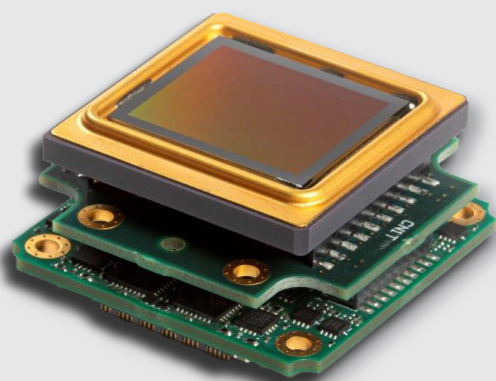
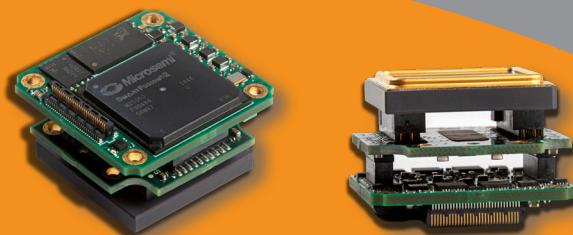


# Dione 1280 OEM Series

## Ultra-compact LWIR thermal imaging core

- ▶ SWaP optimized, uncooled and shutterless
- ▶ Microbolometer detector with 1280x1024 resolution and 12  $\mu\text{m}$  pixel



## State-of-the-art thermal imaging core

The Dione 1280 series is based on an uncooled microbolometer detector with a 1280x1024 pixel resolution and 12  $\mu\text{m}$  pixel pitch. The NETD (Noise Equivalent Temperature Difference) is less than 60 mK and the maximum frame rate is 60 Hz.

The Dione 1280 OEM comes as a two-PCB based core, with an ultra-compact form factor of just 35 x 35 x 23.5 mm<sup>3</sup>.

All Dione 1280 versions benefit from Xenics image enhancement for advanced image processing while keeping power consumption low (approximately 2 W). A 16 bit digital video output (compatible with CameraLink) is available on all versions, via the SAMTEC ST5 connector. Moreover, GenICam compliance and availability of multiple lenses adds flexibility for integration programs in the target markets such as safety and security, transportation and industrial process monitoring.

### Designed for use in

- Safety & Security
- Transportation
- Process Monitoring

### Advantages

- Ultra-compact size, low weight and power (SWaP)
- 1280x1024 microbolometer detector with 12  $\mu\text{m}$  pixel pitch
- Frame rates up to 60 Hz
- Uncooled and shutterless



Thermal security



Vision enhancement



Border security

## ► Camera Specifications

Camera Specifications	Dione 1280 OEM
<b>Mechanical specifications</b>	
Approximate Dimensions - excluding lens [width x height x length] [mm]	35 x 35 x 23.5
Weight [gr] - excluding lens	27
Optical interface	-
Connector I/O	SAMTEC ST5-30-1.50-L-D-P-TR
<b>Environmental &amp; power specifications</b>	
Ambient operating temperature range [°C]	From -40 to +70
Storage temperature [°C]	From -40 to +85
Average power consumption [W]	1.9 (at 30 Hz) & 2.1 (at 60 Hz)
Power supply voltage	DC 5 V
Shock	40 g, 11 ms, MIL-STD810G
Vibration	5 g (20 to 2000 Hz), MIL-STD810G
Regulatory compliance	RoHS
<b>Electro-optical specifications</b>	
Image format [pixels]	1280 x 1024
Pixel pitch [µm]	12
Detector type	Microbolometer
Integration type	Rolling shutter
Active area and diagonal [mm]	15.36 x 12.29 [diagonal 19.67]
Detector NETD [Noise Equivalent Temperature Difference] [mK] Temperature Difference] [mK]	<60 [at 30 Hz, 300 K, F/1]
Spectral range [nm]	8 - 14
Pixel operability	99.5% [excluding 3 peripheral rows and columns]
Max frame rate [Hz] [full frame]	60
Integration time range [µs]	20 - 65
Region of interest	No
Min region size [pixels]	NA
Analog-to-Digital [ADC] [bits]	14
Command and control	SAMTEC ST5 connector
Digital output format	16 bit [compatible with CameraLink]
Trigger	SAMTEC ST5 connector
<b>Product selector guide</b>	
Part number	XEN-000691

XDS-024-03 | Information furnished by Xenics is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are typical values and subject to change without notice. This information supersedes all previously supplied information.



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