0_NETMINUS	BIT	4.E	Loadcell input module Channel 0 net weight negative status
Input	XBF-LD02S_CH1_NETMINUS	BIT	4.F	Loadcell input module Channel 1 net weight negative status
Input	XBF-LD02S_CH0_HOOR	BIT	5.0	Loadcell input module Channel 0 upper alarm
Input	XBF-LD02S_CH1_HOOR	BIT	5.1	Loadcell input module Channel 1 upper alarm
Input	XBF-LD02S_CH0_LOOR	BIT	5.2	Loadcell input module Channel 0 lower alarm
Input	XBF-LD02S_CH1_LOOR	BIT	5.3	Loadcell input module Channel 1 lower alarm
Input	XBF-LD02S_CH0_HHOORSTAT	BIT	5.8	Loadcell input module Channel 0 high high status
Input	XBF-LD02S_CH0_HOORSTAT	BIT	5.9	Loadcell input module Channel 0 high status
Input	XBF-LD02S_CH0_LOORSTAT	BIT	5.A	Loadcell input module Channel 0 low status
Input	XBF-LD02S_CH0_LLOORSTAT	BIT	5.B	Loadcell input module Channel 0 low low status
Input	XBF-LD02S_CH1_HHOORSTAT	BIT	5.C	Loadcell input module Channel 1 high high status
Input	XBF-LD02S_CH1_HOORSTAT	BIT	5.D	Loadcell input module Channel 1 high status
Input	XBF-LD02S_CH1_LOORSTAT	BIT	5.E	Loadcell input module Channel 1 low status
Input	XBF-LD02S_CH1_LLOORSTAT	BIT	5.F	Loadcell input module Channel 1 low low status
Input	XBF-LD02S_CH0_GWDATA_L	Word	6	Loadcell input module Channel 0 gross weight data(Lower)
Input	XBF-LD02S_CH0_GWDATA_H	Word	7	Loadcell input module Channel 0 gross weight data(Upper)
Input	XBF-LD02S_CH1_GWDATA_L	Word	8	Loadcell input module Channel 1 gross weight data(Lower)
Input	XBF-LD02S_CH1_GWDATA_H	Word	9	Loadcell input module Channel 1 gross weight data(Upper)
Input	XBF-LD02S_CH0_TAREDATA_L	Word	10	Loadcell input module Channel 0 tare weight data(Lower)
Input	XBF-LD02S_CH0_TAREDATA_H	Word	11	Loadcell input module Channel 0 tare weight data(Upper)

Input	XBF-LD02S_CH1_TAREDATA_L	Word	12	Loadcell input module Channel 1 tare weight data(Lower)
Input	XBF-LD02S_CH1_TAREDATA_H	Word	13	Loadcell input module Channel 1 tare weight data(Upper)
Input	XBF-LD02S_CH0_NETDATA_L	Word	14	Loadcell input module Channel 0 net weight data(Lower)
Input	XBF-LD02S_CH0_NETDATA_H	Word	15	Loadcell input module Channel 0 net weight data(Upper)
Input	XBF-LD02S_CH1_NETDATA_L	Word	16	Loadcell input module Channel 1 net weight data(Lower)
Input	XBF-LD02S_CH1_NETDATA_H	Word	17	Loadcell input module Channel 1 net weight data(Upper)
Input	XBF-LD02S_CH0_GWMAX_L	Word	18	Loadcell input module Channel 0 gross weight max. data(Lower)
Input	XBF-LD02S_CH0_GWMAX_H	Word	19	Loadcell input module Channel 0 gross weight max. data(Upper)
Input	XBF-LD02S_CH0_GWMIN_L	Word	20	Loadcell input module Channel 0 gross weight Min. data(Lower)
Input	XBF-LD02S_CH0_GWMIN_H	Word	21	Loadcell input module Channel 0 gross weight Min. data(Upper)
Input	XBF-LD02S_CH1_GWMAX_L	Word	22	Loadcell input module Channel 1 gross weight max. data(Lower)
Input	XBF-LD02S_CH1_GWMAX_H	Word	23	Loadcell input module Channel 1 gross weight max. data(Upper)
Input	XBF-LD02S_CH1_GWMIN_L	Word	24	Loadcell input module Channel 1 gross weight Min. data(Lower)
Input	XBF-LD02S_CH1_GWMIN_H	Word	25	Loadcell input module Channel 1 gross weight Min. data(Upper)
Input	XBF-LD02S_CH0_CUR_FFVAL	Word	26	Loadcell input module Channel 0 free fall data
Input	XBF-LD02S_CH1_CUR_FFVAL	Word	27	Loadcell input module Channel 1 free fall data
Input	XBF-LD02S_ECODE	Word	28	Loadcell input module Error code

## &lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	XBF-LD02S_CH0_CAL1REQ	BIT	0.0	Loadcell input module Channel 0 1 point calibration request
Output	XBF-LD02S_CH1_CAL1REQ	BIT	0.1	Loadcell input module Channel 1 1 point calibration request
Output	XBF-LD02S_CH0_CAL2REQ	BIT	0.2	Loadcell input module Channel 0 2 point calibration request
Output	XBF-LD02S_CH1_CAL2REQ	BIT	0.3	Loadcell input module Channel 1 2 point calibration request
Output	XBF-LD02S_CH0_EQUCALREQ	BIT	0.4	Loadcell input module Channel 0 equivalent calibration request
Output	XBF-LD02S_CH1_EQUCALREQ	BIT	0.5	Loadcell input module Channel 1 equivalent calibration request
Output	XBF-LD02S_CH0_ZCALREQ	BIT	1.0	Loadcell input module Channel 0 zero calibration request
Output	XBF-LD02S_CH1_ZCALREQ	BIT	1.1	Loadcell input module Channel 1 zero calibration request
Output	XBF-LD02S_CH0_SCALREQ	BIT	1.2	Loadcell input module Channel 0 span calibration request

Output	XBF-LD02S_CH1_SCALREQ	BIT	1.3	Loadcell input module Channel 1 span calibration request
Output	XBF-LD02S_CH0_CALSTORE	BIT	1.4	Loadcell input module Channel 0 save request
Output	XBF-LD02S_CH1_CALSTORE	BIT	1.5	Loadcell input module Channel 1 save request
Output	XBF-LD02S_CH0_ZSETREQ	BIT	2.0	Loadcell input module Channel 0 zero setting request
Output	XBF-LD02S_CH1_ZSETREQ	BIT	2.1	Loadcell input module Channel 1 zero setting request
Output	XBF-LD02S_CH0_ZRSTREQ	BIT	2.2	Loadcell input module Channel 0 zero reset request
Output	XBF-LD02S_CH1_ZRSTREQ	BIT	2.3	Loadcell input module Channel 1 zero reset request
Output	XBF-LD02S_CH0_TAREREQ	BIT	2.4	Loadcell input module Channel 0 tare setting
Output	XBF-LD02S_CH1_TAREREQ	BIT	2.5	Loadcell input module Channel 1 tare setting
Output	XBF-LD02S_CH0_HOLDREQ	BIT	2.6	Loadcell input module Channel 0 output hold request
Output	XBF-LD02S_CH1_HOLDREQ	BIT	2.7	Loadcell input module Channel 1 output hold request
Output	XBF-LD02S_CH0_MAXMINREQ	BIT	2.8	Loadcell input module Channel 0 Min./Max. hold request
Output	XBF-LD02S_CH1_MAXMINREQ	BIT	2.9	Loadcell input module Channel 1 Min./Max. hold request
Output	XBF-LD02S_CH0_SEQREQ	BIT	2.A	Loadcell input module Channel 0 sequential control request
Output	XBF-LD02S_CH1_SEQREQ	BIT	2.B	Loadcell input module Channel 1 sequential control request
Output	XBF-LD02S_CH0_TARERSTREQ	BIT	2.C	Loadcell input module Channel 0 tare release request
Output	XBF-LD02S_CH1_TARERSTREQ	BIT	2.D	Loadcell input module Channel 1 tare release request

### A.3.3 GEL-xxxx

#### (1) GEL-AV8C

##### 1) Refresh data

<Input>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	GEL-AV8C_ERR	BIT	0.0	Analog input module: Module error
Input	GEL-AV8C_RDY	BIT	0.F	Analog input module: Module ready
Input	GEL-AV8C_CH0_ACT	BIT	1.0	Analog input module: CH0 RUN
Input	GEL-AV8C_CH1_ACT	BIT	1.1	Analog input module: CH1 RUN
Input	GEL-AV8C_CH2_ACT	BIT	1.2	Analog input module: CH2 RUN
Input	GEL-AV8C_CH3_ACT	BIT	1.3	Analog input module: CH3 RUN
Input	GEL-AV8C_CH4_ACT	BIT	1.4	Analog input module: CH4 RUN
Input	GEL-AV8C_CH5_ACT	BIT	1.5	Analog input module: CH5 RUN
Input	GEL-AV8C_CH6_ACT	BIT	1.6	Analog input module: CH6 RUN
Input	GEL-AV8C_CH7_ACT	BIT	1.7	Analog input module: CH7 RUN
Input	GEL-AV8C_CH0_DATA	Word	2	Analog input module: CH0 conversion value
Input	GEL-AV8C_CH1_DATA	Word	3	Analog input module: CH1 conversion value
Input	GEL-AV8C_CH2_DATA	Word	4	Analog input module: CH2 conversion value
Input	GEL-AV8C_CH3_DATA	Word	5	Analog input module: CH3 conversion value
Input	GEL-AV8C_CH4_DATA	Word	6	Analog input module: CH4 conversion value
Input	GEL-AV8C_CH5_DATA	Word	7	Analog input module: CH5 conversion value
Input	GEL-AV8C_CH6_DATA	Word	8	Analog input module: CH6 conversion value
Input	GEL-AV8C_CH7_DATA	Word	9	Analog input module: CH7 conversion value
Input	GEL-AV8C_CH0_IDD	BIT	10.0	Analog input module: CH0 input disconnection detection
Input	GEL-AV8C_CH1_IDD	BIT	10.1	Analog input module: CH1 input disconnection detection
Input	GEL-AV8C_CH2_IDD	BIT	10.2	Analog input module: CH2 input disconnection detection

Input	GEL-AV8C_CH3_IDD	BIT	10.3	Analog input module: CH3 input disconnection detection
Input	GEL-AV8C_CH4_IDD	BIT	10.4	Analog input module: CH4 input disconnection detection
Input	GEL-AV8C_CH5_IDD	BIT	10.5	Analog input module: CH5 input disconnection detection
Input	GEL-AV8C_CH6_IDD	BIT	10.6	Analog input module: CH6 input disconnection detection
Input	GEL-AV8C_CH7_IDD	BIT	10.7	Analog input module: CH7 input disconnection detection
Input	GEL-AV8C_CH0_HOOR	BIT	11.0	Analog input module: Channel 0 alarm upper limit
Input	GEL-AV8C_CH1_HOOR	BIT	11.1	Analog input module: Channel 1 alarm upper limit
Input	GEL-AV8C_CH2_HOOR	BIT	11.2	Analog input module: Channel 2 alarm upper limit
Input	GEL-AV8C_CH3_HOOR	BIT	11.3	Analog input module: Channel 3 alarm upper limit
Input	GEL-AV8C_CH4_HOOR	BIT	11.4	Analog input module: Channel 4 alarm upper limit
Input	GEL-AV8C_CH5_HOOR	BIT	11.5	Analog input module: Channel 5 alarm upper limit
Input	GEL-AV8C_CH6_HOOR	BIT	11.6	Analog input module: Channel 6 alarm upper limit
Input	GEL-AV8C_CH7_HOOR	BIT	11.7	Analog input module: Channel 7 alarm upper limit
Input	GEL-AV8C_CH0_LOOR	BIT	12.0	Analog input module: Channel 0 alarm lower limit
Input	GEL-AV8C_CH1_LOOR	BIT	12.1	Analog input module: Channel 1 alarm lower limit
Input	GEL-AV8C_CH2_LOOR	BIT	12.2	Analog input module: Channel 2 alarm lower limit
Input	GEL-AV8C_CH3_LOOR	BIT	12.3	Analog input module: Channel 3 alarm lower limit
Input	GEL-AV8C_CH4_LOOR	BIT	12.4	Analog input module: Channel 4 alarm lower limit
Input	GEL-AV8C_CH5_LOOR	BIT	12.5	Analog input module: Channel 5 alarm lower limit
Input	GEL-AV8C_CH6_LOOR	BIT	12.6	Analog input module: Channel 6 alarm lower limit
Input	GEL-AV8C_CH7_LOOR	BIT	12.7	Analog input module: Channel 7 alarm lower limit

&lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	GEL-AV8C_ERR_CLR	BIT	0.0	Analog input module: Error clear request

## (2) GEL-DV8C

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	GEL-AC8C_ERR	BIT	0.0	Analog input module: Module error
Input	GEL-AC8C_RDY	BIT	0.F	Analog input module: Module ready
Input	GEL-AC8C_CH0_ACT	BIT	1.0	Analog input module: CH0 RUN
Input	GEL-AC8C_CH1_ACT	BIT	1.1	Analog input module: CH1 RUN
Input	GEL-AC8C_CH2_ACT	BIT	1.2	Analog input module: CH2 RUN
Input	GEL-AC8C_CH3_ACT	BIT	1.3	Analog input module: CH3 RUN
Input	GEL-AC8C_CH4_ACT	BIT	1.4	Analog input module: CH4 RUN
Input	GEL-AC8C_CH5_ACT	BIT	1.5	Analog input module: CH5 RUN
Input	GEL-AC8C_CH6_ACT	BIT	1.6	Analog input module: CH6 RUN
Input	GEL-AC8C_CH7_ACT	BIT	1.7	Analog input module: CH7 RUN
Input	GEL-AC8C_CH0_DATA	Word	2	Analog input module: CH0 conversion value
Input	GEL-AC8C_CH1_DATA	Word	3	Analog input module: CH1 conversion value
Input	GEL-AC8C_CH2_DATA	Word	4	Analog input module: CH2 conversion value
Input	GEL-AC8C_CH3_DATA	Word	5	Analog input module: CH3 conversion value

## Appendix

Input	GEL-AC8C_CH4_DATA	Word	6	Analog input module: CH4 conversion value
Input	GEL-AC8C_CH5_DATA	Word	7	Analog input module: CH5 conversion value
Input	GEL-AC8C_CH6_DATA	Word	8	Analog input module: CH6 conversion value
Input	GEL-AC8C_CH7_DATA	Word	9	Analog input module: CH7 conversion value
Input	GEL-AC8C_CH0_IDD	BIT	10.0	Analog input module: CH0 input disconnection detection
Input	GEL-AC8C_CH1_IDD	BIT	10.1	Analog input module: CH1 input disconnection detection
Input	GEL-AC8C_CH2_IDD	BIT	10.2	Analog input module: CH2 input disconnection detection
Input	GEL-AC8C_CH3_IDD	BIT	10.3	Analog input module: CH3 input disconnection detection
Input	GEL-AC8C_CH4_IDD	BIT	10.4	Analog input module: CH4 input disconnection detection
Input	GEL-AC8C_CH5_IDD	BIT	10.5	Analog input module: CH5 input disconnection detection
Input	GEL-AC8C_CH6_IDD	BIT	10.6	Analog input module: CH6 input disconnection detection
Input	GEL-AC8C_CH7_IDD	BIT	10.7	Analog input module: CH7 input disconnection detection
Input	GEL-AC8C_CH0_HOOR	BIT	11.0	Analog input module: Channel 0 alarm upper limit
Input	GEL-AC8C_CH1_HOOR	BIT	11.1	Analog input module: Channel 1 alarm upper limit
Input	GEL-AC8C_CH2_HOOR	BIT	11.2	Analog input module: Channel 2 alarm upper limit
Input	GEL-AC8C_CH3_HOOR	BIT	11.3	Analog input module: Channel 3 alarm upper limit
Input	GEL-AC8C_CH4_HOOR	BIT	11.4	Analog input module: Channel 4 alarm upper limit
Input	GEL-AC8C_CH5_HOOR	BIT	11.5	Analog input module: Channel 5 alarm upper limit
Input	GEL-AC8C_CH6_HOOR	BIT	11.6	Analog input module: Channel 6 alarm upper limit
Input	GEL-AC8C_CH7_HOOR	BIT	11.7	Analog input module: Channel 7 alarm upper limit
Input	GEL-AC8C_CH0_LOOR	BIT	12.0	Analog input module: Channel 0 alarm lower limit
Input	GEL-AC8C_CH1_LOOR	BIT	12.1	Analog input module: Channel 1 alarm lower limit
Input	GEL-AC8C_CH2_LOOR	BIT	12.2	Analog input module: Channel 2 alarm lower limit
Input	GEL-AC8C_CH3_LOOR	BIT	12.3	Analog input module: Channel 3 alarm lower limit
Input	GEL-AC8C_CH4_LOOR	BIT	12.4	Analog input module: Channel 4 alarm lower limit
Input	GEL-AC8C_CH5_LOOR	BIT	12.5	Analog input module: Channel 5 alarm lower limit
Input	GEL-AC8C_CH6_LOOR	BIT	12.6	Analog input module: Channel 6 alarm lower limit
Input	GEL-AC8C_CH7_LOOR	BIT	12.7	Analog input module: Channel 7 alarm lower limit

<Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	GEL-AC8C_ERR_CLR	BIT	0.0	Analog input module: Error clear request

## (3) GEL-DV4C

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	GEL-DV4C_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	GEL-DV4C_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	GEL-DV4C_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error
Input	GEL-DV4C_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	GEL-DV4C_RDY	BIT	0.F	Analog output module: Module ready
Input	GEL-DV4C_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	GEL-DV4C_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN
Input	GEL-DV4C_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	GEL-DV4C_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN

&lt;Output&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	GEL-DV4C_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	GEL-DV4C_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	GEL-DV4C_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	GEL-DV4C_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting
Output	GEL-DV4C_CH0_DATA	Word	1	Analog Output module: Channel 0 Input value
Output	GEL-DV4C_CH1_DATA	Word	2	Analog Output module: Channel 1 Input value
Output	GEL-DV4C_CH2_DATA	Word	3	Analog Output module: Channel 2 Input value
Output	GEL-DV4C_CH3_DATA	Word	4	Analog Output module: Channel 3 Input value
Output		WORD	5	Reserved
Output		WORD	6	Reserved
Output		WORD	7	Reserved
Output		WORD	8	Reserved
Output		WORD	9	Reserved

## (4) GEL-DC4C

## 1) Refresh data

&lt;Input&gt;

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Input	GEL-DC4C_CH0_ERR	BIT	0.0	Analog Output module: Channel 0 error
Input	GEL-DC4C_CH1_ERR	BIT	0.1	Analog Output module: Channel 1 error
Input	GEL-DC4C_CH2_ERR	BIT	0.2	Analog Output module: Channel 2 error
Input	GEL-DC4C_CH3_ERR	BIT	0.3	Analog Output module: Channel 3 error
Input	GEL-DC4C_RDY	BIT	0.F	Analog output module: Module ready
Input	GEL-DC4C_CH0_ACT	BIT	1.0	Analog Output module: CH0 RUN
Input	GEL-DC4C_CH1_ACT	BIT	1.1	Analog Output module: CH1 RUN

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Input	GEL-DC4C_CH2_ACT	BIT	1.2	Analog Output module: CH2 RUN
Input	GEL-DC4C_CH3_ACT	BIT	1.3	Analog Output module: CH3 RUN

### <Output>

Input/Output	Variable	Type	Word(16BIT) Offset	Comment
Output	GEL-DC4C_CH0_OUTEN	BIT	0.0	Analog Output module: Channel 0 output status setting
Output	GEL-DC4C_CH1_OUTEN	BIT	0.1	Analog Output module: Channel 1 output status setting
Output	GEL-DC4C_CH2_OUTEN	BIT	0.2	Analog Output module: Channel 2 output status setting
Output	GEL-DC4C_CH3_OUTEN	BIT	0.3	Analog Output module: Channel 3 output status setting
Output	GEL-DC4C_CH0_DATA	Word	1	Analog Output module: Channel 0 Input value
Output	GEL-DC4C_CH1_DATA	Word	2	Analog Output module: Channel 1 Input value
Output	GEL-DC4C_CH2_DATA	Word	3	Analog Output module: Channel 2 Input value
Output	GEL-DC4C_CH3_DATA	Word	4	Analog Output module: Channel 3 Input value
Output	-	WORD	5	Reserved
Output	-	WORD	6	Reserved
Output	-	WORD	7	Reserved
Output	-	WORD	8	Reserved
Output	-	WORD	9	Reserved



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