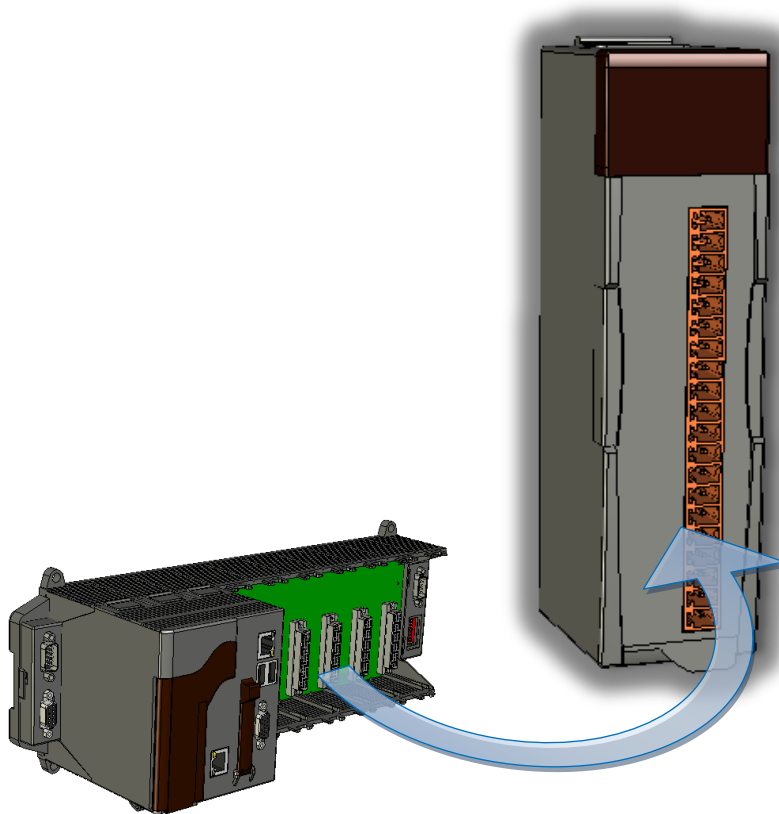


I-8024W

API Reference Manual

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Service and usage information for XP-8000 series



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Important Notices

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1. PAC_I8024W_INITIAL

This function initializes the module I-8024W in the specified slot. You must implement this function once before you try to use the other I-8024W functions.

Syntax

```
short pac_i8024W_Initial (  
    int slot  
);
```

Parameter

slot [in]:

Specifies the slot of XP-8000 in which the I-8024 plugged (Range: 1 to 7).

Return Values

None

Examples

[C++]

```
int slot = 1;  
pac_i8024W_Initial (slot);  
//The I-8024W is initialized in the slot 1.  
//Please plugs the I-8024W card into the slot 1 before initialization.
```

[C#]

```
int slot = 1;  
pac_i8024W_Initial (slot);
```

2. PAC_I8024W_VOLTAGEOUT

This function makes I-8024W modules to output the voltage of specified floating-point value in the specified channel and slot in the XP-8000 system.

Syntax

```
void pac_i8024W_VoltageOut (  
    int slot,  
    int ch,  
    float data  
);
```

Parameter

slot [in]

Specifies the slot of XP-8000 in which the I-8024W plugged (Range: 1 to 7).

ch [in]

Specifies the channel from which I-8024W outputs (Range: 0 to 3).

data [in]

Specifies the analog output value (Voltage range: -10 ~ +10V).

Return Values

None

Examples

[C++]

```
int slot = 1, ch = 0;  
float data = 3.0f;  
pac_i8024W_VoltageOut (slot, ch, data);  
//The I-8024W module outputs 3.0V voltage from the channel 0.
```

[C#]

```
int slot = 1, ch = 0;  
float data = 3.0f;  
pac_i8024W_VoltageOut (slot, ch, data);
```

3. PAC_I8024W_CURRENTOUT

This function makes I-8024W modules to output the current of specified floating-point value in the specified channel and slot in the XP-8000 system.

Syntax

```
void pac_i8024W_CurrentOut (  
    int slot,  
    int ch,  
    float data  
);
```

Parameter

slot [in]

Specifies the slot of XP-8000 in which the I-8024 plugged (Range: 1 to 7).

ch [in]

Specifies the channel from which I-8024W outputs (Range: 0 to 3).

data [in]

Specifies the analog output value (Current range: 0 ~ + 20 mA).

Return Values

None

Examples

[C++]

```
int slot = 1, ch = 0;  
float data= 10.0f;  
pac_i8024W_CurrentOut (slot, ch, data);  
//Output 10.0mA current from the channel 0 of I-8024W module.
```

[C#]

```
int slot = 1, ch = 0;  
float data = 10.0f;  
pac_i8024W_CurrentOut (slot, ch, data);
```


4. PAC_I8024W_VOLTAGEOUT_HEX

This function makes I-8024W modules to output the specified voltage value in HEX format in the specified channel and slot in the XP-8000 system.

Syntax

```
void pac_i8024W_VoltageOut_Hex (  
    int slot,  
    int ch,  
    int data  
);
```

Parameter

slot [in]

Specifies the slot of XP-8000 in which the I-8024 plugged (Range: 1 to 7).

ch [in]

Specifies the channel from which I-8024W outputs (Range: 0 to 3).

data [in]

Specifies analog output data with hexadecimal value(Voltage range: 8000h ~ 7FFFh, that is -32768 ~ +32767, linearly maps to the range of voltage output: -10 ~ +10 V).

Return Values

None

Examples

[C++]

```
int slot = 1, ch = 0, data = 0x3FFF;  
pac_i8024W_VoltageOut_Hex (slot, ch, data);  
//The I-8024W module outputs the 5.0V voltage from the channel 0.
```

[C#]

```
int slot = 1, ch = 0; data = 0x3FFF;  
pac_i8024W_VoltageOut_Hex (slot, ch, data);
```

5. PAC_I8024W_CURRENTOUT_HEX

This function makes I-8024W modules to output the specified current value in HEX format in the specified channel and slot in the XP-8000 system.

Syntax

```
void pac_i8024W_CurrentOut_Hex (  
    int slot,  
    int ch,  
    int data  
);
```

Parameter

slot [in]

Specifies the slot of XP-8000 in which the I-8024 plugged (Range: 1 to 7).

ch [in]

Specifies the channel from which I-8024W outputs (Range: 0 to 3).

data [in]

Specifies analog output data with hexadecimal value (Current range: 0h ~ 7FFFh, that is 0 ~ +32767, linearly maps to the range of current output: 0. ~ +20.mA).

Return Values

None

Examples

[C++]

```
int slot = 1, ch = 0; data = 0x3FFF;  
pac_i8024W_CurrentOut_Hex (slot, ch, data);  
//Output the 10.0mA current from the channel 0 of I-8024W module.
```

[C#]

```
int slot = 1, ch = 0; data = 0x3FFF;  
pac_i8024W_CurrentOut_Hex (slot, ch, data);
```