

OEM CAMERA MODULES

Perfect Fit For Embedded Solutions

For OEM that prefer to design their own camera solution but do not want to spend time on the sensor integration we offer a range of OEM camera modules.

All of the features and technical data are identical to the standard cameras except for the interface board which is not included. Thus making it a perfect solution to interface to your own embedded system.



OEM-D1024E-160-LC-12

OEM Camera Modules Selection Chart

CMOS OEM Cameras	Photonfocus CMOS Sensor	Sensor name / generation	Resolution	Frame rate @ full resolution [fps]	Dynamic range [dB] 120 dB= LinLog®	Colour format (S/W / Color)	Number of Modules	Greyscale [bit]	Region of Interest (MROI)	Global shutter
OEM-D752E-40-LC-11	✓	A1024B / 2.	752x582	87	120	✓/-	1	12	≤ 16	✓
OEM-D1024E-40-LC-12	✓	A1024B / 2.	1024x1024	37	120	✓/-	1	12	≤ 16	✓
OEM-D1024E-80-LC-12	✓	A1024B / 2.	1024x1024	75	120	✓/-	2	12	≤ 16	✓
OEM-D1024E-160-LC-12	✓	A1024B / 2.	1024x1024	150	120	✓/-	2	12	≤ 16	✓



OEM-D1024E-40-LC-12 OEM-D752E-40-LC-12	OEM-D1024E-80-LC-12	OEM-D1024E-160-LC-12
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Image Sensor

Technology	CMOS active pixel	
Scanning system	Progressive scan	
Optical format / diagonal	1" / 15.42 mm (OEM-D752E-40-LC-12: 2/3" / 10.12 mm)	
Resolution	1024 x 1024 pixels (OEM-D752E-40-LC-12: 752 x 582 pixels)	
Pixel size	10.6 µm x 10.6 µm	
Active optical area	10.9 mm x 10.9 mm (OEM-D752E-40-LC-12: 8.0 mm x 6.2 mm)	
Random noise	< 0.5 DN RMS @ 8 bit / gain = 1	
Fixed pattern noise (FPN)	< 1.0 DN RMS @ 8 bit / gain = 1 / offset correction on	
Dark current	2 fA / pixel @ 30 °C	
Full well capacity	200 ke ⁻	
Spectral range	400 nm ... 900 nm	
Responsivity	120 x 10 ³ DN / (J/m ²) @ 610 nm / 8 bit / gain = 1 (approximately 350 DN / (lux s) @ 610 nm / 8 bit / gain = 1)	
Optical fill factor	35 %	
Dynamic range	Up to 120 dB with LinLog®	
Colour format	Monochrome	
Characteristic curve	Linear, LinLog®, Skimming	
Shutter mode	Global shutter	
Read out mode	Sequential exposure	Sequential read out or simultaneous read out (read out during exposure)

OEM Camera Modules

Exposure time increment	25 ns	50 ns	25 ns
Frame rate	37 fps (OEM-D752E-40-LC-12: 87 fps)	75 fps	150 fps
Pixel clock	40 MHz	40 MHz	80 MHz
Camera taps	1		2
Greyscale resolution	12 bit / 10 bit / 8 bit		
Analogue gain	1		
Digital gain	1 or 2 or 4		
Configuration interface	SERIAL (9600 baud)	SERIAL (9600 baud or 57600 baud, user selectable)	
Trigger modes	<ul style="list-style-type: none"> • Free running (non triggered) • Interface trigger • I/O trigger • (Multiple) Regions of interest (ROI/MROI) • On-camera shading correction • Decimation in x (only OEM-D752E-40-LC-12 and OEM-D1024E-40-LC-12) and y direction • Look-up Table • Image information • Skimming • LinLog® • Trigger input • Strobe output 		
Interface	Low voltage CMOS (LVCMOS)		
Operating temperature	0 °C – +50 °C		
Camera module power supply	0.16 A @ +5 V DC (+/-10 %) 0.1 A @ +3.3 V DC (+/-10 %) 0.05 A @ +1.8 V DC (+/-10 %)	0.15 A @ +5 V DC (+/-10 %) 0.35 A @ +3.3 V DC (+/-10 %) 0.16 A @ +1.8 V DC (+/-10 %)	0.15 A @ +5 V DC (+/-10 %) 0.35 A @ +3.3 V DC (+/-10 %) 0.16 A @ +1.8 V DC (+/-10 %)
Power consumption	0.87 W	2.2 W	2.4 W
Dimensions	44 x 44 mm ²		
Mass	15 g		
Conformity	RoHS / WEEE		

Software

Camera control	PFRremote™ graphical user interface (GUI) and PFLib (SDK)
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