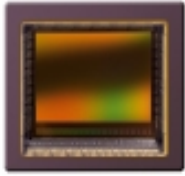


CMV8000  
AREA SCAN SENSORS



The CMV8000 is a global shutter CMOS image sensor with 3360 by 2496 pixels in a 4/3" optical format. The image array

consists of 5.5 um by 5.5 um pipelined global shutter pixels, which allow exposure during read out while performing CDS operation reducing fixed pattern and dark noise significantly. The CMV8000 has 16 digital LVDS outputs (serial) each running at 600 Mbps, which results in 104 fps frame rate at full resolution in 10-bit mode. Higher frame rates can be achieved in row-windowing mode or row-subsampling mode. A 12-bit per pixel mode is available at reduced frame rates.

## SPECIFICATIONS

<b>Part status</b>	Pre-production
<b>Resolution</b>	8MP - 3360 (H) x 2496 (V)
<b>Pixel size</b>	5.5 x 5.5
<b>Optical format</b>	4/3"
<b>Shutter type</b>	Global shutter
<b>Frame rate</b>	104 fps (10 bit) 46 fps (12 bit)
<b>Output interface</b>	16 LVDS outputs @ 600 Mbps
<b>Sensitivity</b>	5.56 V/lux.s
<b>Conversion gain</b>	0.077 LSB/e-
<b>Full well charge</b>	11700 e-
<b>Dark noise</b>	8.6 e- (RMS)
<b>Dynamic range</b>	61 dB
<b>SNR max</b>	41,3 dB
<b>Parasitic light sensitivity</b>	1/20000
<b>Extended dynamic range</b>	Yes, up to 90 dB
<b>Dark current</b>	41.2 e-/s (25 °C)
<b>Fixed pattern noise</b>	< 1 LSB (<0,1% of full swing)
<b>Chroma</b>	Mono and RGB
<b>Supply voltage</b>	1,8V / 3,3V
<b>Power</b>	900 mW
<b>Operating temperature range</b>	-30 to +70 degC
<b>RoHS compliance</b>	Yes
<b>Package</b>	107 pins uPGA
<b>Socket</b>	Andon Electronics ( <a href="http://www.andonelectronics.com">http://www.andonelectronics.com</a> ) IS232-848107T-400T4-R27-L14 (thru-hole) IS232-848107T-414T4-R27-L14 (surface mount)

## ORDERING INFO - CMV8000

<b>Part Number</b>	<b>Version</b>	<b>Chroma</b>	<b>Microlens</b>	<b>Package</b>	<b>Glass</b>
CMV8000ES-1E5M1PA	5 um epi	mono	Yes	ceramic 107pins $\mu$ PGA	double sided AR coated
CMV8000ES-1E5C1PA	5 um epi	color	Yes	ceramic 107pins $\mu$ PGA	double sided AR coated
CMV8000ES-1E5M1PN	5 um epi	mono	Yes	ceramic 107pins $\mu$ PGA	removable