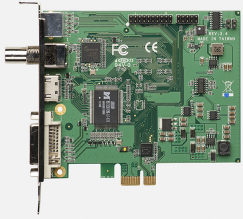


Piccolo HD One

SDI / HDMI / DVI High-Definition 1080p Video Capture Card



At a Glance

- Video and audio capture from SDI, HDMI, DVI or Y/Pr/Pb video sources
- HD 1920x1080p25/30
- PCIe x1 bus

Benefits

Compatible with a wide range of video sources:

- HD-SDI
- HDMI
- DVI
- Y/Pb/Pr

Audio signal acquisition

- Stereo
- 16-bit linear PCM
- 32, 44.1, 48 KHz

16 general purpose IO lines

Analog Y/Pb/Pr, audio and watchdog cables included

Windows drivers

DirectShow and C APIs

Applications

LIFE SCIENCES & MEDICAL

Endoscopy applications

Standard and high-definition image acquisition

Dental applications

Video-guided surgery applications

MICROSCOPY

High-definition image acquisition

Offline inspection stations

Laboratory and measuring microscopes

Specifications

Mechanical

Form Factor	PCI Express card
Format	Standard profile, half length, 1-lane PCI Express card
Dimensions	L 114 mm x H 101 mm L 4.51 in x H 3.98 in
Weight	96 g, 3.39 oz

Host bus

Standard	PCI Express 1.0
Link width	1 lane
Link speed	2.5 GT/s (PCIe 1.0)
Peak delivery bandwidth	256 MB/s
Power consumption	Max. 2.1 W

Camera / video inputs

Interface standard(s)	• SDI and HDMI for HD digital audio/video • DVI-D for HD digital video • DVI-A and Y/Pb/Pr for HD analog video
Connectors	• DVI-I: DVI-I socket(female) connector on the bracket for digital and analog video inputs • HDMI: HDMI type A (full size) receptacle (female) connector on the bracket for digital audio and video inputs • SDI: BNC female connector on the bracket for digital audio and video inputs • COMPONENTS: mini-DIN female connector on the bracket for expansion with the Y/Pb/Pr/L/R component cable • The Y/Pb/Pr/L/R component cable provides: – Y/Pb/Pr: 3 RCA female connectors for analog HD component video
Formats and standards (HD)	Up to 1080p30 / 1080i60 / 720p60
Number of cameras	1
Line-scan cameras supported	No

Video delivery

Raw video format(s)	YUY2, Packed YUV 4:2:2
Deliverable video resolution (HD)	• 1080p or 1080i source : 1920 x 1080 down to 640 x 384 • 720p source: 1280 x 720 down to 640 x 384

Audio inputs

Number of inputs	3, Stereo
Type	• SDI: Two 16-bit LPCM 48 kHz embedded digital audio channels • HDMI: Two 16-bit LPCM 32/44.1/48 kHz embedded digital audio channels • L/R Audio: Two line-level analog audio inputs
Audio format	• 16-bit Linear PCM • 32 kHz, 44.1 kHz or 48 kHz
Connectors	• HDMI: HDMI type A (full size) receptacle (female) connector on the bracket for digital audio and video inputs • SDI: BNC female connector on the bracket for digital audio and video inputs • COMPONENTS: mini-DIN female connector on the bracket for expansion with the Y/Pb/Pr/L/R component cable • The Y/Pb/Pr/L/R component cable provides: – L/R: 1 twin RCA female connector for analog audio

General Purpose Inputs and Outputs

Number of lines	16 I/O lines (IO)
Connectors	• I/O: 20-pin dual-row 0.1" header on the PCB • WATCHDOG: 4-pin dual-row 0.1" header on the PCB
Usage	General purpose IO
Electrical specifications	IO: Quasi-bidirectional I/O lines, individually configurable as input or output

Host system requirements

Processor	• Minimum: Core 2 Duo or better • Recommended: Intel 2nd/ 3rd Generation Core i3/i5/i7
System memory	• Minimum: 2GB DDR3 • Recommended: 4GB DDR3 (dual channel) or better
Graphic card	• Minimum: Supports DirectX 9 or higher • Recommended: Intel HD2000/2500/3000/4000 or better

Software

Host PC Operating System	• Microsoft Windows 8, 7, XP • Microsoft Windows Server 2012, 2008 R2 • 32- and 64-bit versions
APIs	• MultiCam 32-bit and 64-bit binary libraries for ISO-compliant C/C++ compilers • DirectShow filters for Microsoft Visual C++ compilers, for 32-bit and 64-bit applications • DirectShow .NET C#

Environmental conditions

Operating ambient air temperature	0 to +50 °C / +32 to +122 °F
Operating ambient air humidity	10 to 90% RH non-condensing
Storage ambient air temperature	-20 to +70 °C / -4 to +158 °F
Storage ambient air humidity	10 to 90% RH non-condensing

Certifications

Electromagnetic - EMC standards	• The European Council EMC Directive 2004/108/EC • The United States FCC rule 47 CFR 15
EMC - Emission	• EN 55022:2010 Class B • FCC 47 Part 15 Class B
EMC - Immunity	• EN 55024:2010 Class B • EN 61000-4-2 • EN 61000-4-3 • EN 61000-4-4 • EN 61000-4-5 • EN 61000-4-6 • EN 61000-4-8 • EN 61000-4-11
RoHS	Compliant with the European Union Directive 2011/65/EU (ROHS2)
REACH	Compliant with the European Union Regulation No 1907/2006
WEEE	Must be disposed of separately from normal household waste and must be recycled according to local regulations

Ordering Information

Product code - Description	1840 - Picolo HD One
Included accessories	• 1844 - Picolo HD Y/Pb/Pr/L+R Analog A/V Cable • 1846 - Picolo HD Watchdog Cable
Optional accessories	• 1844 - Picolo HD Y/Pb/Pr/L+R Analog A/V Cable • 1846 - Picolo HD Watchdog Cable



Your distributor