# AsIOAccRead()

This function block can be used to read non-cyclic registers (inputs **ONLY**).

When the function block is called from a cyclic task, it is executed asynchronously, the *status* output continues to return the value ERR\_FUB\_BUSY until the function block has finished being processed. During the execution, the function block should be called cyclically with *enable*=TRUE. Canceling the function block during this execution is not possible.

This function block can only be used conditionally for **redundancy**. The applicable limitations are described in the following sections:

<u>Hidden pointer usage</u>
<u>Asynchronous execution</u>
Special error code on the inactive CPU

Additional information can be found in the "Redundancy" section.

#### **Parameters**

I/O	Parameter	Data type	Description
IN	enable	BOOL	Enables the function block
IN	<u>pDeviceName</u>	UDINT (given as a pointer to STRING)	Pointer to the device name <sup>1</sup>
IN	<u>pChannelName</u>	UDINT (given as a pointer to STRING)	Pointer to the channel name <sup>1</sup>
OUT	Status	UINT	Error number (0 = no error)
OUT	value	UDINT	Read value

<sup>1)</sup> Do not change pointer or content of string while status is ERR\_FUB\_BUSY.

### **Call syntax (Automation Basic)**

AsIOAccRead (enable, adr(DeviceName), adr(ChannelName), status, value)

### **DeviceName parameter**

The address of a string which clearly defines the I/O module used is entered for this input.

#### Format of the string:

[SL < x >].[SS < x >] .... For local I/O modules

[SL<x>].[SS<x>].[IF<x>].[ST<x>].[SL<x>].[SS<x>] .... for expansion, CAN, POWERLINK and X2X I/O modules

- 1. Description of the individual parameters for the device string
  - SL ... Slot number <x>. Possible slot numbers range from 0 (CPU slot) to 15 (final system bus slot).
  - **SS** ... If the interface module is inserted in an insert slot or subslot, the subslot number must be given (<x> = 1, 2 or 3).
  - **IF** ... Interface number <x>.
  - **ST** ... Station number <x> of the slave.
- 2. A period "." is used as the argument **separator**.
- 3. **Examples** of valid device descriptions:

DeviceName	Description
"SL3"	Local I/O module in slot 3
"SL3.SS1"	Local I/O module in slot 3, subslot 1
"SS1.ST5.SL1"	Interface card inserted in subslot 1 CAN or POWERLINK I/O module; station 5, slot 1
"SS2.ST4"	Interface card inserted in subslot 2 X2X I/O module; station 4

## ChannelName parameter

• The ChannelName parameter is derived from the I/O mapping or I/O configuration. The "logical name" is used as the ChannelName.

Examples of the ChannelName parameter:

ChannelName (logical name)	Description	
"AsyncBusyErrorCount"	Number of faulty asynchronous frames	
"AsyncFormatErrorCount"	Number of destroyed asynchronous frames	

• It is also possible to directly specify a register number of the X2X I/O module in hexadecimal or decimal format. The default length and maximum length of a read access is 4 bytes. The length of a read access can be limited by specifying an IEC 61131 data type. This data type specification is separated from the register number specification by a colon (":").

Examples with the default length of 4 bytes: "0x44e" "1102"

Examples for limiting the length: "0x44e:BYTE" "1102:UINT"