

PC3602

Coaxlink Octo

General

Product name	PC3602 Coaxlink Octo
Product code	3602
Product status	Released

Mechanical

Mechanical Specs	<dl> <dt>Form factor</dt> <dd> <p>PCI Express card</p> </dd> <dt>Format</dt> <dd> <p>Standard profile, half length, 8-lane PCI Express card</p> </dd> <dt>Cooling method</dt> <dd> <p>Air cooling, fan-cooled heatsink</p> </dd> <dt>Mounting</dt> <dd> <p>For insertion in a standard height, 8-lane or higher, PCI Express card slot</p> </dd> <dt>Connectors</dt> <dd> <p>'A B C D E F G H' on card bracket:</p> <p>8 x DIN 1.0/2.3 75 Ohms coaxial receptacles</p> <p>CoaXPress Host Interface</p> <p>'INTERNAL I/O 1' on printed circuit board:</p> <p>26-pin 2-row 0.1" pitch pin header with shrouding</p> <p>I/O lines and I/O power output</p> <p>'I/O EXTENSION' on printed circuit board:</p> <p>26-pin 2-row 0.05" pitch pin header with shrouding</p> <p>I/O extension cable socket</p> <p>'C2C-LINK' on printed circuit board:</p> <p>6-pin 2-row 0.1" pitch pin header with shrouding</p> <p>Card-to-card link</p> <p>'AUXILIARY POWER INPUT' on printed circuit board:</p> <p>6-pin PEG power socket</p> <p>12 V DC power input for PoCXP and I/O power output</p> </dd> <dt>LED indicators</dt> <dd> <p>'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H' on bracket:</p> <p>Bi-color red/green LEDs</p> <p>CoaXPress Host connector indicator</p>
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Mechanical

<p>'FPGA STATUS LAMP' on PCB:</p>
 <p>Bi-color red/green LED</p>
 <p>FPGA status indicator</p>
 <p>'BOARD STATUS LAMP' on PCB:</p>
 <p>Bi-color red/green LED</p>
 <p>Board status indicator</p>
 </dd>
 <dt>Switches</dt>
 <dd>
 <p>'RECOVERY' on PCB:</p>
 <p>3-pin 1-row 0.1" header or 2-way DIP switch</p>
 <p>Firmware emergency recovery</p>
 </dd>
 <dt>Dimensions</dt>
 <dd>
 <p>PCB L x H: 167.65 mm x 111.15 mm [6.6 in x 4.38 in]</p>
 </dd>
 <dt>Weight</dt>
 <dd>
 <p>Net weight: 185 g [6.5 oz]</p>
 <p>Gross weight: 330 g [11.6 oz]</p>
 </dd>
 </dl>

Form factor

PCIe Card

Cooling method

Air cooling / fan-cooled

Host Bus

Standard

PCIe 3.0

Camera Inputs

Camera Inputs

<dl>
 <dt>Camera interface standard</dt>
 <dd>
 <p>CoaXPress</p>
 </dd>
 <dt>Interface standard(s)</dt>
 <dd>
 <p>CoaXPress 1.0, 1.1, 1.1.1, 2.0 and 2.1</p>
 </dd>
 <dt>Maximum link speed</dt>
 <dd>
 <p>CXP-6</p>
 </dd>
 <dt>Maximum link width</dt>
 <dd>
 <p>8 connections</p>
 </dd>
 <dt>Camera powering</dt>
 <dd>
 <p>PoCXP</p>
 </dd>
 </dl>

Camera Inputs

<dt>Connectors</dt>	
<dd>	
Eight DIN1.0/2.3 75 Ohms CXP-6	
</dd>	
<dt>Status LEDs</dt>	
<dd>	
One CoaXPress Host connection status LED per connection	
</dd>	
<dt>Number of cameras</dt>	
<dd>	
Area-scan cameras:	
One 1- or 2- or 4- or 8-connection camera	
One or two 1- or 2- or 4-connection cameras	
Up to four 1- or 2-connection cameras	
One 1- or 2- or 4-connection camera and up to four 1-connection cameras	
Up to eight 1-connection cameras	
Line-scan cameras:	
One 1- or 2- or 4- or 8-connection camera	
One or two 1- or 2- or 4-connection cameras	
Up to four 1- or 2-connection cameras	
</dd>	
<dt>Maximum number of cameras</dt>	
<dd>	
8	
</dd>	
<dt>Line-scan cameras supported</dt>	
<dd>	
Yes	
</dd>	
<dt>Maximum aggregated camera data transfer rate</dt>	
<dd>	
50 Gbps (5,000 MB/s)	
</dd>	
<dt>Supported CXP down-connection speeds</dt>	
<dd>	
1.25 Gbps (CXP-1), 2.5 Gbps (CXP-2), 3.125 Gbps (CXP-3), 5 Gbps (CXP-5), and 6.25 Gbps (CXP-6)	
</dd>	
<dt>Number of CXP data streams (per camera)</dt>	
<dd>	
1 data stream per camera	
</dd>	
<dt>Maximum CXP stream packet size</dt>	
<dd>	
16,384 bytes	
</dd>	
<dt>PoCXP (Power over CoaXPress)</dt>	
<dd>	
PoCXP Safe Power:	
17 W of 24V DC regulated power per CoaXPress connector	
PoCXP Device detection and automatic power-on	
Overload and short-circuit protections	
On-board 12V to 24V DC/DC converter	
<p>A +12V power source must be connected to the AUXILIARY	

Camera Inputs

POWER INPUT connector using a 6-pin PEG cable

Camera types

Area-scan cameras:

Grayscale and color (YCbCr, YUV, RGB and Bayer CFA)

Single-tap (1X-1Y) progressive-scan

Line-scan cameras and contact imaging sensors:

Grayscale and color RGB

Camera pixel formats supported

Mono8, Mono10, Mono12, Mono14, Mono16

BayerXX8, BayerXX10, BayerXX12, BayerXX14, BayerXX16
where XX = GR, RG, GB, or BG

RGB8, RGB10, RGB12, RGB14, RGB16

RGBA8, RGBA10, RGBA12, RGBA14, RGBA16

YCbCr601_422_8, YCbCr601_422_10

YCbCr709_422_8, YCbCr709_422_10

YUV422_8, YUV422_10

Raw

Camera interface standard

CoaXPress