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

GENERAL INFORMATION

SIMPLWINDOWS NAME:	AVPro Edge MXNet Decoder v2.1
CATEGORY:	AVPro Edge MXNet
VERSION:	2.1
SUMMARY:	This module works in conjunction with the AVPro MXNet CommandProcessor v2.1 module to control one decoder of an Edge MXNet system. The full suite of AVPro MXNet modules includes: • AVPro MXNet CommandProcessor v2.1 • AVPro MXNet Encoder v2.1 • AVPro MXNet Decoder v2.1 • AVPro MXNet SerialPort v2.1 • AVPro MXNet IRPort v2.1 • AVPro MXNet CEC v2.1 • AVPro MXNet DestinationRouter v2.1 • AVPro MXNet MultiDestinationRouter v2.1 • AVPro MXNet VW DecoderAssign v2.1 • AVPro MXNet VW Layout v2.1 • AVPro MXNet VW LayoutRecall v2.1 • AVPro MXNet 10G VW LayoutRecall v2.1
GENERAL NOTES:	This module requires one instance of the AVPro MXNet CommandProcessor v2.1 module to register with and one instance of the AVPro MXNet Encoder module v2.1 to handle routing of a single input.
CRESTRON HARDWARE REQUIRED:	4-Series processor, 3-Series processor
SETUP OF CRESTRON HARDWARE:	N/A
VENDOR FIRMWARE:	MXNet 1G Control Box v2.34 MXNet 1G Encoder v3.39 MXNet 1G Decoder v4.21 MXNet 10G Control Box v3.28 MXNet 10G Encoder v1.25 MXNet 10G Decoder v1.25
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 decoder used to associate this component with.
Matrix_Destination_Index	The specific index of this decoder to be used on the Destination Router module. (Minimum = 1 | Maximum = 256)

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CONTROL:

Reboot	D	Pulse to reboot the Decoder.
Screen_On	D	Pulse to turn on the Decoder display screen.
Screen_Flash	D	Pulse to flash the Decoder display screen.
Screen_Off	D	Pulse to turn off the Decoder display screen.
OSD_On	D	Pulse to set the on-screen display on. *10G does not support this.*
OSD_Off	D	Pulse to set the on-screen display off. *10G does not support this.*
Volume_Level_Up	D	Ramp volume up incrementally while signal is high. *1G does not support this.*
Volume_Level_Down	D	Ramp volume down incrementally while signal is high. *1G does not support this.*
Volume_Level	A	Integer value specifies the target volume level to set. Range is 0 to 100. *1G does not support this.*
Volume_Level_Set	D	Pulse to set the target volume specified by the **Volume_Level** analog signal. *1G does not support this.*
Volume_Mute_On	D	Pulse to set the volume to the lowest possible level. *1G does not support this.*
Volume_Mute_Off	D	Pulse to set the volume to the previous level prior to muting. *1G does not support this.*
Volume_Mute_Toggle	D	Pulse to alternate the volume mute state between on and off. *1G does not support this.*
Resolution	A	Analog value specifies the resolution to use from the defined resolution list. Possible values include: 0: passthrough, 1: 720P50, 2: 720P60, 3: 1080P24, 4: 1080P50, 5: 1080P60,

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		6: 4K30, 7: 4K50, 8: 4K60
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 decoder block has been initialized with the command processor module.
Is_Online	D	Digital high indicates the decoder is online, or not online when the signal is low.
Screen_On_Fb	D	Digital high indicates the decoder front panel display screen is on, or not on when the signal is low.
Screen_Flash_Fb	D	Digital high indicates the decoder front panel display screen is flashing, or not flashing when the signal is low.
Screen_Off_Fb	D	Digital high indicates the decoder front panel display screen is off, or not off when the signal is low.
OSD_On_Fb	D	Digital high indicates the on-screen display is on, or not on when the signal is low, if applicable.
OSD_Off_Fb	D	Digital high indicates the on-screen display 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. *1G does not support this.*
Volume_Mute_On_Fb	D	Digital high indicates the volume level is at the lowest possible value, if applicable. *1G does not support this.*
Resolution_Fb	A	Integer value indicates the currently selected resolution value.
VideoWall_Count_Fb	A	Integer value indicates the number of video wall layouts this decoder is included in.
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: 3840x2160, 30.
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.

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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:	200.28000.002.00
SYMBOL LIBRARY USED FOR TESTING:	1191
SAMPLE PROGRAM:	AVPro Edge MXNet v2.1 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. v2.1 – Added volume support for applicable 10G decoders. – Added support for 10G videowall support with “10G VW Layout”

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