

Partner: AVPro Edge  
Models: MXNet  
Device Type: AVPro Edge MXNet



## GENERAL INFORMATION

<b>SIMPLWINDOWS NAME:</b>	AVPro Edge MXNet CommandProcessor v2.0
<b>CATEGORY:</b>	AVPro Edge MXNet
<b>VERSION:</b>	2.0
<b>SUMMARY:</b>	<p>This module works in conjunction with the suite of AVPro Edge MXNet component modules to control input to output routing through an MXNet system. A component module is any module that registers with the command processor module for control and feedback of a particular feature of the switcher. The full suite of modules includes:</p> <ul style="list-style-type: none"><li>• AVPro MXNet CommandProcessor v2.0</li><li>• AVPro MXNet Encoder v2.0</li><li>• AVPro MXNet Decoder v2.0</li><li>• AVPro MXNet SerialPort v2.0</li><li>• AVPro MXNet IRPort v2.0</li><li>• AVPro MXNet CEC v2.0</li><li>• AVPro MXNet DestinationRouter v2.0</li><li>• AVPro MXNet MultiDestinationRouter v2.0</li><li>• AVPro MXNet VW DecoderAssign v2.0</li><li>• AVPro MXNet VW Layout v2.0</li><li>• AVPro MXNet VW LayoutRecall v2.0</li></ul>
<b>GENERAL NOTES:</b>	<p>This module requires one or more instances of the AVPro Edge MXNet component modules listed above to control and get feedback from the connected system.</p> <p>For each encoder and decoder in the system, add an Encoder or Decoder block as appropriate. Most other blocks require the use of these blocks for initialization and control.</p> <p>The module suite will attempt to initialize all components provided in the design. If a device is missing or determined to be offline by the MXNet control box, that endpoint component and all associated control components will be registered as "Offline" and be bypassed for initialization.</p>
<b>CRESTRON HARDWARE REQUIRED:</b>	4-Series processor, 3-Series processor
<b>SETUP OF CRESTRON HARDWARE:</b>	N/A
<b>VENDOR FIRMWARE:</b>	MXNet Control Box v2.28 MXNet Encoder v3.39 MXNet Decoder v4.21
<b>VENDOR SETUP:</b>	N/A

Partner: AVPro Edge  
Models: MXNet  
Device Type: AVPro Edge MXNet



## PARAMETERS:

<b>Command_Processor_ID</b>	The unique identifier of this module that component modules register with.
<b>IP_Address_or_Hostname</b>	The IP address or hostname of the control box to connect to.
<b>Poll_Time</b>	The elapsed time the module will poll for all current states.

Partner: AVPro Edge  
Models: MXNet  
Device Type: AVPro Edge MXNet



## CONTROL:

<b>Connect</b>	D	Pulse or set high to initiate communication with the control box.
<b>Disconnect</b>	D	Pulse to terminate communication with the control box and clear all current state information from the module.
<b>Reinitialize</b>	D	Pulse to cause the command process to reconnect to the control box and refresh all state information.
<b>IP_Address_or_Hostname</b>	S	The IP address or hostname of the control box to connect to.
<b>Debug_Level</b>	A	Integer value specifies the level of messages that appear in the debug window. <ul style="list-style-type: none"> <li>• 1 – Default</li> <li>• 2 – Warning</li> <li>• 3 – Error</li> <li>• 4 – Critical</li> </ul>
<b>Debug_Enable</b>	D	Pulse to toggle debug state between enabled and disabled. While enabled, debug output will be printed to the control processor console.
<b>Passthru_Command</b>	S	Text value specifies a command to be sent directly to the connected control box. Allows for sending commands that may not be supported directly by the module suite. The command format must comply with hardware command protocol.
<b>Send_Passthru_Command</b>	D	Pulse to send the passthru command to the connected control box specified in the <b>Passthru_Command</b> serial input.
<b>Reboot_Controller</b>	D	Pulse to reboot the control box.
<b>Reboot_System</b>	D	Pulse to reboot all encoders and decoders and the control box.
<b>AllScreen_On</b>	D	Pulse to turn on front panel display lights for all encoders and decoders.
<b>AllScreen_Flash</b>	D	Pulse to flash front panel display lights for all encoders and decoders.
<b>AllScreen_Off</b>	D	Pulse to turn off front panel display lights for all encoders and decoders.
<b>ALLOSID_On</b>	D	Pulse to turn on on-screen display for all decoders.
<b>ALLOSID_Off</b>	D	Pulse to turn off on-screen display for all decoders.

Partner: AVPro Edge  
Models: MXNet  
Device Type: AVPro Edge MXNet

**FEEDBACK:**

<b>Is_Communicating</b>	D	Digital high indicates that the module is successfully communicating with the control box specified by the module IP Address parameter, or not communicating when the signal is low.
<b>Is_Initialized</b>	D	Digital high indicates the module has synchronized all state information from the control box and completed initialization, or not synchronized when the signal is low.
<b>Offline_Count_Fb</b>	A	Integer value specifying the number of components that have been marked "offline" to be bypassed for initialization.
<b>IP_Address_or_Hostname_Fb</b>	S	Text value indicates the current IP address used to connect to the control box.

Partner: AVPro Edge  
Models: MXNet  
Device Type: AVPro Edge MXNet



## TESTING:

**OPS USED FOR TESTING:** VC4 v4.0000.00007  
CP4 v2.8001.00086.01  
CP3 v1.8001.0214.01

**SIMPL WINDOWS USED FOR TESTING:** 4.2500.04

**CRES DB USED FOR TESTING:** 219.0500.001.00

**DEVICE DATABASE:** 200.27500.001.00

**SYMBOL LIBRARY USED FOR TESTING:** 1189

**SAMPLE PROGRAM:** AVPro Edge MXNet v2.0 Demo.smw

**REVISION HISTORY:**

- v1.0 – Initial Release
- v1.1 – Fixed SerialPort transmitted and received data.
  - Made updates to allow a Wallplate Encoder to initialize with this suite.
- v1.2 – Isolated serial communication queue to provide device control responsiveness.
  - Corrected unsolicited data parsing impacting hotplug detected and resolution.
- v2.0 – Added “Offline” functionality.
  - Polling will happen more frequently but will only poll for one component’s states at a time. This prevents serial control from getting backed up behind a global system poll.