

Micro 80P

80x80 Thermal Imaging Sensors and Electronics

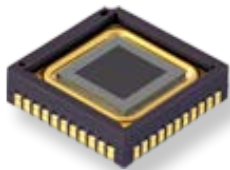
For Low Cost, High Volume Applications

- High sensitivity sensor
- Easy electrical interface
- Low power consumption
- Optimized sensor package design

Actual Micro 80P thermal images

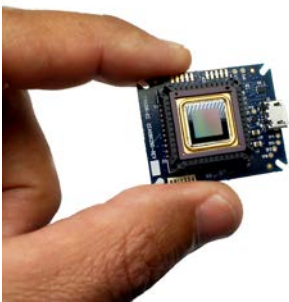


80x80 THERMAL IMAGING SENSORS



Micro80P Thermal Imaging Sensor

Thermal sensor array ideal for ground-up custom product developments.



ELEC80 Micro80P Electronics

Electronics that drive the Micro80P. Includes programmable system on a chip with firmware. Performs ambient-temperature-based non-uniformity correction, pixel replacement and several image processing functions. Also available: software development kit (SDK). Produces a USB video output.

ELEC80 Micro80P Firmware only

Firmware from the above electronics module. License or purchase. Integrate these programs into your own hardware to optimally drive the Micro80P and produce a corrected digital video signal.



ATOM 80 Thermal Imager Module - Evaluation Kit

Ideal kit to evaluate Micro80P thermal imaging performance. Includes Windows desktop software that performs real-time recording and playback, single image capture and display, conversions to .AVI, .JPG, .CSV and other image formats, color palette selection, auto/manual gain/level control and image averaging to improve sensitivity. SDK also available. Available with several different infrared lens options.

Micro 80P

80x80 Thermal Imaging Sensors and Electronics For Low Cost, High Volume Applications

PERFORMANCE

Micro 80P Sensor	80x80 amorphous silicon detector array
Detector Spectral Response	8-14 μm
NETD	<100 mK (f/1, 27°C, 50 Hz)
Scene Dynamic Range	> 300°C
Array Uniformity	< 1.5% deviation
Array Operability	> 99.5%
Low Power Consumption	\leq 25 mW
Operating Temperature Range	-40°C to +85°C
Standards	MIL-STD-810 and -883
MTTF	> 15 years
Frame Rate	from 1 Hz up to 50 Hz
Overexposure	Sun safe
Dimensions	16.5 x 16.5 x 5 mm
Weight	< 5 g
Electrical Interface	I ² C serial link

KEY APPLICATIONS:

- Automotive night vision and obstacle detection
- Non-contact temperature measurement
- Building/home automation control
- Advanced intrusion detection
- People counting
- Traffic monitoring

Technical characteristics described in this data sheet are for information only and are not contractual. Because of ongoing product enhancements, specifications are subject to change without notice. Contact us regarding US export control information for these products.