

Bus 001 Device 002: ID 0408:4033 Quanta Computer, Inc. ACER HD User Facing
Couldn't open device, some information will be missing

Device Descriptor:

bLength 18
bDescriptorType 1
bcdUSB 2.01
bDeviceClass 239 Miscellaneous Device
bDeviceSubClass 2
bDeviceProtocol 1 Interface Association
bMaxPacketSize0 64
idVendor 0x0408 Quanta Computer, Inc.
idProduct 0x4033
bcdDevice 0.04
iManufacturer 1 Quanta
iProduct 2 ACER HD User Facing
iSerial 3 01.00.00
bNumConfigurations 1

Configuration Descriptor:

bLength 9
bDescriptorType 2
wTotalLength 0x0255
bNumInterfaces 3
bConfigurationValue 1
iConfiguration 0
bmAttributes 0x80
(Bus Powered)
MaxPower 500mA

Interface Association:

bLength 8
bDescriptorType 11
bFirstInterface 0
bInterfaceCount 2
bFunctionClass 14 Video
bFunctionSubClass 3 Video Interface Collection
bFunctionProtocol 0
iFunction 4

Interface Descriptor:

bLength 9
bDescriptorType 4
bInterfaceNumber 0
bAlternateSetting 0
bNumEndpoints 1
bInterfaceClass 14 Video
bInterfaceSubClass 1 Video Control
bInterfaceProtocol 1
iInterface 4

VideoControl Interface Descriptor:

bLength 13
bDescriptorType 36

bDescriptorSubtype 1 (HEADER)
bcdUVC 1.50
wTotalLength 0x006f
dwClockFrequency 48.000000MHz
bInCollection 1
baInterfaceNr(0) 1

VideoControl Interface Descriptor:

bLength 18
bDescriptorType 36
bDescriptorSubtype 2 (INPUT_TERMINAL)
bTerminalID 1
wTerminalType 0x0201 Camera Sensor
bAssocTerminal 0
iTerminal 0
wObjectiveFocalLengthMin 0
wObjectiveFocalLengthMax 0
wOcularFocalLength 0
bControlSize 3
bmControls 0x0020000a
Auto-Exposure Mode
Exposure Time (Absolute)
Region of Interest

VideoControl Interface Descriptor:

bLength 13
bDescriptorType 36
bDescriptorSubtype 5 (PROCESSING_UNIT)
bUnitID 2
bSourceID 1
wMaxMultiplier 16384
bControlSize 3
bmControls 0x0000157f
Brightness
Contrast
Hue
Saturation
Sharpness
Gamma
White Balance Temperature
Backlight Compensation
Power Line Frequency
White Balance Temperature, Auto

iProcessing 0

bmVideoStandards 0x00

VideoControl Interface Descriptor:

bLength 29
bDescriptorType 36
bDescriptorSubtype 6 (EXTENSION_UNIT)
bUnitID 3
guidExtensionCode {26b8105a-0713-4870-979d-da79444bb68e}

bNumControls 1
bNrInPins 1
baSourceID(0) 2
bControlSize 4
bmControls(0) 0x04
bmControls(1) 0x00
bmControls(2) 0x00
bmControls(3) 0x00
iExtension 0

VideoControl Interface Descriptor:

bLength 29
bDescriptorType 36
bDescriptorSubtype 6 (EXTENSION_UNIT)
bUnitID 4
guidExtensionCode {63610682-5070-49ab-b8cc-b3855e8d221d}
bNumControls 26
bNrInPins 1
baSourceID(0) 3
bControlSize 4
bmControls(0) 0xff
bmControls(1) 0xff
bmControls(2) 0x77
bmControls(3) 0x47
iExtension 0

VideoControl Interface Descriptor:

bLength 9
bDescriptorType 36
bDescriptorSubtype 3 (OUTPUT_TERMINAL)
bTerminalID 5
wTerminalType 0x0101 USB Streaming
bAssocTerminal 0
bSourceID 4
iTerminal 0

Endpoint Descriptor:

bLength 7
bDescriptorType 5
bEndpointAddress 0x87 EP 7 IN
bmAttributes 3
Transfer Type Interrupt
Synch Type None
Usage Type Data
wMaxPacketSize 0x0010 1x 16 bytes
bInterval 8

Interface Descriptor:

bLength 9
bDescriptorType 4
bInterfaceNumber 1
bAlternateSetting 0
bNumEndpoints 0

bInterfaceClass 14 Video
bInterfaceSubClass 2 Video Streaming
bInterfaceProtocol 1
iInterface 0

VideoStreaming Interface Descriptor:

bLength 15
bDescriptorType 36
bDescriptorSubtype 1 (INPUT_HEADER)
bNumFormats 2
wTotalLength 0x00f5
bEndpointAddress 0x81 EP 1 IN
bmInfo 0
bTerminalLink 5
bStillCaptureMethod 1
bTriggerSupport 0
bTriggerUsage 0
bControlSize 1
bmaControls(0) 4
bmaControls(1) 0

VideoStreaming Interface Descriptor:

bLength 11
bDescriptorType 36
bDescriptorSubtype 6 (FORMAT_MJPEG)
bFormatIndex 1
bNumFrameDescriptors 3
bFlags 1
Fixed-size samples: Yes
bDefaultFrameIndex 1
bAspectRatioX 0
bAspectRatioY 0
bmInterlaceFlags 0x00
Interlaced stream or variable: No
Fields per frame: 1 fields
Field 1 first: No
Field pattern: Field 1 only
bCopyProtect 0

VideoStreaming Interface Descriptor:

bLength 30
bDescriptorType 36
bDescriptorSubtype 7 (FRAME_MJPEG)
bFrameIndex 1
bmCapabilities 0x01
Still image supported
wWidth 1280
wHeight 720
dwMinBitRate 442368000
dwMaxBitRate 442368000
dwMaxVideoFrameBufferSize 1843200
dwDefaultFrameInterval 333333

bFrameIntervalType	1
dwFrameInterval(0)	333333

VideoStreaming Interface Descriptor:

bLength	30
bDescriptorType	36
bDescriptorSubtype	7 (FRAME_MJPEG)
bFrameIndex	2
bmCapabilities	0x01
Still image supported	
wWidth	640
wHeight	480
dwMinBitRate	147456000
dwMaxBitRate	147456000
dwMaxVideoFrameBufferSize	614400
dwDefaultFrameInterval	333333
bFrameIntervalType	1
dwFrameInterval(0)	333333

VideoStreaming Interface Descriptor:

bLength	30
bDescriptorType	36
bDescriptorSubtype	7 (FRAME_MJPEG)
bFrameIndex	3
bmCapabilities	0x01
Still image supported	
wWidth	640
wHeight	360
dwMinBitRate	110592000
dwMaxBitRate	110592000
dwMaxVideoFrameBufferSize	460800
dwDefaultFrameInterval	333333
bFrameIntervalType	1
dwFrameInterval(0)	333333

VideoStreaming Interface Descriptor:

bLength	6
bDescriptorType	36
bDescriptorSubtype	13 (COLORFORMAT)
bColorPrimaries	1 (BT.709,sRGB)
bTransferCharacteristics	1 (BT.709)
bMatrixCoefficients	4 (SMPTE 170M (BT.601))

VideoStreaming Interface Descriptor:

bLength	27
bDescriptorType	36
bDescriptorSubtype	4 (FORMAT_UNCOMPRESSED)
bFormatIndex	2
bNumFrameDescriptors	3
guidFormat	{32595559-0000-0010-8000-00aa00389b71}
bBitsPerPixel	16
bDefaultFrameIndex	1
bAspectRatioX	0

bAspectRatioY 0
bmInterlaceFlags 0x00
 Interlaced stream or variable: No
 Fields per frame: 2 fields
 Field 1 first: No
 Field pattern: Field 1 only
bCopyProtect 0
VideoStreaming Interface Descriptor:
bLength 30
bDescriptorType 36
bDescriptorSubtype 5 (FRAME_UNCOMPRESSED)
bFrameIndex 1
bmCapabilities 0x01
 Still image supported
wWidth 1280
wHeight 720
dwMinBitRate 147456000
dwMaxBitRate 147456000
dwMaxVideoFrameBufferSize 1843200
dwDefaultFrameInterval 1000000
bFrameIntervalType 1
dwFrameInterval(0) 1000000
VideoStreaming Interface Descriptor:
bLength 30
bDescriptorType 36
bDescriptorSubtype 5 (FRAME_UNCOMPRESSED)
bFrameIndex 2
bmCapabilities 0x01
 Still image supported
wWidth 640
wHeight 480
dwMinBitRate 147456000
dwMaxBitRate 147456000
dwMaxVideoFrameBufferSize 614400
dwDefaultFrameInterval 333333
bFrameIntervalType 1
dwFrameInterval(0) 333333
VideoStreaming Interface Descriptor:
bLength 30
bDescriptorType 36
bDescriptorSubtype 5 (FRAME_UNCOMPRESSED)
bFrameIndex 3
bmCapabilities 0x01
 Still image supported
wWidth 640
wHeight 360
dwMinBitRate 110592000
dwMaxBitRate 110592000
dwMaxVideoFrameBufferSize 460800

dwDefaultFrameInterval 333333
bFrameIntervalType 1
dwFrameInterval(0) 333333

VideoStreaming Interface Descriptor:

bLength 6
bDescriptorType 36
bDescriptorSubtype 13 (COLORFORMAT)
bColorPrimaries 1 (BT.709,sRGB)
bTransferCharacteristics 1 (BT.709)
bMatrixCoefficients 4 (SMPTE 170M (BT.601))

Interface Descriptor:

bLength 9
bDescriptorType 4
bInterfaceNumber 1
bAlternateSetting 1
bNumEndpoints 1
bInterfaceClass 14 Video
bInterfaceSubClass 2 Video Streaming
bInterfaceProtocol 1
iInterface 0

Endpoint Descriptor:

bLength 7
bDescriptorType 5
bEndpointAddress 0x81 EP 1 IN
bmAttributes 5
Transfer Type Isochronous
Synch Type Asynchronous
Usage Type Data
wMaxPacketSize 0x00c0 1x 192 bytes
bInterval 1

Interface Descriptor:

bLength 9
bDescriptorType 4
bInterfaceNumber 1
bAlternateSetting 2
bNumEndpoints 1
bInterfaceClass 14 Video
bInterfaceSubClass 2 Video Streaming
bInterfaceProtocol 1
iInterface 0

Endpoint Descriptor:

bLength 7
bDescriptorType 5
bEndpointAddress 0x81 EP 1 IN
bmAttributes 5
Transfer Type Isochronous
Synch Type Asynchronous
Usage Type Data
wMaxPacketSize 0x0180 1x 384 bytes

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    bInterval          1
Interface Descriptor:
  bLength             9
  bDescriptorType     4
  bInterfaceNumber    1
  bAlternateSetting   3
  bNumEndpoints       1
  bInterfaceClass     14 Video
  bInterfaceSubClass  2 Video Streaming
  bInterfaceProtocol  1
  iInterface          0
Endpoint Descriptor:
  bLength             7
  bDescriptorType     5
  bEndpointAddress    0x81 EP 1 IN
  bmAttributes        5
    Transfer Type     Isochronous
    Synch Type        Asynchronous
    Usage Type        Data
  wMaxPacketSize     0x0200 1x 512 bytes
  bInterval          1
Interface Descriptor:
  bLength             9
  bDescriptorType     4
  bInterfaceNumber    1
  bAlternateSetting   4
  bNumEndpoints       1
  bInterfaceClass     14 Video
  bInterfaceSubClass  2 Video Streaming
  bInterfaceProtocol  1
  iInterface          0
Endpoint Descriptor:
  bLength             7
  bDescriptorType     5
  bEndpointAddress    0x81 EP 1 IN
  bmAttributes        5
    Transfer Type     Isochronous
    Synch Type        Asynchronous
    Usage Type        Data
  wMaxPacketSize     0x0280 1x 640 bytes
  bInterval          1
Interface Descriptor:
  bLength             9
  bDescriptorType     4
  bInterfaceNumber    1
  bAlternateSetting   5
  bNumEndpoints       1
  bInterfaceClass     14 Video
  bInterfaceSubClass  2 Video Streaming

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bInterfaceProtocol 1
iInterface 0
Endpoint Descriptor:
bLength 7
bDescriptorType 5
bEndpointAddress 0x81 EP 1 IN
bmAttributes 5
Transfer Type Isochronous
Synch Type Asynchronous
Usage Type Data
wMaxPacketSize 0x0320 1x 800 bytes
bInterval 1

Interface Descriptor:
bLength 9
bDescriptorType 4
bInterfaceNumber 1
bAlternateSetting 6
bNumEndpoints 1
bInterfaceClass 14 Video
bInterfaceSubClass 2 Video Streaming
bInterfaceProtocol 1
iInterface 0

Endpoint Descriptor:
bLength 7
bDescriptorType 5
bEndpointAddress 0x81 EP 1 IN
bmAttributes 5
Transfer Type Isochronous
Synch Type Asynchronous
Usage Type Data
wMaxPacketSize 0x03b0 1x 944 bytes
bInterval 1

Interface Descriptor:
bLength 9
bDescriptorType 4
bInterfaceNumber 1
bAlternateSetting 7
bNumEndpoints 1
bInterfaceClass 14 Video
bInterfaceSubClass 2 Video Streaming
bInterfaceProtocol 1
iInterface 0

Endpoint Descriptor:
bLength 7
bDescriptorType 5
bEndpointAddress 0x81 EP 1 IN
bmAttributes 5
Transfer Type Isochronous
Synch Type Asynchronous

Usage Type	Data
wMaxPacketSize	0x0a80 2x 640 bytes
bInterval	1
Interface Descriptor:	
bLength	9
bDescriptorType	4
bInterfaceNumber	1
bAlternateSetting	8
bNumEndpoints	1
bInterfaceClass	14 Video
bInterfaceSubClass	2 Video Streaming
bInterfaceProtocol	1
iInterface	0
Endpoint Descriptor:	
bLength	7
bDescriptorType	5
bEndpointAddress	0x81 EP 1 IN
bmAttributes	5
Transfer Type	Isochronous
Synch Type	Asynchronous
Usage Type	Data
wMaxPacketSize	0x0b20 2x 800 bytes
bInterval	1
Interface Descriptor:	
bLength	9
bDescriptorType	4
bInterfaceNumber	1
bAlternateSetting	9
bNumEndpoints	1
bInterfaceClass	14 Video
bInterfaceSubClass	2 Video Streaming
bInterfaceProtocol	1
iInterface	0
Endpoint Descriptor:	
bLength	7
bDescriptorType	5
bEndpointAddress	0x81 EP 1 IN
bmAttributes	5
Transfer Type	Isochronous
Synch Type	Asynchronous
Usage Type	Data
wMaxPacketSize	0x0be0 2x 992 bytes
bInterval	1
Interface Descriptor:	
bLength	9
bDescriptorType	4
bInterfaceNumber	1
bAlternateSetting	10
bNumEndpoints	1

bInterfaceClass 14 Video
bInterfaceSubClass 2 Video Streaming
bInterfaceProtocol 1
iInterface 0
Endpoint Descriptor:
bLength 7
bDescriptorType 5
bEndpointAddress 0x81 EP 1 IN
bmAttributes 5
Transfer Type Isochronous
Synch Type Asynchronous
Usage Type Data
wMaxPacketSize 0x13c0 3x 960 bytes
bInterval 1

Interface Descriptor:
bLength 9
bDescriptorType 4
bInterfaceNumber 1
bAlternateSetting 11
bNumEndpoints 1
bInterfaceClass 14 Video
bInterfaceSubClass 2 Video Streaming
bInterfaceProtocol 1
iInterface 0
Endpoint Descriptor:
bLength 7
bDescriptorType 5
bEndpointAddress 0x81 EP 1 IN
bmAttributes 5
Transfer Type Isochronous
Synch Type Asynchronous
Usage Type Data
wMaxPacketSize 0x13fc 3x 1020 bytes
bInterval 1

Interface Descriptor:
bLength 9
bDescriptorType 4
bInterfaceNumber 2
bAlternateSetting 0
bNumEndpoints 0
bInterfaceClass 254 Application Specific Interface
bInterfaceSubClass 1 Device Firmware Update
bInterfaceProtocol 1
iInterface 12
Device Firmware Upgrade Interface Descriptor:
bLength 9
bDescriptorType 33
bmAttributes 15
Will Detach

Manifestation Tolerant
Upload Supported
Download Supported
wDetachTimeout 2000 milliseconds
wTransferSize 4096 bytes
bcdDFUVersion 1.10