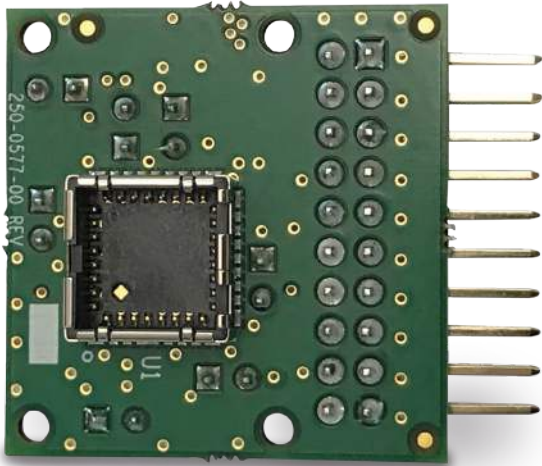




EASY-TO-INTERFACE EVALUATION BOARD

FLIR Lepton® Camera Breakout Board v2.0

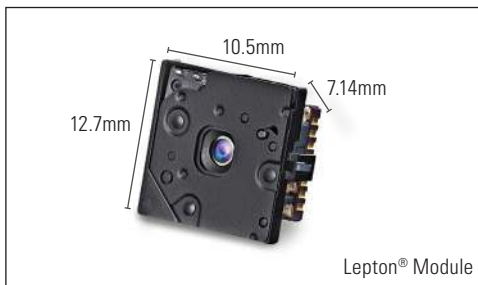


PN: 250-0577-00

The FLIR Lepton® Thermal Camera Breakout Board is an easy-to-interface evaluation board to quickly connect all versions of the FLIR Lepton camera module to common platforms like Raspberry Pi* or custom hardware such as mobile development kits. It provides on-board power supplies, generated from 3 – 5.5V, and a master clock. Local power supplies, the master clock and the power-up sequence components can all be by-passed using a jumper.

Lepton sold separately or in a kit through major electronic component distributors worldwide.

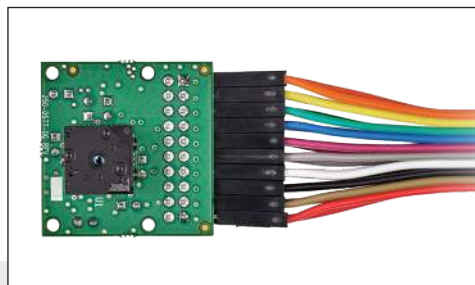
www.flir.com/lepton-bob



SIZE, WEIGHT AND POWER (SWAP)

Enhanced Features

- Operating temperature 0°C to 55°C
- Input Voltage: 3 V to 5.5 V
- Space-Saving, (29.5 mm × 29.0 mm)
- Works with all FLIR Lepton® modules



EASE OF INTEGRATION

Faster time to market

- Access to SPI and I2C camera module interfaces
- Provides 25-MHz reference clock (can be by-passed)
- Power Efficient 1.2 V core voltage (can be by-passed)
- Dual Low Noise LDO for 2.8 V voltage (can be by-passed)
- 32-pin Molex camera socket for Lepton® Module
- 100 Mil Header



APPLICATIONS

Designed for applications where SWaP, cost, and quality are critical

- Rugged and Mobile Devices
- Smart Buildings and Smart Cities
- Motion Sensor
- Gesture Recognition

*Raspberry Pi is a trademark of the Raspberry Pi Foundation. This product is not designed or qualified for production use.

SPECIFICATIONS

Mechanical

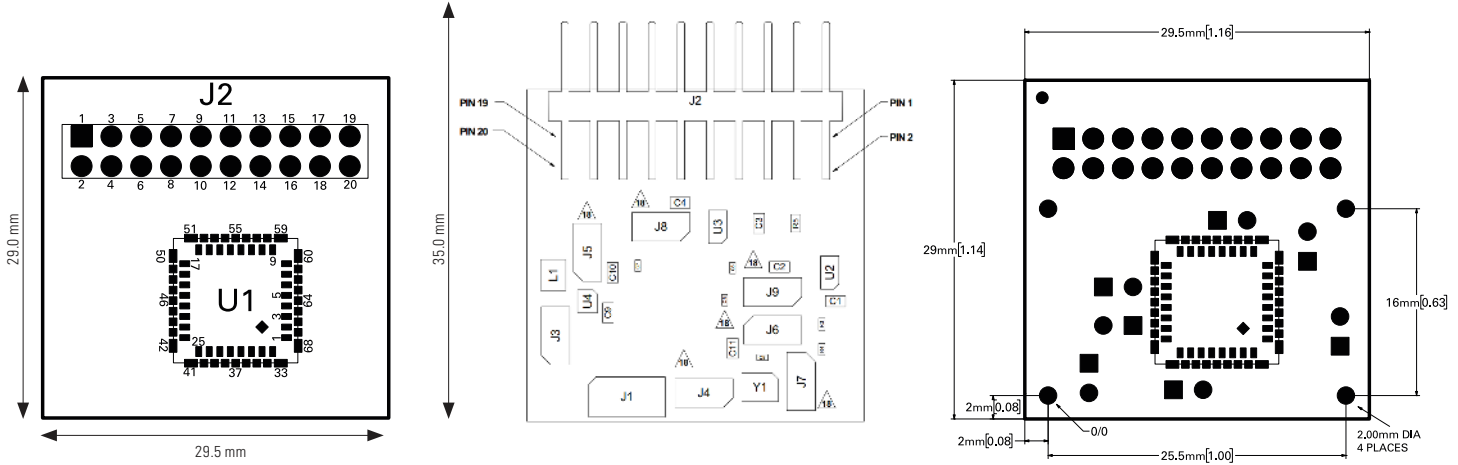


Figure 1. Mounting hole locations.

Thickness including Molex socket and jumper pins but excluding the Lepton: 15mm.

Electrical

Schematic: 250-0577-24_R200

Assembly drawing: 250-0577-25_R200

The Lepton breakout board comes with jumpers on J5 – J9 installed. With all jumpers installed Lepton can be operated from J2 with 3-5V on J3 pin 2*. Jumpers J5 – J9 can be removed to provide control individual voltage, master clock or power up sequence externally.

*The diode D1 on version R120 of the Lepton Breakout Board 250-0577-00 is installed with the wrong orientation which prevents powering the Lepton from J2 pin 2. However, the Lepton can be powered with 3 – 5V on J3 pin 2.

Pin-Out

Pin #	Function	Pin #	Function
Pin 1	GND	Pin 2	Power in 3 – 5.5V
Pin 3	VPROG	Pin 4	VCC28
Pin 5	SDA	Pin 6	VCC28_IO
Pin 7	SPI_CLK	Pin 8	SCL
Pin 9	SPI_MOSI	Pin 10	SPI_CS
Pin 11	GPIO0	Pin 12	SPI_MISO
Pin 13	GPIO2	Pin 14	GPIO1
Pin 15	GPIO3 / VSYNC	Pin 16	VCC12
Pin 17	RESET_L	Pin 18	MASTER_CLK
Pin 19	GND	Pin 20	PW_DWN_L

Specifications are subject to change without notice. For the most up-to-date specs, go to www.flir.com

FLIR SYSTEMS, INC.

Corporate Headquarters
1201 S. Joyce Street
Suite C006
Arlington, VA 22202
USA
Office: +1 703.682.3400

FLIR Systems, Inc.
27700 SW Parkway Ave.
Wilsonville, OR 97070
USA
PH: +1 886.477.3687

SANTA BARBARA

FLIR Systems, Inc.
6769 Hollister Ave.
Goleta, CA 93117

EUROPE

FLIR Systems, Inc.
Luxemburgstraat 2
2321 Meer
Belgium
Tel. : +32 (0) 3665 5100
Fax : +32 (0) 3303 5624

www.flir.com
NASDAQ: FLIR

Equipment described herein is subject to US export regulations and may require a license prior to export. Diversion contrary to US law is prohibited. Imagery for illustration purposes only. Specifications are subject to change without notice. ©2021 FLIR Systems, Inc. All rights reserved. 01/21

21-0085-OEM



The World's Sixth Sense®