

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



GENERAL INFORMATION

SIMPLWINDOWS NAME:	AVPro Edge MXNet Encoder v2.0
CATEGORY:	AVPro Edge MXNet
VERSION:	2.0
SUMMARY:	<p>This module works in conjunction with the AVPro MXNet CommandProcessor v2.0 module to control one encoder of an Edge MXNet system. The full suite of AVPro MXNet modules includes:</p> <ul style="list-style-type: none">• AVPro MXNet CommandProcessor v2.0• AVPro MXNet Encoder v2.0• AVPro MXNet Decoder v2.0• AVPro MXNet SerialPort v2.0• AVPro MXNet IRPort v2.0• AVPro MXNet CEC v2.0• AVPro MXNet DestinationRouter v2.0• AVPro MXNet MultiDestinationRouter v2.0• AVPro MXNet VW DecoderAssign v2.0• AVPro MXNet VW Layout v2.0• AVPro MXNet VW LayoutRecall v2.0
GENERAL NOTES:	<p>This module requires one instance of the AVPro MXNet CommandProcessor v2.0 module to register with and one instance of the AVPro MXNet Decoder module v2.0 to handle routing of a single input.</p>
CRESTRON HARDWARE REQUIRED:	4-Series processor, 3-Series processor
SETUP OF CRESTRON HARDWARE:	N/A
VENDOR FIRMWARE:	MXNet Control Box v2.28 MXNet Encoder v3.39 MXNet Decoder v4.21
VENDOR SETUP:	N/A

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PARAMETERS:

Command_Processor_ID	The unique identifier of the command processor module that this module registers with.
MAC_Address_or_Device_ID	The MAC Address or Device ID (Custom Name) of the encoder used to associate this component with.
Matrix_Source_Index	The specific index of this encoder to be used on the Matrix Router module. (Minimum = 1 Maximum = 256)

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CONTROL:

Reboot	D	Pulse to reboot the encoder.
Screen_On	D	Pulse to turn on the encoder display screen.
Screen_Flash	D	Pulse to flash the encoder display screen.
Screen_Off	D	Pulse to turn off the encoder display screen.
Volume_Level_Up	D	Ramp volume up incrementally while signal is high.
Volume_Level_Down	D	Ramp volume down incrementally while signal is high.
Volume_Level	A	Integer value specifies the target volume level to set. Range is 0 to 100.
Volume_Level_Set	D	Pulse to set the target volume specified by the Volume_Level analog signal.
Volume_Mute_On	D	Pulse to set the volume to the lowest possible level.
Volume_Mute_Off	D	Pulse to set the volume to the previous level prior to muting.
Volume_Mute_Toggle	D	Pulse to alternate the volume mute state between on and off.
Audio_Source	A	<p>Integer value specifies the audio source value to use from the defined list.</p> <p>1: HDMI 2: Analog 3: Auto</p> <p><i>10G does not support this.</i></p>
EDID	A	<p>Integer value specifies the EDID value to use from the defined EDID lists.</p> <p><u>1G Devices</u></p> <p>1: 1080P_6CH, 2: 1080P_3D_2CH, 3: 1080P_3D_6CH, 4: 4K30Hz_3D_2CH, 5: 4K30Hz_3D_6CH, 6: 4K30Hz_3D_8CH, 7: 1080P_2CH_HDR, 8: 1080P_6CH_HDR, 9: 1080P_3D_2CH_HDR, 10: 1080P_3D_6CH_HDR,</p>

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11: 4K30Hz_3D_2CH_HDR | 4K60Hz_3D_2CH_HDR.
12: 4K30Hz_3D_6CH_HDR | 4K60Hz_3D_6CH_HDR,
13: 4K30Hz_3D_8CH_HDR | 4K60Hz_3D_8CH_HDR,
14: 1920X1200_2D_2CH_HDR.
15: User_EDID

10G Devices

0: 1080P_2CH,
1: 1080P_6CH,
2: 1080P_3D_2CH,
3: 1080P_3D_6CH,
4: 4K30Hz_3D_2CH,
5: 4K30Hz_3D_6CH,
6: 4K30Hz_3D_8CH,
7: 4K60Hz_3D_2CH,
8: 4K60Hz_3D_6CH,
9: 4K60Hz_3D_8CH,
10: 1080P_2CH_HDR,
11: 1080P_6CH_HDR,
12: 1080P_3D_2CH_HDR,
13: 1080P_3D_6CH_HDR,
14: 4K30Hz_3D_2CH_HDR,
15: 4K30Hz_3D_6CH_HDR,
16: 4K30Hz_3D_8CH_HDR,
17: 4K60Hz_3D_2CH_HDR,
18: 4K60Hz_3D_6CH_HDR,
19: 4K60Hz_3D_8CH_HDR,
20: 1920X1200_3D_2CH_HDR

Hot_Plug_Reset

D Pulse to reset the hot plug on the device.

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FEEDBACK:

Is_Initialized	D	Digital high indicates this encoder block has been initialized with the command processor module.
Is_Online	D	Digital high indicates the encoder is online, or not online when the signal is low.
Screen_On_Fb	D	Digital high indicates the encoder front panel display screen is on, or not on when the signal is low, if applicable.
Screen_Flash_Fb	D	Digital high indicates the encoder front panel display screen is flashing, or not flashing when the signal is low, if applicable.
Screen_Off_Fb	D	Digital high indicates the encoder front panel display screen is off, or not off when the signal is low, if applicable.
Volume_Level_Fb	A	Integer value indicates the current extracted audio volume, if applicable. Range is 0 to 100.
Volume_Mute_On_Fb	D	Digital high indicates the volume level is at the lowest possible value, if applicable.
EDID_Fb	A	Integer value indicates the currently selected EDID. See EDID for list of values.
Hot_Plug_Detect_Fb	D	Digital high indicates the hot plug is detected, or not detected when the signal is low.
Connection_Rating	S	Text value indicates the current connection speed rating.
Resolution_and_Timing	S	Text value indicates the current resolution and FPS. Format example: 3840x2160p/30Hz
Colorspace	S	Text value indicates the current colorspace reported.
Bit_Depth	S	Text value indicates the current bit depth reported.
HDR_Status	S	Text value indicates the current HDR status ON or OFF.
HDCP_Status	S	Text value indicates the current HDCP status ON or OFF.
Audio_Format_Fb	S	Text value indicates the current audio format reported.
Network_Connection_Fb	S	Text value indicates the current network connection reported.
Device_Id_Fb	S	Text value indicating the device meta data for Device ID.
MAC_Address_Fb	S	Text value indicating the device meta data for MAC Address.

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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.