

General Information

Order Number	2200000357
Manufacturer	Basler
Type	Frame grabber
Product Series	marathon Frame Grabber
Product Type	Processing
Warranty	36 Months

Device Features

Processor	Xilinx Kintex7 XC7K160T
On-Board Memory	2 GByte DDR3-RAM
I/O Module Interfaces (Trigger and Sync)	onboard: 8in/8out (max.), TTL or opto-coupled, Front GPIO: up to 3 differential signals in, up to 4 single-ended signals in (depends on configuration), 2 TTL outputs
Power via Interface (p. port)	PoCXP (13W/24V per cable, Safe Power)
Acquisition Card Features	VisualApplets compatible

Camera Interface

Standard	CoaXPress 1.0/1.1
Interface	CoaXPress (CXP-6)
Configurations	CXP1-6; up to 4 cameras
Connectors	4 x DIN 1.0/2.3
Cable Length	11 - 40 meters
Power output	■ 13W/24V per cable ■ Power over CXP ■ SafePower
Camera Support	■ area scan camera ■ line scan camera
Sensor Type	■ CFA sensor (Bayer) ■ Grayscale sensor ■ RGB sensor
Sensor Resolution	16k (-32k)*65k (area scan sensor, depends on applet), 16k - 32k (line scan sensor, depends on applet)
Bit Depth	■ 8-16-bit (grayscale) ■ 24-48-bit (color)
Data Bandwidth	4 × 6.25 Gbit/s (780 MB/s)
Data Bandwidth (p.port; Total)	6.25 Gbps; 25 Gbps
No. of Ports	4

	Test Environment	Camera Simulator
Host PC Interface	PC Bus Interface	PCIe 2.1 ×4, DMA1800
	PC Bus Interface Performance	up to 1800 MB/s (sustainable)
Controls and General-Purpose I/Os	Trigger Board GPIO Interfaces	Box connector (34-pin)
	On-board GPIO interface	One 34-pin flat cable connector onboard: 8 input signals and 8 output signals with open-drain optionally as 4 opto-coupled inputs (4,5V - 28V), optional 2 opto-coupled differential inputs (RS422); 4 opto-coupled outputs (4,5V - 28V)
	On-board Front GPIO Interface	2 TTL outputs, up to 20 MHz frequency - One 15-pin D-Sub socket: 2 opto-coupled differential inputs (RS422) and 1 opto-coupled differential / single ended input
	GPIO Synchronisation and Control	Configurable Trigger System supporting several trigger modes (grabber controlled, external trigger, gated, software trigger) and shaft encoder functionality with backward compensation, Multi-Camera-Synchronization
	GPIO Interface Summary	4 in/2 out (max.), TTL or opto-coupled; differential or single-ended signals (configuration dependent) 8 in/8 out (max.), TTL or opto-coupled; differential or single-ended signals (configuration dependent)

- 8 in/8 out (max.), TTL or opto-coupled; differential or single-ended signals (configuration dependent)

Processing Features

Basic Features

- Image Selector
- Invert
- LUT
- Mirroring
- Offset/Gain/Gamma correction
- ROI
- White Balance

Physical and Environmental Information

Dimensions

PCIe Standard height, half length card: 167.64 mm
length x 111.15 mm height

Weight

168 g

Power Consumption / Power Source

typ. 1.175 A @ 12V (actual values depend on image pre-
processing), maximum load: 3.35 A (single supply over
4-pin power connector)

Operating Temperature

50° (0 LFM*), 60° (100 LFM*) FPGA operating
temperature: 0°C to 85°C, * LFM = Linear Feet per
Minute, unit for measuring airflow velocity

Storage Temperature

-50 - 80 °C (-58 °F - 176 °F)

Relative Humidity (operating, storage)	5 - 90 % non-condensing (operating), 0 - 95 % (storage)
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MTBF	pending
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Software

Software Drivers

- Linux 64-Bit
- Windows 11 / 10 (64-Bit)
- Windows 11 / 10 (32-Bit)

Software Tools

- Device Drivers
- Documentation
- microDiagnostics (Analysis and service tool)
- microDisplay (Acquisition control and viewer)
- SDK

Software API

- .net interface
- Framegrabber SDK

FPGA Programming

VisualApplets

MV Software Compatibility

- Halcon
- VisionPro

Manufacturer

Basler

Conformity

CE (incl. RoHS)

FCC

UKCA

Documentation

[More specifications can be found in the Documentation](#)