



MVI56E-MCM

ControlLogix[®] Platform

Modbus Communication Module

MCMPortErrors

This object stores the port statistics for an MVI56E-MCM port.

Name	Data Type	Description
CmdReq	INT	Total number of command list requests sent
CmdResp	INT	Total number of command list responses received
CmdErr	INT	Total number of command list errors
Requests	INT	Total number of requests for port
Responses	INT	Total number of responses for port
ErrSent	INT	Total number of errors sent
ErrRec	INT	Total number of errors received

MCMBlkStat

This object stores the block transfer statistics for the module.

Name	Data Type	Description
Read	INT	Total number of read block transfers
Write	INT	Total number of write block transfers
Parse	INT	Total number of blocks parsed
Event	INT	Total number of event blocks received
Cmd	INT	Total number of command blocks received
Err	INT	Total number of block transfer errors

6.7.5 MCMCONTROL

This object contains the attributes to define a Master command. An array of these objects is used for each port.

Name	Data Type	Description
WarmBoot	BOOL	Warm Boot
ColdBoot	BOOL	Cold Boot
SlaveControl	MCMSlaveControl (page 168)	Allows the control of slave parameters.
CmdControl	MCMCmdControl (page 168)	Allows for a disabled command to be sent to a device (Master).
EventCmd	MCMEventCmd (page 168)	Allows a command defined in ladder to be sent to a device (Master).
SlavePollStat	MCMSlavePollStat (page 169)	Request slave poll status for the port (Master).
Passthru	MCMPassthru (page 169)	Contains PassThru objects required when PortX.Type is set to a value between 2 to 4.

SlaveControl

Name	Data Type	Description
TriggerSlaveControl	BOOL	Trigger to Enable or Disable Slaves
PortNumber	INT	Slave Address
NumberOfSlaves	INT	Number of Slaves
BlockNumber	INT	Block ID number
SlaveIndexes	INT[200]	Slave Indexes
NumberOfSlavesProcessed	INT	Number of Slaves processed
EnableSlaves	BOOL	Set 0 to Disable or 1 to Enable Slaves

CmdControl

Name	Data Type	Description
TriggerCmdCntrl	BOOL	Trigger command control. User application will activate this trigger
NumberOfCommands	INT	Number of commands per block (1 to 6)
PortNumber	INT	MVI56-MCM Port Number of master port (1 or 2)
CommandIndex	INT[6]	Stores the command indexes for command control
CmndsAddedToQueue	INT	Number of commands added to queue
CmdControlBlockID	INT	Temporary variable to calculate control block ID
CmdCntrlPending	BOOL	Auxiliary control command - prevents a second request before acknowledgment is received

EventCmd

Name	Data Type	Description
EventCmdTrigger	BOOL	Trigger for event command. User ladder must set this bit to initiate event command
EventCmdPending	BOOL	Set after the ladder has sent an event cmd to the module and is waiting for the status to be returned
PortNumber	INT	Module master port number associated to this request (1 or 2)
SlaveAddress	INT	Modbus slave node address
InternalDBAddress	INT	Internal database address
PointCount	INT	Number of points for this command
SwapCode	INT	Swap code (0= no swap, 1=swap words, 2=swap words and bytes, 3=swap bytes)
ModbusFunctionCode	INT	Modbus function code
DeviceDBAddress	INT	Modbus register address within slave
EventCmdStatusReturned	INT	(0=Fail, 1=Success)
EventBlockID	INT	Temporary variable to calculate event block ID

SlavePollStat

This object contains all of the Slave Polling status (when the port is used as a Master).

Tag Name	Data Type	Description
Port1Slave0Read	BOOL	
Port1Slave128Read	BOOL	
Port2Slave0Read	BOOL	
Port2Slave128Read	BOOL	
P1Slaves	INT[256]	P1 Slave Status
P2Slaves	INT[256]	P2 Slave Status

Passthru

Tag Name	Data Type	Description
MBOffset	INT	
MBOffsetBit	INT	
MBMsgLen	INT	
MBMsg	SINT[500]	
MBControl1	MCMCONTROL (page 167)	
MBControl2	MCMCONTROL (page 167)	
MBScratch	INT[3]	
MBCoil	CoilArray (page 169)	Conversion from Bool to INT data types