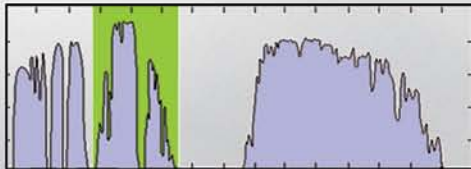




AIM

HiPIR - Engine HOT MCT 1024 x 768 10 μ m PITCH IR ENGINE

ULTRA-COMPACT HIGH PERFORMANCE MWIR ENGINE



- Ultra-low size, weight and power characteristics
- High operating temperature
- Preserving ~5 μ m cutoff-wavelength
- Best suited for applications such as micro UAVs, small gimbals, portable systems or clip-on sights
- Optional small video processing unit available
- Top level PCB (Image processing is optional)



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ULTRA-COMPACT HIGH PERFORMANCE MWIR ENGINE

Preliminary data sheet

IR Sensor

| | |
|----------------------------|------------------------------------|
| Material | HgCdTe - Cadmium Mercury Telluride |
| Format | 1024 x 768 (XGA) |
| Pixel pitch | 10µm x 10µm |
| Detector spectral response | 3.4µm - 4.8µm |
| FPA operating temperature | ~160K |

ROIC

| | |
|--------------------|---|
| Read out modes | Selectable ITR / IWR |
| Full well capacity | ~5.5Me ⁻ (ITR); ~3.7Me ⁻ (IWR) |
| Windowing | programmable (any window in steps of 4 columns and 1 row) |

SWaP

| | |
|--------------------------------|---|
| Size (Length x Height x Width) | 60mm x 60mm x 50mm (2.36 x 2.36 x 1.97 inches) |
| Weight | ~ 0.37 kg (~0.8lbs) |
| Power consumption | < 4W (regulated mode @ ambient room temperature) |
| Cold shield | F/2.2; others on request |

Electronics

| | |
|------------------------|---------------|
| Video outputCooler | CL LVDS 14bit |
| Full frame rate | 50Hz / 60Hz |
| Nominal supply voltage | 12VDC |

Performance

| | |
|----------------|--|
| NETD | < 25mK (at 300K; 50% well fill) |
| Operability | > 99% |
| Cool down time | ~ 3 minutes @ ambient room temperature |

BiOptions

| | |
|---------------------------------|--|
| Stackable image processing unit | BPR, NUC, dynamic reduction, several reference sets for NUC HDMI video output, frame rate 25Hz / 30Hz |
|---------------------------------|--|

