

OEM-D1024E-40-LC-12
OEM-D752E-40-LC-12

OEM-D1024E-80-LC-12

OEM-D1024E-160-LC-12

Image Sensor

Image sensor	Photonfocus A1024B (2. generation)	
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	CL SERIAL (9600 baud)	CL SERIAL (9600 baud or 57600 baud, user selectable)	
Trigger modes	• Free running (non triggered) • Interface trigger • I/O trigger		
Features	• (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 (LVCOS)		
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		