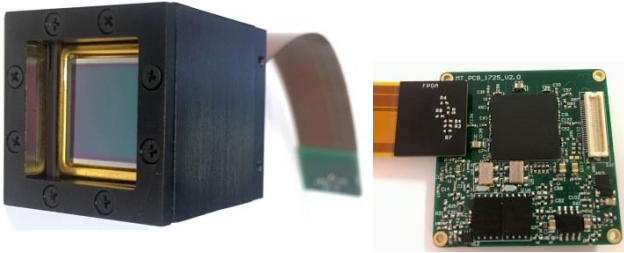


MT-CORE-F-B6417

640 x 480 - 17µm LWIR Camera Core



Features

- 640 × 480-17 µm Array Format
- 8-12 µm Spectral Response Range
- 30 Hz Frame Rate
- ≤100 mK NETD with f/1 optics
- FPA in ceramic vacuum package
- ASIC based drive and control electronics

Technical Specifications

Product Type	Microbolometer Camera Core	
Format	640 × 480	
Pixel Pitch	17 μm	
Sensor Type	VO _x or similar	
Spectral Response	LWIR (8-12 μm)	
FPA Package Type	Ceramic Vacuum Package	
ROIC	MT6417BA	
Drive Electronics	ASIC (MTAS1410X4) based	
Frame Rate	≤ 30 Hz	
Readout Mode	Rolling Shutter	
NETD	≤ 100 mK @ 30Hz with f/1 optics	Peak Value in the Histogram
Power Consumption	≤ 3.0 W at 30 Hz	
Supply Voltage	5 V	
Temperature Sensor	Integrated in the ROIC, with ≥ 1 mV/K sensitivity	
Operating Temperature	-10°C ≤ T _{op} ≤ 50°C	
Pixel Operability	≥ 95 % in the full array of 640x480 pixels	
ELECTRICAL INTERFACE		
System Clock	40 MHz for 30 fps (Optimized)	
Video/Control Interface	ITU-R BT.656 or CameraLink (Base)	UART (LVCMOS33)
ADC Resolution	14-bit	
Connector	50-pin HIROSE DF12 series	
Image Enhancement	Offset/Gain Correction, Histogram Equalization	
Mechanical Dimensions	26.6 mm × 26.6 mm × 28.0 mm (FPA and ASIC Core) 40 mm x 40 mm x 7 mm (FPGA board)	
Weight	≤ 40 g	