

U3600 LCC

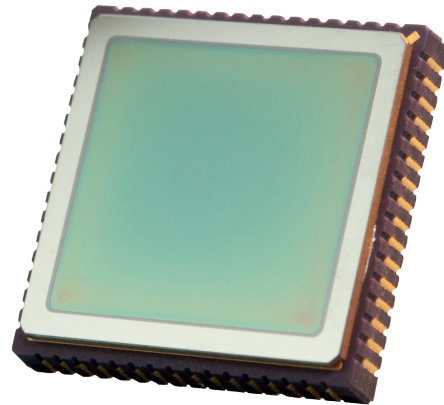


MEETING TODAY'S CHALLENGES TO PROVIDE A SECURE FUTURE

An advanced version of the market's smallest, lightest 320 x 240 thermal imaging detector, the low-cost U3600 LCC offers a 17 micron pixel pitch focal plane array for even sharper displays. This uncooled sensor, designed especially for commercial applications, incorporates vanadium-oxide technology for long-wave infrared detection.

Weighing less than 4 grams and measuring just 1.83 x 1.83 x 0.37 cm, the U3600 LCC features a low-profile, surface-mountable ceramic leadless chip carrier (LCC) that can be mounted to any printed circuit board using a LCC socket. Its ability to create crystal-clear thermal images in challenging environmental conditions and even total darkness is maintained by on-chip temperature feedback, which eliminates the need for a thermoelectric cooler.

The U3600 LCC is ideal for commercial products requiring an exceptionally compact and lightweight imaging capability, including security, surveillance and monitoring systems.



- Focal plane array features 17 micron pixel pitch
- Lighter and more compact than any competing 320 x 240 detector
- Low cost infrared solution
- Uncooled vanadium-oxide technology
- Low-profile, surface-mountable ceramic leadless chip carrier

SYSTEM FEATURES

FOCAL PLANE ARRAY

Detector Type	Uncooled VOx Microbolometer
Array Size	320 x 240
Detector Pitch	17 μm
Spectral Response	LWIR 8 - 14 μm

VIDEO

Frame Rate	60 Hz
Nominal Data Rate	5 MHz
Format	NTSC/PALCompatible

ELECTRICAL

Power	≤ 120 mW Nominal
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PART NUMBER	1013600-001
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PERFORMANCE

Sensitivity (NETD)	<40 mK @ F/1
Multiplexer	CMOS Ripple Integration
Area Fill Factor	90%
Typical Operability	>99%
Number of Analog Outputs	1
Output Voltage Range	1.2 - 3.2 v
Time Constant	≤ 14 msec
Temperature Stabilization	No TEC required (On-Chip Temperature Feedback)
On-chip Non Uniformity Correction (NUC)	7 bits parallel

MECHANICAL

Dimensions (L x W x H)	1.83 x 1.83 x 0.37 cm (0.72 x 0.72 x 0.145 inches)
Weight	<4 g

ENVIRONMENTAL

Operating Temperature	-40°C to +85°C
Storage Temperature	-46°C to +85°C

* Specifications subject to change without notice.

Specifications subject to change without notice. The products described herein are subject to US Government Export Controls.