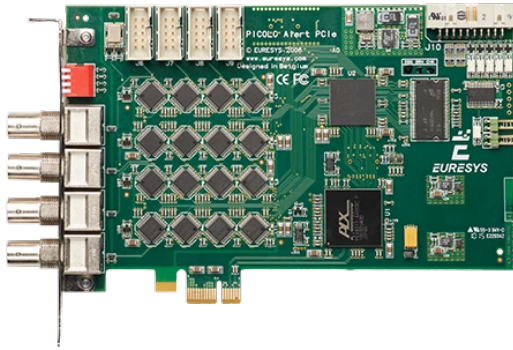


6/3/2024

## Datasheet

# Picolo Alert PCIe

PCIe video capture card with four BNC connectors for up to 16 standard PAL/NTSC cameras



- 4x BNC connectors on the bracket
- Expandable to 16 with three [1203] VEB modules (sold separately)
- PCIe x1 bus
- Sixteen shared video decoders, 100/120 images per second (200/240 fields per second)
- Real-time acquisition from 4 cameras, fast switching between up to 16 cameras
- Independently-programmable frame rate and acquisition parameters for each video input

## Main benefits

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### Windows and Linux drivers available



- Windows and Linux drivers available

# Other benefits

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## Video input configurations

- Four cameras can be connected using the BNC connectors on the bracket:  
Acquisition at 30 (NTSC) or 25 (PAL) frames per second per camera
- Sixteen cameras can be connected using the BNC connectors on the bracket and three [1203] VEBs: Acquisition at 7.5 (NTSC) or 6.25 (PAL) frames per second per camera

# Specifications

## Mechanical

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### Form factor

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PCI Express card

### Format

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Standard profile, half length, 1-lane PCI Express card

### Dimensions

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L 167.65 mm x H 106.65 mm

L 6.6 in x H 4.38 in

### Weight

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Net weight: 157 g [5.5 oz]

Gross weight: 257 g [9.1 oz]

## Host bus

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### Standard

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PCI Express 1.0

### Link width

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1 lane

### Link speed

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2.5 GT/s (PCIe 1.0)

### DMA

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32-bit

### Peak delivery bandwidth

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256 MB/s

### Effective (sustained) delivery bandwidth

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180 MB/s (Host PC motherboard dependent)

### Power consumption

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Max. 9.5 W (2.9 A @ +3.3 V)

## Camera / video inputs

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### Camera interface standard

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NTSC, PAL, RS-170, CCIR

### Interface standard(s)

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NTSC-M, PAL-B/G, RS-170, CCIR

### Connectors

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VIDEO 1 to VIDEO 4: BNC female connectors on the bracket for composite video inputs

VEB LINK 0 to VEB LINK 3: 10-pin shrouded header connectors on the PCB for VEB modules

### Termination resistor

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Selectable using switches on the bracket

### Native resolution

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Square pixels, broadcast and custom resolutions

### Frame rate

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Up to 25/30 images per second, 50/60 fields per second per input

Total 100/120 images per second with up to 16 cameras

### Number of cameras

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16

### Number of cameras (at full frame rate)

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4

### Maximum number of cameras

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16

## Video delivery

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### Raw video format(s)

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Packed RGB color formats: RGB15, RGB16, RGB24, RGB32

Planar RGB color formats: RGB24PL

Packed YUV color formats: YUV411, YUV422, YUV444

Planar YUV color formats: YUV411PL, YUV422PL, YUV444PL, YUV411PL, YUV422PL

Monochrome formats: Y8

## Deliverable video resolution (SD)

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Frame, field, CIF, QCIF and custom image formats

## Area-scan camera control

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### Trigger

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Hardware trigger for up to four cameras

With configurable noise removal filter and optional delay

### Strobe

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Hardware strobe signal for up to four cameras

With programmable position and duration

## General Purpose Inputs and Outputs

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### Number of lines

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9 I/O lines:

4 contact closure inputs (IN)

5 solid-state relay outputs (OUT)

### Connectors

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I/O: 20-pin dual-row 0.1" shrouded header on the PCB

### Usage

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General purpose IO

### Electrical specifications

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IN: Polarity-free inputs, compatible with TTL, 12V and 24V signals, opto-couplers, relays and switches

OUT: Opto-isolated potential-free and polarity-free solid-state outputs, compatible with signals up to 30V, with 4  $\mu$ s fall time, isolated up to 500V

### Watchdog

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Yes

## Software

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### Driver name

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MultiCam

### Last release

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MultiCam 6.19

## Host PC Operating System

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Microsoft Windows 10, 8.1, 7 for x86 (32-bit) and x86-64 (64-bit) processor architectures

Linux for x86 (32-bit) and x86-64 (64-bit) processor architectures

Refer to release notes for details

## APIs

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MultiCam 32- and 64-bit binary libraries (Windows and Linux), for ISO-compliant C/C++ compilers

DirectShow 32- and 64-bit filters (Windows only), for Microsoft Visual C++ compilers

## Environmental conditions

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### Operating ambient air temperature

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0 °C to +50 °C / +32 °F to +122 °F

### Operating ambient air humidity

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10% to 90% RH non-condensing

### Storage ambient air temperature

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-20 °C to +70 °C / -4 °F to +158 °F

### Storage ambient air humidity

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10% to 90% RH non-condensing

## Certifications

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### EMC standards

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European Council EMC Directive 2004/108/EC

United States FCC rule 47 CFR 15

### EMC - Emission

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EN 55022:2010 Class B

FCC 47 Part 15 Class B

### EMC - Immunity

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EN 55024:2010 Class B

EN 61000-4-2

EN 61000-4-3

EN 61000-4-5

EN 61000-4-6

## KC Certification

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Korean Radio Waves Act, Article 58-2, Clause 3

## Flammability

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PCB compliant with UL 94 V-0

## RoHS

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European Union Directive 2015/863 (ROHS3)

## REACH

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European Union Regulation 1907/2006

## WEEE

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Must be disposed of separately from normal household waste and must be recycled according to local regulations

## Ordering Information

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### Product status

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Not recommended for new designs

### Product code – Description

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PC1641 Piccolo Alert PCIe

### Related products

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PC1203 VEB

# Offices

- Europe, Middle East & Africa  
Euresys SA  
**Contact support : [support.europe@euresys.com](mailto:support.europe@euresys.com)**

Sensor to Image GmbH  
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