

SuperOPC

OPC Server for Super-IO Programmable Controllers

Copyright © 1999 – 2003, VITAL Systems, Inc.

SuperOPC server provide OPC compliant data to MMI/HMI packages. SuperOPC is custom built for Super-IO programmable controllers, providing I/O and internal data to any client application that supports OPC. SuperOPC is virtually plug-and-play with built in tags that enable software HMI packages to show controller information without any configuration needed.

Features

- OPC 2.0 Spec Compliant
- Read Input and Output states
- One Read Control-Word Register (CW:9) for user defined states from controller.
- User defined message transmit to any Controller
- No Configuration required
- Works transparently with VSI's PCI DeviceNET adapters.
- Access up to eight DeviceNET channels.

System Requirements

The SuperOPC Server works with the [PCI7202B](#) DeviceNET interface adapter. Before installing the SuperOPC server, please install the CIS Server. SuperOPC access the devices using the CIS Server. To install the CIS Server, you will need the file [SetupCIS.exe](#). To install the SuperOPC server, you will need [SetupOPC.exe](#). These files are available at www.Vitalsystem.com. Pentium III or higher machine is recommended.

Data Format

SuperOPC server is accessed by OPC clients (HMI/MMI packages) using the following name:

Server Name: SuperIO.OPC

OPC Tags

OPC Tags are made of access-path and item name. Not all items require access path.

AccessPath

The format of access-path is as follows:

NxDzz

x is the channel number.

zz is the MAC ID.

Valid Range: 0..7

Valid Range: 00..63 (must be 2 digits)

Item Names

Following is the list of items available to the client applications. In most cases data returned is 1 or 0 and is **READ ONLY**.

<u>Item Name</u>	<u>Description</u>
-------------------------	---------------------------

IS1	Input 1
IS2	Input 2
IS3	Input 3
IS4	Input 4
IS5	Input 5
IS6	Input 6
IS7	Input 7
IS8	Input 8

OS1	Output 1
OS2	Output 2
OS3	Output 3
OS4	Output 4
OS5	Output 5
OS6	Output 6
OS7	Output 7
OS8	Output 8

PROGRAM_MODE

Controller is in Program Mode

PACKAGE_ARRIVING

A package is available to the controller

PACKAGE_EXITING

A package is exiting the controller

DOWNSTREAM_READY

Downstream controller is ready to receive package

READY_TO_UPSTREAM

Controller is ready for packages from upstream

PLC_DEVICE

The controller is a programmable logic controller

ONLINE

The controller is active and sending data on the network

CW:9Read Only data at Control Word File Index 9. 16 bits.
0..32767**CW:9.0 - CW:9.15** CW:9 data bits

- CW:25 Byte 1 for Message Transmit. Access-path must be blank for this item. Valid Range 0...255. READ / WRITE Access.
- CW:26 Byte 2 for Message Transmit. Access-path must be blank for this item. Valid Range 0...255. READ / WRITE Access.
- CW:27 Byte 3 for Message Transmit. Access-path must be blank for this item. Valid Range 0...255. READ / WRITE Access.
- CW:28 Byte 4 for Message Transmit. Access-path must be blank for this item. Valid Range 0...255. READ / WRITE Access.
- CW:29 Byte 5 for Message Transmit. Access-path must be blank for this item. Valid Range 0...255. READ / WRITE Access.
- CW:30 Byte 6 for Message Transmit. Access-path must be blank for this item. Valid Range 0...255. READ / WRITE Access.

TRANSMIT_DATA Writing a non zero number to this item will transmit one message to the controller pointed by the access-path associated with this item.

The Accesspath and Item name can also be combined in case the OPC client does not support the use of Accesspath. The following format is used

Accesspath|Item e.g. N0D32|OS1, N2D10|CW:9

Examples

1. Access-path N0.D55 refers to MAC id 55 connected at channel 0.
2. CW:9.0 bit can be assigned to indicate malfunction state.
3. CW:9.3 bit may indicate lane full condition
4. A message transmit, using TRANSMIT_DATA item, to N0.D55 command the controller to start the shuttle countdown.

For further information, please contact tech-support at Vital Systems Inc.

Contact Info

info@vitalsystem.com
support@vitalsystem.com

Ph 623-434-6621
Fax 623-321-1343

Vital Systems Inc.
21640 N. 19th Ave Suite C6
Phoenix AZ 85027 USA