

Key Features

160x120 FPA size

35 μ m detector pitch

Wafer-level vacuum packaged

Supports both 3-wire SPI and I2C programming interfaces

Ultra low-cost CMOS infrared (CIR) microbolometer technology
Patent granted

UNDER
DEVELOPMENT

Technical Specifications

Detector Technology	CMOS Infrared (CIR) Microbolometer
Wavelength	7.5 μ m – 13.5 μ m (LWIR)
FPA Size	160 x 120
Detector Pitch	35 μ m
NETD	< 250 mK @ 17 fps with F/1 optics
	< 110 mK @ 4 fps with F/1 optics
Electrical Power Dissipation	< 30 mW 3.3V analog, 1.8V digital power supply
Frame Rate	Up to 30 fps, programmable
Readout Mode	Rolling line
Readout Gain	Programmable
Video Output	Pseudo-differential analog output, 2.0V swing
Sensor Programming Interface	Selectable 3-wire SPI or I2C interfaces
Video Synchronization	Provides frame, line and pixel synchronization signals
Physical Dimensions	8" CMOS wafers, 7.7mm x 8.6mm expected die dimensions
Availability	Tested dies and wafers will be available as engineering samples @ Q4/2017
Engineering Characterization Platform	Testing platform (electronics, firmware, software, and SDK) will be available @ Q4/2017