**EVMX4X3/EVMX8X6**

**IP/Serial Commands- ASCII**



|  |  |  |  |
| --- | --- | --- | --- |
| **Command(s)** | **Description** | **Command Example** | **Response** |
| PWON. | Power on the system. |   | PWON |
| PWOFF. | Power off the system. |   | PWOFF |
| /\*Name; | Report product name. |   | 4x4 HDBaseT |
| /\*Type; | Report product model. |   | EVMX4X3 |
| /^Version; | Report software version. |   | V1.0.0CPLD:V1.0.0VideoDriverVersion:V1.0.0 |
| %0911. | Reset to factory default. |   | Factory Default |
| /%Lock; | Lock front panel buttons. |   | System Locked! |
| /%Unlock; | Unlock front panel buttons. |   | System UnLock! |
| %9961. | Report the LOCK states of the unit. |   | System Unlock! |
| %9964. | Report the GUI IP. |   | GUI\_IP:192.168.0.178! |
| SetGuiIP:xxx.xxx.xxx.xxx. | Set the GUI IP to xxx.xxx.xxx.xxx. | SetGuiIP:192.168.0.178. | SetGuiIP:192.168.0.178! |
| Baudrate:[X]. | Set the serial baud rate of matrix switcher [x]= 1--2400；2--4800；3--9600；4--19200；5--38400；6--57600；7--115200； | Baudrate:1. | Baudrate9600 |
| IRFVON. | Enable the IR switching to follow the video switching. |   | IR Follow Video ON! |
| IRFVOFF. | Disable the IR switching to follow the video switching. |   | IR Follow Video OFF! |
| PHDBT[x]:ON. | Enable PoC of HDBT outputs for powering HDBaseT receivers,[x]=0-3,0 represents all outputs，1 represents HDBT1… | PHDBT0:ON. | PHDBT 1 2 3Status Y Y Y |
| PHDBT[x]:OFF. | Disable PoC of HDBT outputs for powering HDBaseT receivers,[x]=0-3,0 represents all outputs，1 represents HDBT1… | PHDBT0:OFF. | PHDBT 1 2 3Status N N N |
| [y]B[x]. | Switch video input [Y] to video output [X]. [X]=0~4, [Y]=0~4, the "[X]=0" represents all outputs,1 represents output1... | 1B4. | AV:01->04. |
| [y]R[x]. | Select IR IN of RX for IR OUT.The [Y] represents IR IN of RX,[Y]=0,represents all IR IN,[Y]=1~4,represents 4 IR IN.[X]=1~4 represents 4 IR OUT of the matrix switcher. | 1R3. | IR:01->03. |
| RS232RCM[x]ON. | Enable the RS232 remote-control mode for HDBT output [X] that the matrix switcher can be controlled from remote PC. [X]=0~3.The “[X]=0” represents all HDBT outputs. | RS232RCM0ON. | RS232 Remote 1 2 3Control MCU Y Y Y |
| RS232RCM[x]OFF. | Disable the RS232 remote-control mode for HDBT output [X] that the matrix switcher cannot be controlled from remote PC. [X]=0~3. The “[X]=0” represents all HDBT outputs. | RS232RCM0OFF. | RS232 Remote 1 2 3Control MCU N N N |
| IRRCM[x]ON. | Enable the IR remote-control mode for HDBT output [X] that the matrix switcher can be controlled by the IR remote at the far-end HDBaseT receivers’ position.[X]=0~3. The “[X]=0” represents all HDBT outputs. | IRRCM0ON. | IR Remote 1 2 3 4Control MCU Y Y Y Y |
| IRRCM[x]OFF. | Disable the IR remote-control mode for HDBT output [X] that the matrix switcher cannot be controlled by the IR remote at the far-end HDBaseT receivers’ position.[X]=0~3. The “[X]=0” represents all HDBT outputs. | IRRCM0OFF. | IR Remote 1 2 3 4Control MCU N N N N |
| HDCP[x]ON. | Turn on HDCP of all outputs, The [X]=0 represents all HDBT outputs.[x]=1~4 represents all outputs. | HDCP0ON. | Out 1 2 3 4HDCP Y Y Y Y |
| HDCP[x]OFF. | Turn off HDCP of all outputs, The [X]=0 represents all HDBT outputs.[x]=1~4 represents all outputs. | HDCP0OFF. | Out 1 2 3 4HDCP N N N N |
| HDCP[x]MAT. | The HDCP content of output [X] follows the HDCP version of display device.[X]=0~4. [X]=0, represents all outputs.[X]=1~4, represents output 1~4. | HDCP0MAT. | OUT 01 HDCP MAT Display!OUT 02 HDCP MAT Display!OUT 03 HDCP MAT Display!OUT 04 HDCP MAT Display! |
| HDCP[x]PAS. | Set the HDCP mode of output [X] to Passive.The HDCP content of output [X] automatically follows the HDCP version of source device.[X]=0~4. [X]=0, represents all outputs.[X]=1~4, represents output 1~4. | HDCP0PAS. | OUT 01 HDCP PASSIVE!OUT 02 HDCP PASSIVE!OUT 03 HDCP PASSIVE!OUT 04 HDCP PASSIVE! |
| HDCP[x]BYP.default | Set the HDCP mode of output [X] to Active.If the input video has HDCP content, the HDCP version of HDMI output is HDCP 1.4 for broader video solution. If the input video has no HDCP content, the HDMI output has no HDCP too.[X]=0~4. [X]=0, represents all outputs.[X]=1~4, represents output 1~4. | HDCP0BYP. | OUT 01 HDCP BYPASSS!OUT 02 HDCP BYPASSS!OUT 03 HDCP BYPASSS!OUT 04 HDCP BYPASSS! |
| EDIDMInit. | Reset factory default EDID to all input ports. | EDIDMInit. | EDIDMInit.  |
| EDIDUpgrade[x]. | Upgrade the EDID data of the input port [XX]. [X]=0~4, U. [X]=0, represents all inputs.[X]=1~4, represents HDMI input 1~4.[X]=U, upload a user-defined EDID. The EDID can be saved for invoking at any time.When the command applied, system prompts to upload the EDID file (.bin). Operation will be cancelled in 10 seconds. Please disconnect HDBT connection before sending command to ensure the data can be received successfully. | EDIDUpgrade01. EDIDUpgradeU.  | Please send the EDID file！EDID Upgrade OK! |
| EDID/[x]/[y]. | The input [X] recall the embedded EDID [Y]. [X]=00~04. The 00 represents all inputs.[Y]=01~09. The 01~04 represents build-in EDID, 09 represents user-defined EDID. | EDID/3/1. | Input 03 EDID Upgrade OK By 01 Internal EDID! |
| EDIDG[X]. | Report the EDID data from output [X]. [X]=1~4,represents output 1~4. | EDIDG4. | EDIDOUT04：4B 00 D1 C0 81 80 81 40 95 0F 95 00 B3 00 81 C0 01 01 A3 66 00 A0 F0 70 1F 80 30 20 35 00 0F 28 21 00 00 1A 56 5E 00 A0 A0 A0 29 50 30 20 35 00 0F 28 21 00 00 1E 00 00 00 FC 00 50 48 4C 20 32 34 31 50 36 56 0A 20 20 00 00 00 FD 00 17 50 1E 63 1E 00 0A 20 20 20 20 20 20 01 A8 02 03 2A F1 4F 01 02 03 05 06 07 10 11 12 13 14 15 16 1F 04 23 09 07 07 83 01 00 00 6D 03 0C 00 10 00 39 3C 20 00 60 01 02 03 02 3A 80 D0 72 38 2D 40 10 2C 96 80 0F 28 21 00 00 18 EF 51 00 A0 F0 70 19 80 30 20 35 00 0F 28 21 00 00 1A 04 74 00 30 F2 70 5A 80 B0 58 8A 00 0F 28 21 00 00 1A 7D 39 00 A0 80 38 1F 40 30 20 3A 00 0F 28 21 00 00 1A 00 00 00 00 00 00 00 00 00 00 00 00 00 06 0D 0A  |
| EDIDM[x]B[y]. | Copy the EDID data of output [X] to input [Y].[X]=1~4, [Y]=0~4.[X]=1~4, represents output 1~4,[Y]=0, represents all inputs.[Y]=1~4, represents input 1~4. | EDIDM4B1. | Input 01 EDID Upgrade OK By 04 EXT EDID! |
| /+[Y]/[X]:xxx. | Send the ASCII command “xxx” to control the far-end third-party device.l xxx: ASCII string.l The “[X]=1~3” represents the baud rate of third-party device.[X]=1, the baud rate is 2400[X]=2, the baud rate is 4800[X]=3, the baud rate is 9600[X]=4, the baud rate is 19200[X]=5, the baud rate is 38400[X]=6, the baud rate is 57600[X]=7, the baud rate is 115200l The “[Y]=0” represents all HDBT outputs.l The “[Y]=1~3” represents the HDBT output 1~3. | /+3/1:123456. | 123456 |
| CMDON/+[X]/[y]:xxx. | When power on the matrix switcher, automatically send ASCII command “xxx” to far-end third-party device.l xxx: ASCII string.l The “[X]=1~7” represents the baud rate of third-party device.[X]=1, the baud rate is 2400[X]=2, the baud rate is 4800[X]=3, the baud rate is 9600[X]=4, the baud rate is 19200[X]=5, the baud rate is 38400[X]=6, the baud rate is 57600[X]=7, the baud rate is 115200l The “[Y]=0” represents all HDBT outputs.l The “[Y]=1~3” represents the HDBT output 1~3. | CMDON/+3/1:123456. | HDBT Out 01 CMD\_ON Save Success! |
| CMDOFF/+[X]/[y]:xxx. | When power off the matrix switcher, automatically send ASCII command “xxx” to far-end third-party device.l xxx: ASCII string.l The “[X]=1~3” represents the baud rate of third-party device.[X]=1, the baud rate is 2400[X]=2, the baud rate is 4800[X]=3, the baud rate is 9600[X]=4, the baud rate is 19200[X]=5, the baud rate is 38400[X]=6, the baud rate is 57600[X]=7, the baud rate is 115200l The “[Y]=0” represents all HDBT outputs.l The “[Y]=1~3” represents the HDBT output 1~3. | CMDOFF/+3/1:123456. | HDBT Out 01 CMD\_OFF Save Success! |
| EDIDSTA[x]. | Report the EDID status of input [X]. [X]=0~4.[X]=0, represents all inputs.[X]=1~4, represents HDMI input 1~4.PS:If EDID09 does not defined, it will call build-in EDID06 | EDIDSTA0. | Input 01 EDID From 01 Internal EDID!Input 02 EDID From 01 Internal EDID!Input 03 EDID From 01 Internal EDID!Input 04 EDID From 01 Internal EDID! |
| STA. | Report all system status. | STA. | GUI Or RS232 Query Status:4x4 HDBaseTEXMX4X3V1.0.0PWONPHDBT 1 2 3Status Y Y YSystem UnLock!Baudrate9600GUI\_IP:192.168.0.178!Out 01 02 03 04 In 04 04 04 04Output5V 1 2 3 4 Status Y Y Y YRS232 Remote 1 2 3Control MCU Y Y Y IR Remote 1 2 3 4Control MCU Y Y Y YIR Follow Video ON!IR:01->01!IR:02->02!IR:03->03!IN 1 2 3 4Connect Y N N YOUT 1 2 3 4Connect N Y N N Input 01 EDID From 06 Internal EDID!Input 02 EDID From 06 Internal EDID!Input 03 EDID From 06 Internal EDID!Input 04 EDID From 06 Internal EDID!OUT 01 HDCP BYPASS!OUT 02 HDCP BYPASS!OUT 03 HDCP BYPASS!OUT 04 HDCP BYPASS! |
| STA\_POUT. | Report the on/off status of all outputs.(deteced by 5V signal) |   | Output5V 1 2 3 4Status Y Y Y Y |
| STA\_PHDBT. | Report the PoC status of HDBT outputs. |   | PHDBT 1 2 3Status Y Y Y |
| STA\_RS232RCM. | Report the RS232 remote-control mode status. |   | RS232 Remote 1 2 3Control MCU Y Y Y |
| STA\_IRRCM. | Report the IR remote-control mode status. |   | IR Remote 1 2 3 4Control MCU Y Y Y Y |
| %9971. | Report the connection status of all HDMI input ports. |   | In 1 2 3 4Connect N N N N |
| %9972. | Report the HPD status of HDBT outputs. |   | OUT 1 2 3 4Connect N Y N N  |
| %9975. | Report the connection status of all HDMI and HDBT outputs. |   | Out 01 02 03 04In 04 04 04 04 |
| %9974. | Report the HDCP mode of all outputs. |   | OUT 01 HDCP BYPASS!OUT 02 HDCP BYPASS!OUT 03 HDCP BYPASS!OUT 04 HDCP BYPASS! |
| STA\_IR. | Report IR switching status. |   | IR Follow Video ON!IR:01->01!IR:02->02!IR:03->03! |
| Sta[x]. | Report the preset [X]. [X]=1~9. | Sta1. | Preset 01 Sta:Out 01 In 01!Out 02 In 01!Out 03 In 01!Out 04 In 01! |
| Save[x]. | Store the current switching status to present [X]. X=1~9. | Save1. | Save To F1 |
| Recall[x]. | Recall present [X]. [X]=1~9. | Recall2. | Recall From F2AV:01->01.IR:01->01.AV:02->02.IR:02->02.AV:03->03.IR:03->03.AV:04->04.  |
| @OUT[xx]. | Turn on HDMI 5V of outputs.[X]=0~4.[X]=1~4, represents output 1~4.[Y]=0, represents all onputs. |  @OUT0. | Output5V 1 2 3 4Status Y Y Y Y |
| $OUT[xx]. | Turn off HDMI 5V of outputs.[X]=0~4.[X]=1~4, represents output 1~4.[Y]=0, represents all onputs. | $OUT0. | Output5V 1 2 3 4Status N N N N |
| CEC[I/O][AA][BB][CC][DD]. | l The “[I]” represents the input port. The “[O]” represents the output port.l The “[AA]” represents the port number. The HDMI input ports are 01~04. The HDBaseT output ports are 01~03 and the local HDMI output ports are 04. l The “[AA]” is “FF” for sending command to all input or output ports.l The “[BB]” represents the device type (e.g. TV: 40/20/80; Blu-ray DVD: 04/08).Example:#define CEC\_ALL\_DEVICE\_TYPES\_TV (0x80)#define CEC\_ALL\_DEVICE\_TYPES\_RECORDING\_DEVICE (0x40)#define CEC\_ALL\_DEVICE\_TYPES\_TUNER (0x20)#define CEC\_ALL\_DEVICE\_TYPES\_PLAYBACK\_DEVICE (0x10)#define CEC\_ALL\_DEVICE\_TYPES\_AUDIO\_SYSTEM (0x08)#define CEC\_ALL\_DEVICE\_TYPES\_CEC\_SWITCH (0x04)l The “[CC]” represents the function type (e.g. “44”: Remote control). eActiveSource =0x82, // follower:TV, switch --> Broadcst , Directly address eImageViewOn =0x04, // follower:TV, switch --> Broadcst eTextViewOn =0x0D, // follower:TV eStandBy =0x36, // follower:All --> Broadcst eUserControlPressed =0x44,// follower:All --> Broadcst//user control, as remote.l The “[DD]” represents the specific command.up to 9;typedef enum \_CecUiCommand\_t // Remote Control Pass-through and UI command codes { CEC\_RC\_SELECT = 0x00, CEC\_RC\_UP = 0x01, CEC\_RC\_DOWN = 0x02, CEC\_RC\_LEFT = 0x03, CEC\_RC\_RIGHT = 0x04, CEC\_RC\_RIGHT\_UP = 0x05, CEC\_RC\_RIGHT\_DOWN = 0x06, CEC\_RC\_LEFT\_UP = 0x07, CEC\_RC\_LEFT\_DOWN = 0x08, CEC\_RC\_ROOT\_MENU = 0x09, CEC\_RC\_SETUP\_MENU = 0x0A, CEC\_RC\_CONTENTS\_MENU = 0x0B, CEC\_RC\_FAVORITE\_MENU = 0x0C, CEC\_RC\_EXIT = 0x0D, // 0x0E - 0x1F Reserved  CEC\_RC\_0 = 0x20, CEC\_RC\_1 = 0x21, CEC\_RC\_2 = 0x22, CEC\_RC\_3 = 0x23, CEC\_RC\_4 = 0x24, CEC\_RC\_5 = 0x25, CEC\_RC\_6 = 0x26, CEC\_RC\_7 = 0x27, CEC\_RC\_8 = 0x28, CEC\_RC\_9 = 0x29, CEC\_RC\_DOT = 0x2A, CEC\_RC\_ENTER = 0x2B, CEC\_RC\_CLEAR = 0x2C, // 0x2D - 0x2F Reserved  CEC\_RC\_CHANNEL\_UP = 0x30, CEC\_RC\_CHANNEL\_DOWN = 0x31, CEC\_RC\_PREVIOUS\_CHANNEL = 0x32, CEC\_RC\_SOUND\_SELECT = 0x33, CEC\_RC\_INPUT\_SELECT = 0x34, CEC\_RC\_DISPLAY\_INFORMATION = 0x35, CEC\_RC\_HELP = 0x36, CEC\_RC\_PAGE\_UP = 0x37, CEC\_RC\_PAGE\_DOWN = 0x38, // 0x39 - 0x3F Reserved  CEC\_RC\_POWER = 0x40, CEC\_RC\_VOLUME\_UP = 0x41, CEC\_RC\_VOLUME\_DOWN = 0x42, CEC\_RC\_MUTE = 0x43, CEC\_RC\_PLAY = 0x44, CEC\_RC\_STOP = 0x45, CEC\_RC\_PAUSE = 0x46, CEC\_RC\_RECORD = 0x47, CEC\_RC\_REWIND = 0x48, CEC\_RC\_FAST\_FORWARD = 0x49, CEC\_RC\_EJECT = 0x4A, CEC\_RC\_FORWARD = 0x4B, CEC\_RC\_BACKWARD = 0x4C, CEC\_RC\_STOP\_RECORD = 0x4D, CEC\_RC\_PAUSE\_RECORD = 0x4E, // 0x4F Reserved CEC\_RC\_ANGLE = 0x50, CEC\_RC\_SUB\_PICTURE = 0x51, CEC\_RC\_VIDEO\_ON\_DEMAND = 0x52, CEC\_RC\_ELECTRONIC\_PROGRAM\_GUIDE = 0x53, CEC\_RC\_TIMER\_PGRMING = 0x54, CEC\_RC\_INITIAL\_CONFIGURATION = 0x55, CEC\_RC\_SELECT\_BROADCAST\_TYPE = 0x56, CEC\_RC\_SELECT\_SOUND\_PRESENTATION = 0x57, // 0x58 - 0x5F Reserved CEC\_RC\_PLAY\_FUNCTION = 0x60, CEC\_RC\_PAUSE\_PLAY\_FUNCTION = 0x61, CEC\_RC\_RECORD\_FUNCTION = 0x62, CEC\_RC\_PAUSE\_RECORD\_FUNCTION = 0x63, CEC\_RC\_STOP\_FUNCTION = 0x64, CEC\_RC\_MUTE\_FUNCTION = 0x65, CEC\_RC\_RESTORE\_VOLUME\_FUNCTION = 0x66, CEC\_RC\_TUNE\_FUNCTION = 0x67, CEC\_RC\_SELECT\_DISK\_FUNCTION = 0x68, CEC\_RC\_SELECT\_AV\_INPUT\_FUNCTION = 0x69, CEC\_RC\_SELECT\_AUDIO\_INPUT\_FUNCTION = 0x6A, CEC\_RC\_POWER\_TOGGLE\_FUNCTION = 0x6B, CEC\_RC\_POWER\_OFF\_FUNCTION = 0x6C, CEC\_RC\_POWER\_ON\_FUNCTION = 0x6D, // 0x6E - 0x70 Reserved CEC\_RC\_F1\_BLUE = 0x71, CEC\_RC\_F2\_RED = 0x72, CEC\_RC\_F3\_GREEN = 0x73, CEC\_RC\_F4\_YELLOW = 0x74, CEC\_RC\_F5 = 0x75, CEC\_RC\_DATA = 0x76 // 0x77 - 0x7F Reserved} CecUiCommand\_t; | CECI0304444A.(Disk drive out)CECO038004.(TV power on)CECO038036.(TV standby) | CEC Input 03 Send Success!CEC Output 03 Send Success!CEC Output 03 Send Success! |