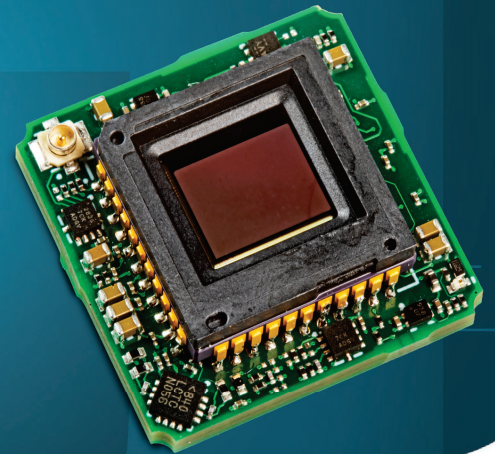


# Dione 640 OEM Series



STATE-OF-THE-ART THERMAL IMAGING CORE

## KEY FEATURES



**STATE-OF-THE-ART MICROBOLOMETER  
DETECTOR WITH 12  $\mu\text{m}$  PIXEL PITCH**



**INDUSTRY LEADING LOW SWaP  
(SIZE, WEIGHT AND POWER)**

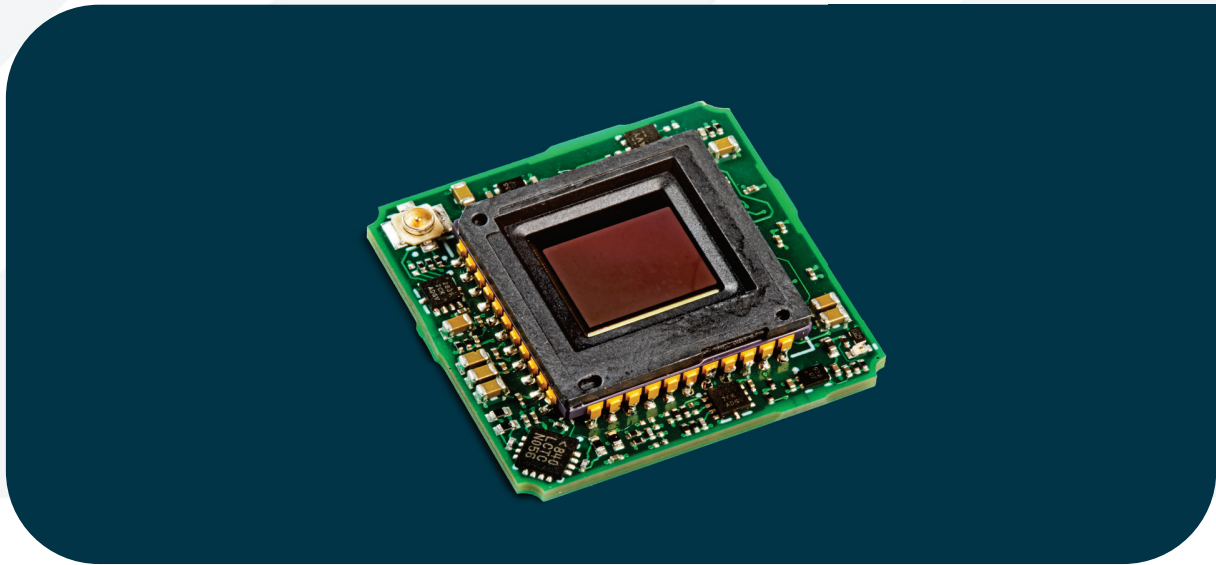


**FRAME RATES UP TO 60 Hz**

The Dione 640 OEM series is based on an uncooled microbolometer detector with a 640x480 pixel resolution and 12  $\mu\text{m}$  pixel pitch. The Dione 640 OEM benefits from Xenics image enhancement for advanced image processing while keeping power consumption low.

All Dione 640 versions are GenICam compliant. The ultra-compact Dione 640 OEM series find application in safety and security systems, as well as in industrial thermal imaging systems.

# Dione 640 OEM Series



## KEY PERFORMANCES

Image format / Pixel pitch	640 x 480 pixels / 12 $\mu$ m
Integration type	Rolling shutter
Spectral range	8 - 14 $\mu$ m
Max frame rate (full frame)	60 Hz
Power consumption	0.750 W (16bit DV); < 1.1 W (MIPI CSI-2); < 1.32 W (UVC); < 1.3 W (USB)
Power supply voltage	DC 5 V

## FUNCTIONS & INTERFACES

Digital output format	16bit DV, MIPI-CSI-2, UVC, USB
Operating temperature range	From -40 °C to +70 °C (16bit DV, UVC and USB); From -30 °C to +70 °C (MIPI CSI-2)
Storage temperature	From -45 °C to +85 °C (16bit DV, UVC); From -40 °C to +85 °C (USB); From -30 °C to +85 °C (MIPI CSI-2)
Detector NETD	<40 mK (at 30 Hz, 300K, F/1), available upon request or <50 mK (at 30 Hz, 300K, F/1)
Shock / Vibration	40 g, 11 ms, MIL-STD810G / 5 g (20 to 2000 Hz), MIL-STD810G

## PRODUCT SELECTOR GUIDE

XEN-000734 (Dione 640 OEM 40 mK)	XEN-000733 (Dione 640 OEM 50 mK)
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[advancedimaging@exosens.com](mailto:advancedimaging@exosens.com)



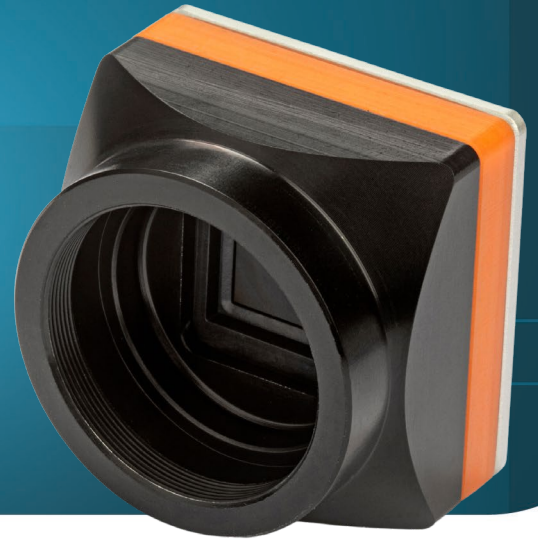
[exosens.com](http://exosens.com)

**EXOSENS**  
REVEAL THE INVISIBLE

**ULTRA-COMPACT, UNCOOLED  
THERMAL IMAGING CORE**

**Xenics**  
EXOSENS GROUP

# Dione 640 CAM Series



*ULTRA-COMPACT, UNCOOLED  
THERMAL IMAGING CORE*

## KEY FEATURES



**LWIR CAMERA CORE OPTIMIZED  
FOR LOW SWaP**



**FRAME RATES UP TO 60 Hz**



**VERY LOW LATENCY**

The Dione 640 CAM series is based on Dione 640 OEM thermal imaging core with 640x480 pixel resolution and 12  $\mu\text{m}$  pixel pitch. The detector NETD is less than 40 mK (available upon request) or 50 mK.

Dione 640 CAM is a LWIR uncooled thermal imaging core with housing supporting M24/M34 lens (optional). It utilizes Xenics image enhancement for advanced image processing while keeping power consumption low. The ultra-compact Dione 640 CAM series find application in safety and security systems, as well as in industrial thermal imaging systems.

# Dione 640 CAM Series



## KEY PERFORMANCES

Image format / Pixel pitch	640 x 480 pixels / 12 $\mu$ m
Integration type	Rolling shutter
Spectral range	8 - 14 $\mu$ m
Max frame rate (full frame)	60 Hz
Power consumption	0.750 W (60 Hz operation; 16bit DV); < 1.1 W (MIPI CSI-2); < 1.32 W (UVC); < 1.3 W (USB)
Power supply voltage	DC 5 V
Optical interface (optional)	M24 x 0.5 or M34 x 0.5

## FUNCTIONS & INTERFACES

Digital output format	16bit DV, MIPI-CSI-2, UVC, USB
Operating temperature range	From -40°C to +70°C (16bit DV, UVC, USB); From -30°C to +70°C (MIPI CSI-2)
Storage temperature	From -45°C to +85°C (16bit DV, UVC); From -40°C to +85°C (USB); From -30°C to +85°C (MIPI CSI-2)
Detector NETD	<40 mK (at 30 Hz, 300K, F/1), available upon request or <50 mK (at 30 Hz, 300K, F/1)
Shock / Vibration	40 g, 11 ms, MIL-STD810G / 5 g (20 to 2000 Hz), MIL-STD810G

## PRODUCT SELECTOR GUIDE

XEN-000697 (Dione 640 CAM 40 mK)	XEN-000696 (Dione 640 CAM 50 mK)
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