VCS-14MX2-M/C340 I

The Fastest Speed CMOS Digital Camera with Back-side Illuminated Sensor

(Model: VCS-14MX2-M/C340I)

CoaXPress®

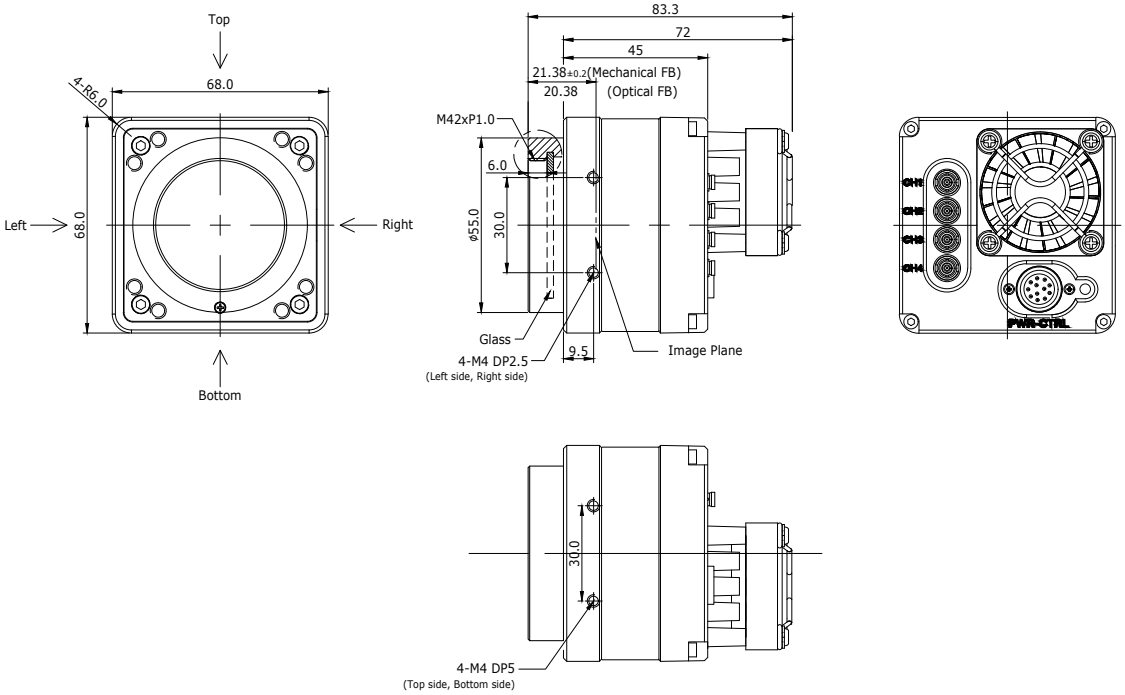
The VCS-14MX2-M/C340I camera, which offers 338 frames per second at 4,608 × 3,072 resolution, delivers not only fast frame rates but also highly uniform images. With CoaXPress 2.0 interface, it can transmit image data at up to 50 Gbps using four coaxial cables. The back-side illuminated sensor significantly enhances image sensitivity. Combining high speed and high performance, the VCS-14MX2-M/C340I camera is an excellent choice for applications that require high data rates and resolutions—such as flat panel display, PCB, and semiconductor inspections.

For a wide range of choice, this amazing product is provided in two different types: a fan type and a heat sink type, both with the same specification.

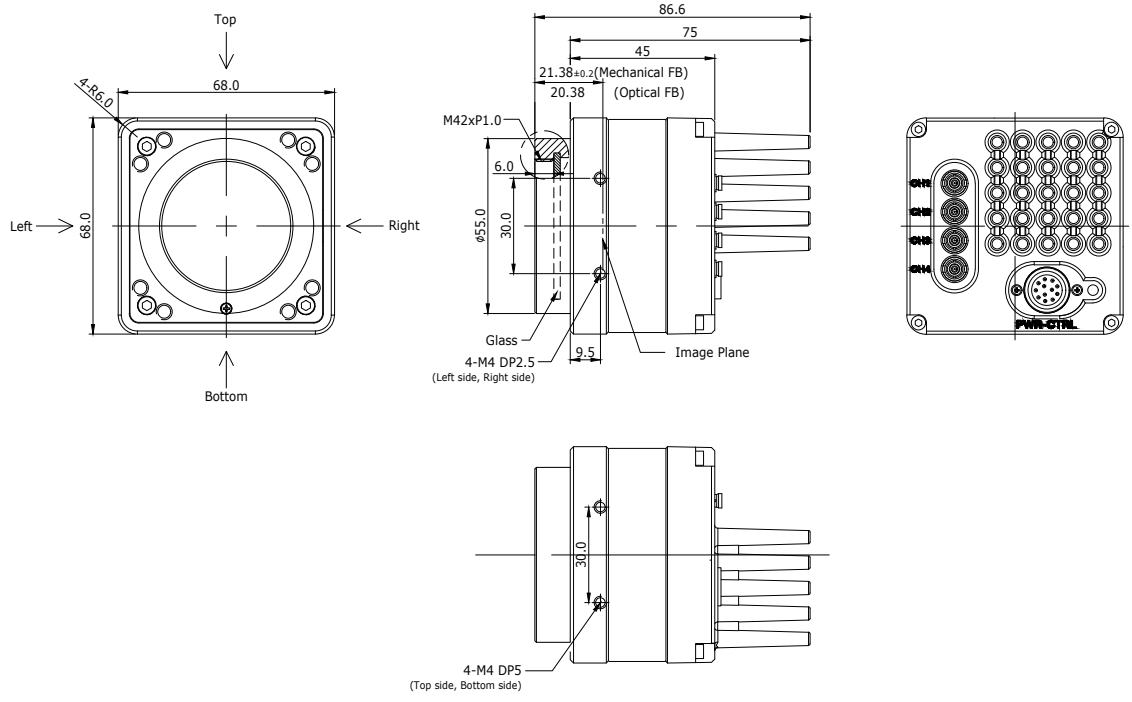
Mechanical Dimensions

Unit: mm

VCS-14MX2-M/C340I



VCS-14MX2-M/C340I-HS



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VCS-14MX2-M/C340I / VCS-14MX2-M/C340I-HS

The Fastest Speed CMOS Digital Camera with Back-side Illuminated Sensor

Main Features

- High Speed 14 Megapixel CMOS Image Sensor
- BSI (Backside Illuminated) CMOS Image Sensor
- CoaXPress 2.0 Interface up to 338 fps at 50 Gbps using 4 CH
- Global Shutter CMOS Technology
- DSNU and PRNU Correction
- Flat Field Correction
- Defective Pixel Correction
- GenICam Compatible – XML based Control
- Low-gain and high-gain composite image

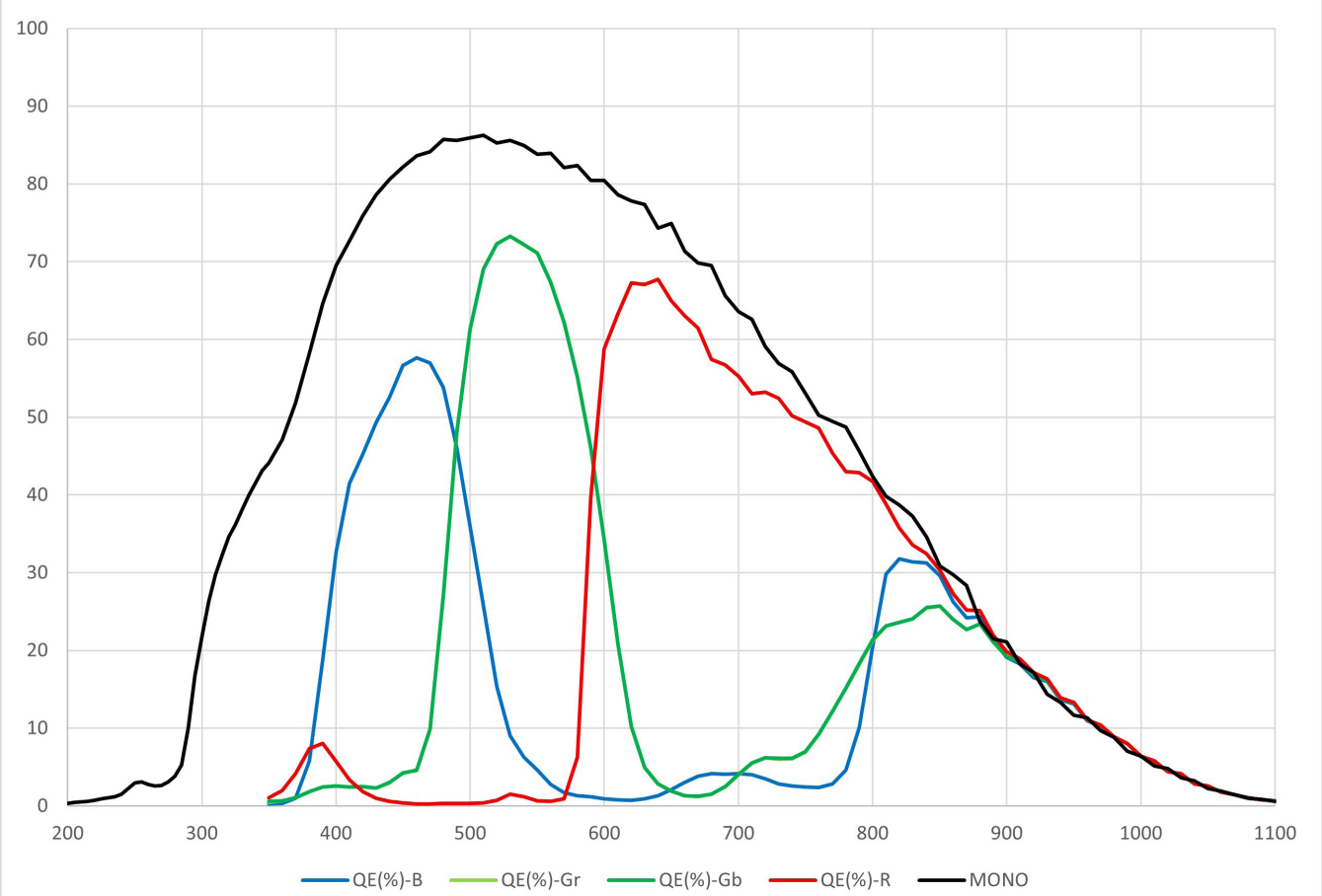
Applications

- FPD and Electronics Inspection
- Semiconductor Inspection
- Research and Scientific Imaging
- Document / Film Scanning

Specifications

Model		VCS-14MX2-M/C340I	VCS-14MX2-M/C340I-HS
Resolution (H × V)		4,608 X 3,072	
Sensor		GSPRINT5514	
Optical Format (Diagonal)		25.34 mm x 16.90 mm (30.5mm)	
Sensor Type		High Speed CMOS Image Sensor	
Pixel Size		5.5 ㎛ × 5.5 ㎛	
Interface		CoaXPress 2.0 (CXP-12)	
Max. Frame Rate (8 bit)	CXP-12 × 1	84 fps	
	CXP-12 × 2	169 fps	
	CXP-12 × 4	338 fps	
Exposure Time		4 ㎲ to 60 s	
Partial Scan (Max. Speed)		21037 fps at 32 Lines, CXP-12	
Pixel Data Format	Mono	Mono 8/10/12	
	Color	RG Bayer 8/10/12	
Electronic Shutter		Global Shutter	
Gain Control	Analog	1.0×, 1.55×, 2.17×, 2.77×, and 5.0x	
	Digital	1× to 32×	
Black Level Control		0 to 255 LSB at12 bit	
Trigger Synchronization		Free-Run, Hardware Trigger, Software Trigger, or CXP	
External Trigger		3.3 V to 24.0 V, 10 ㎃, Logical Level Input, Optically Isolated	
Software Trigger		Asynchronous, Programmable via Camera API	
Dynamic Range		Typ. 66 ㏈ at 12 bit	
Dimension / Weight		68mm x 68mm x 83.3mm, 460 g	68mm x 68mm x 86.6mm, 470 g
Temperature		Operating: 0℃ to 40℃, Storage: -40℃ to 70℃	
Lens Mount		M42 mount, Custom mount available upon request	
Power	External	11 to 24 VDC	
	Dissipation	Typ. 19 W	
	PoCXP	24 VDC, Minimum of two PoCXP cables required	
Compliance		CE, FCC, and KC	

Spectral Response



Ordering Scheme

VCS - 14M X2 - M 340 I

- Series: VCS Series
- Sensor Resolution: 14M – 14 Megapixels
- Interface: X2 – CoaXPress 2.0
- Sensor Options: I – Gpixel CMOS
- Frame Rate: 340 – 340 fps
- Mono / Color: M – Monochrome, C – Color

VCS - 14M X2 - M 340 I - HS

- Series: VCS Series
- Sensor Resolution: 14M – 14 Megapixels
- Interface: X2 – CoaXPress 2.0
- Additional Options: HS – Heat Sink
- Sensor Options: I – Gpixel CMOS
- Frame Rate: 340 – 340 fps
- Mono: M – Monochrome, C – Color

Connector Specification

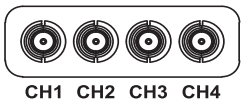
Power / Control

1:	DC Ground	2:	+12 VDC
3:	I/O Output-	4:	I/O Output1+
5:	Trigger IN-	6:	Trigger IN+
7:	I/O Output2+	8:	I/O Output3+
9:	I/O Output4+	10:	I/O Output5+
11:	I/O Output6+	12:	Not Connected

(HR10A-10R-12PB)

Data Transfer / Communications

Micro-BNC



CH1: Master Connection
Micro-BNC (HD-BNC)

Connectors on camera body