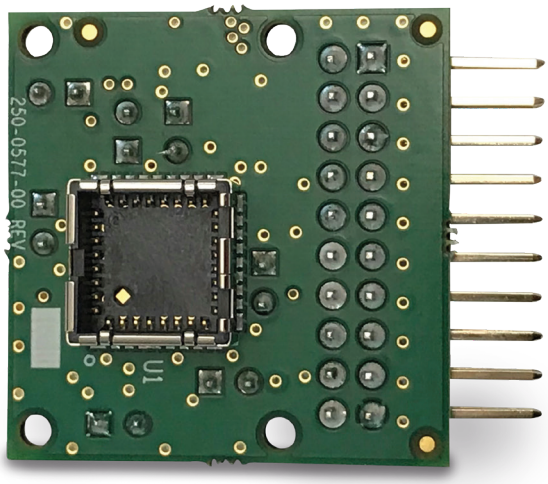


PN: 250-0577-00

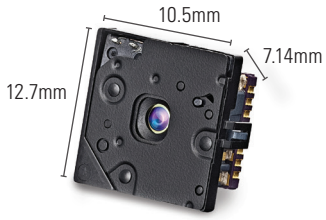
EASY-TO-INTERFACE EVALUATION BOARD

FLIR Lepton® Camera Breakout Board v2.0

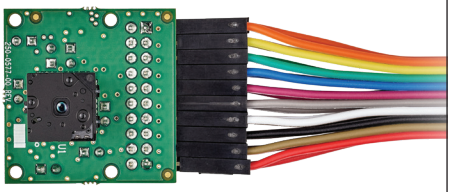
The FLIR Lepton® Thermal Camera Breakout Board is an easy-to-interface evaluation board to quickly connect all versions of the FLIR Lepton camera module to common platforms like Raspberry Pi* or custom hardware such as mobile development kits. It provides on-board power supplies, generated from 3 – 5.5V, 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



Lepton® Module



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

APPLICATIONS

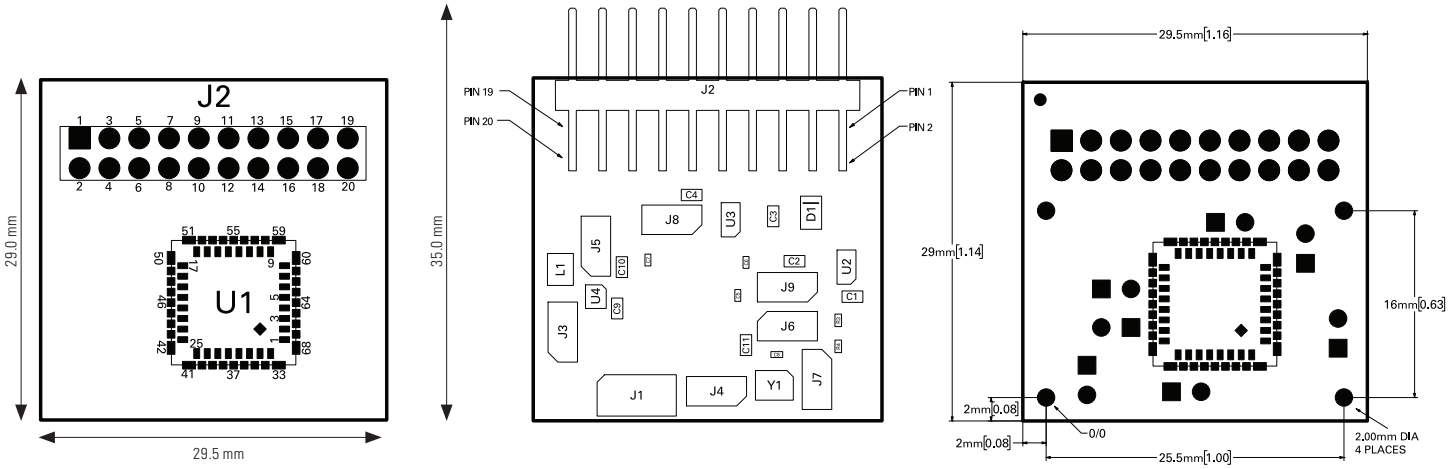
Designed for applications where SWaP, cost, and quality are critical

- 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



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

Figure 1. Mounting hole locations.

Electrical

Schematic: 250-0577-24_R120
Assembly drawing: 250-0577-25_R120
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

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