A 19

A single product for imaging and advanced detection

Micro*80P*™ 6,400 pixels

IIIIIIII



A world of thermal applications supported by ULIS

The range of applications for thermal sensors is vast. Whether they are used for building automation, energy management, security and access control, transportation, or tooling, thermal sensors (which detect the heat emitted by humans or objects in the long-wave infrared, or LWIR, wavelength) must provide more than just temperature and binary "yes/no" information generated by today's single and quad-element thermal detection sensors.

Micro80P[™]: 2 thermal functions in a single sensor



To meet the essential needs of all embedded thermal sensor applications, Micro80P™ can be used in two modes:

Thermal imaging function

For entry-level imaging applications

- Visual IR thermometer
- Short-range surveillance
- Personal vision systems

For when the user needs to see the actual scene being observed

Advanced detection function

For advanced thermal detection applications

- HVAC and lighting management
- Access control
- People counting
- Home appliances

For when the user wants to control programmable logic controllers (PLCs)

Create new possibilities for your imaging and advanced detection applications with Micro80P™

Micro80P[™] thermal sensors combine a full range of features, offering virtually-unlimited potential for thermal imaging and advanced detection applications:

- Accurate spatial sampling: 6,400 pixel resolution
- Accurate thermal sampling: 100 mK sensitivity at 27°C
- Detection of fast or slow objects: 1 Hz to 50 Hz frame rate
- Low power consumption: 2 years on 2 AA batteries
- Easy to integrate: standard I2C communication link



Thermography

Industrial maintenance

Energy management

• HVAC management

Lighting management

Building energy audits

- Electrical
- Non-contact temperature monitoring



Advanced presence detection

- People counting
- Queue management
- Gesture control



Surveillance & security

• Perimeter surveillance Intrusion detection Access control and tailgating



Transportation

- Short-range detection
- Occupancy sensing
- Temperature and HVAC management



MICR080P-044 Micro80P™ 6,400 pixels

TECHNICAL SPECIFICATIONS

PERFORMANCES

- Frame Rate: up to 50Hz
- NETD: 100 mK (F/1, 27°C, 50Hz)
- Scene dynamic: > 300°C
- Array operability: > 99.5%
- Low power consumption: $\leq 25 \text{ mW}$
- Operating temperature range: - 40°C to + 85°C
- Standards: MIL-STD-810 and -883
- MTTF: > 15 years
- Over exposure / Sun safe

FEATURES

- Detection technology: microbolometer
- 80 x 80 2D array, 34 µm pixel-pitch
- Spectral response: 8 14 µm
- Friendly electrical interface driven by I2C serial link
- Overall dimension (mm): 16.5 x 16.5 x 5
- Weight: < 5 g

Thermal sensor arrays

Micro*80P*™: Inventing a new world of thermal applications

About ULIS

ULIS, a subsidiary of Sofradir and GE Equity, specializes in the design and manufacture of high quality infrared imaging sensors for thermography, security & surveillance, automotive and military applications. It enables makers of consumer electronics and infrared equipment to produce low weight, low power consumption and cost-effective thermal cameras in large volume.

ULIS is ranked #2 in the world for infrared (IR) sensors delivered. It is one of the few to use amorphous silicon-based technology that provides unusually high uniformity, a key parameter for high-resolution imaging. Due to its amorphous silicon technology, a robust and reliable semiconductor material proven for its industrial production capacity, the company also achieves large-scale production, which is enabling it to meet the growing demand from existing commercial and emerging markets.

ULIS is located in Veurey-Voroize, near Grenoble, and employs 150 people.



ZI Les Iles Cordées BP 27 - 38113 Veurey-Voroize - FRANCE Phone: +33 4 76 53 74 70 - Fax: +33 4 76 53 74 80 www.ulis-ir.com - ulis@ulis-ir.com

M80P-04-2013/01

"ULIS IR videos"on You Tube

