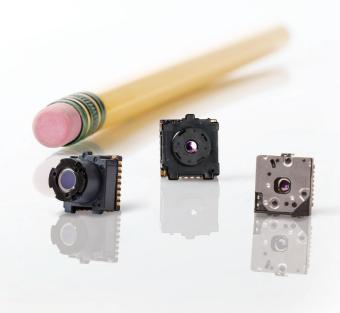
### 阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网,版权归原作者所有。如读者和版权方有任何异议请及时告之,我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译,其目的是协助用户阅读,该译文无法自动跟随原稿更新,同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料,来自厂商的技术支持或者使用者的心得体会等,其内容可能存在描 叙上的差异,建议读者做出适当判断。
- 4.如需与我们联系,请发邮件到marketing@iczoom.com,主题请标有"数据手册"字样。

## **Read Statement**

- 1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
- 2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
- 3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
- 4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets".



# FLIR LEPTON®

#### Longwave Infrared (LWIR) Camera Module

The FLIR Lepton is an LWIR camera solution that is smaller than a dime, can fit inside a cell phone, and is ten times less expensive than a traditional IR camera. Using a focal plane array (FPA) of  $80 \times 60$  active pixel, Lepton easily integrates into native mobile-devices and other electronics as an IR sensor or thermal imager.

#### **ENHANCED IR SENSOR**

Greater sensitivity than common thermopile arrays

- Thermal sensitivity <50 mK
- Optional temperature-stable output to support radiometric processing
- Low operating power, 150mW
- Low power standby mode

#### MICRO THERMAL IMAGER

Uncooled thermal imaging for small electronics

- Integrated digital thermal image processing
- Multiple lens options: 50° / 25° FOV
- Shutter option available
- Fast time to image (<0.5 seconds)

#### **EASE OF INTEGRATION**

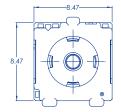
Simplifies development and manufacturing of thermal-enabled devices

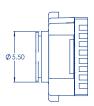
- 8.5 x 8.5 x 5.6 mm package
- Export Compliant (<9Hz)
- MIPI and SPI video interfaces
- Uses standard cell phone-compatible power supplies
- Two-wire serial control interface
- 32-pin socket interface to connector

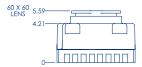


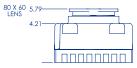
#### **Specifications**

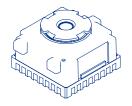
Overiew	LEPTON 50° shutterless	LEPTON 25°	LEPTON 50° w/shutter
Sensor technology	Uncooled VOx microbolometer		
Spectral range	Longwave infrared, 8 µm to 14 µm		
Array format	80 × 60, progressive scan		
Pixel size	17 μm		
Effective frame rate	8.6 Hz (exportable)		
Thermal sensitivity	<50 mK (0.050° C)		
Temperature compensation	Automatic. Output image independent of camera temperature.		
Non-uniformity corrections	Shutterless, automatic (with scene motion) Automatic with shutter		
Image optimization	Factory configured and fully automated		
FOV - horizontal	51°	25°	51°
FOV - diagonal	63.5°	31.3°	63.5°
Output format	User-selectable 14-bit, 8-bit (AGC applied), or 24-bit RGB (AGC and colorization applied)		
Solar protection	Integral		
Electrical			
Input clock	25-MHz nominal, CMOS IO Voltage Levels		
Video data interface	Video over SPI		
Control port	CCI (I2C-like), CMOS IO Voltage Levels		
Input supply voltage (nominal)	2.8 V, 1.2 V, 2.5 V to 3.1 V IO		
Power dissipation	Nominally 150 mW at room temperature (operating), 4 mW (standby)		
Mechanical			
Package dimensions – socket version	$8.5 \times 8.5 \times 5.6$ mm (w $\times$ l $\times$ h)		
Weight	0.55 grams (typ)	0.55 grams (typ)	0.55 grams (typ)
Environmental			
Optimum operating temperature range	-10 °C to +65 °C		
Non-operating temperature range	-40 °C to +80 °C		
Shock	1500 G @ 0.4 ms		











#### SANTA BARBARA

FLIR Systems, Inc. 70 Castilian Drive Goleta, CA 93117 USA PH: +1 805.964.9797

#### EUROPE

FLIR Systems Luxemburgstraat 2 2321 Meer Belgium PH: +32 (0) 3665 5100

www.flir.com NASDAQ: FLIR

#### PORTLAND

Corporate Headquarters FLIR Systems, Inc. 27700 SW Parkway Ave. Wilsonville, OR 97070 USA PH: +1 866.477.3687

#### CHINA - SHANGHAI

FLIR Systems, Co., Ltd. K301-302, No.26 Lane 168, Daduhe Road, Putuo District, Shanghai 200062,P.R.China PH: +86-21-5169 7628

Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited. Imagery for illustration purposes only. Specifications are subject to change without notice. ©2014 FLIR Systems, Inc. All rights reserved. (Updated 061215)

