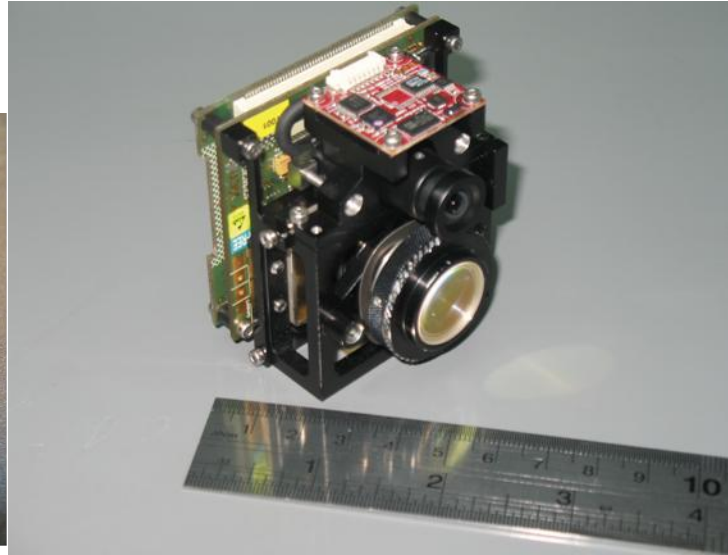
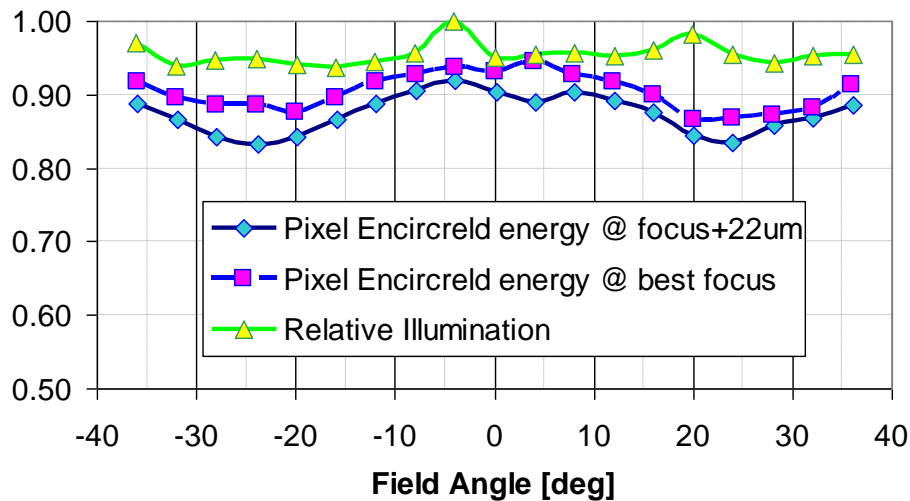
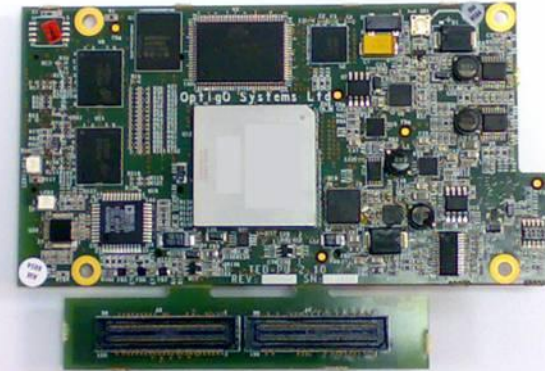


# OPTIGO SWIR BUILDING BLOCKS

A-thermalized lens



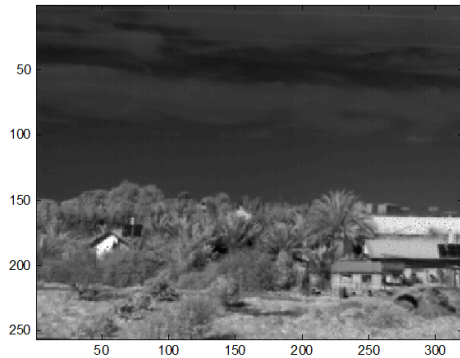
Miniature Image processor



- Weight < 150gr
- $-30C < T < +60C$
- Dual Band
  - ✓ CMOS/CCD
  - ✓ SWIR
- Cam-Link™ outputs
  - 1000 FPS, 320×256
  - 250 FPS, 640×512
- P < 2.5 Watt

- Real Time image processing @ 1Gbps
- P < 6W
- Serial Comm outputs
- Output Video interface
- USB-2 outputs
- Nav. Data inputs
- Battery operated

# Imaging Examples



**60° 320×256 WFOV**  
**w/NUC, room temp**  
**973uSec, IWR**



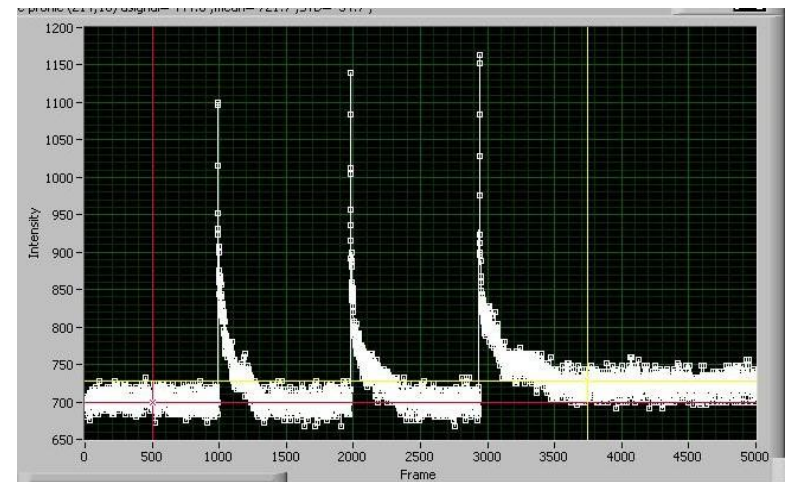
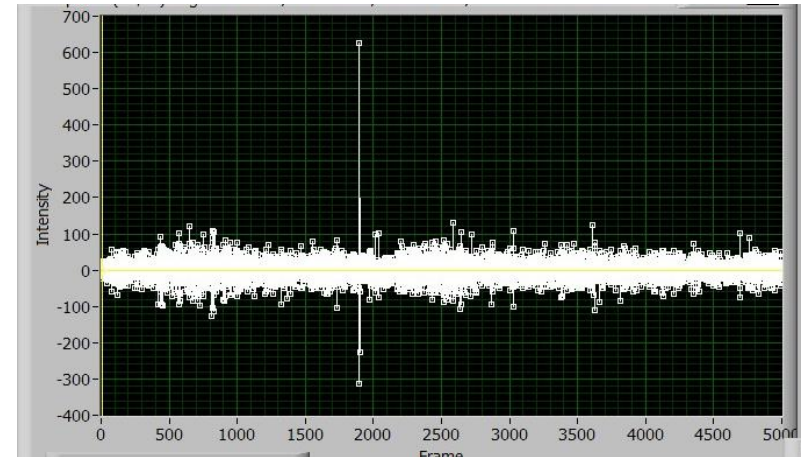
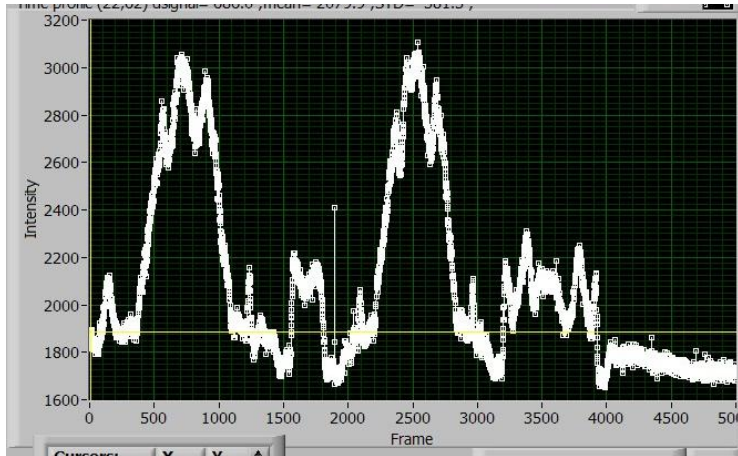
**WFOV , 640×512 ,F#6,**  
**973uSec, w/NUC, -4°C, IWR**

**1000 FPS Movie**



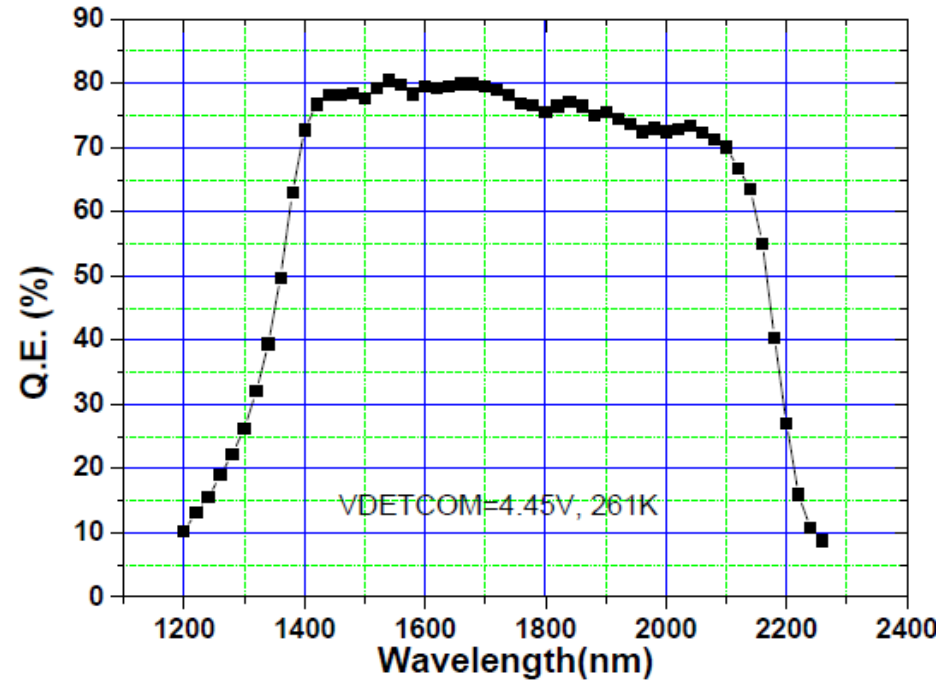
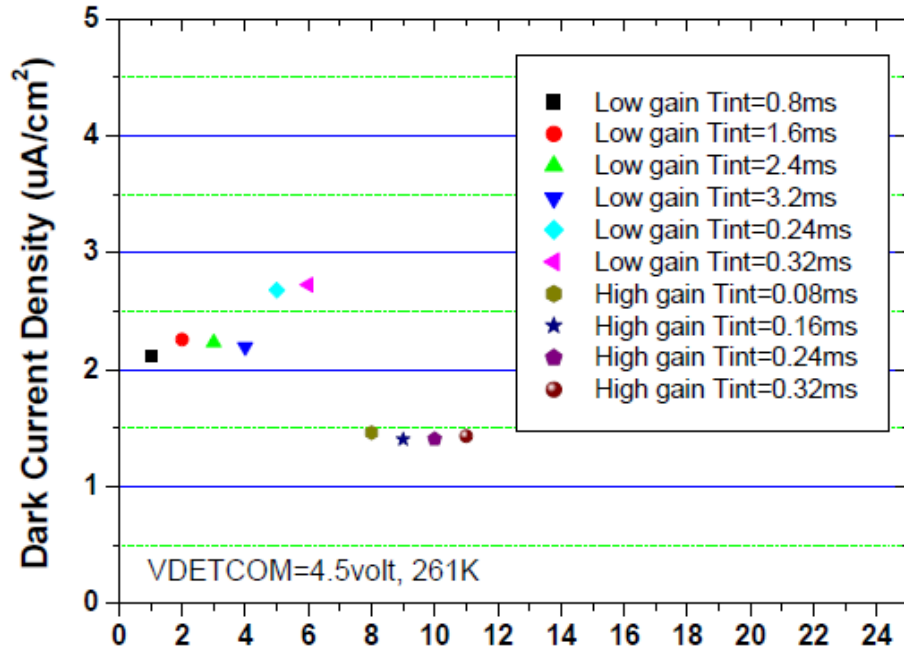
# Before / After signal processing

SWIR Image signal measured at 1000 Hz



*G. Tidhar et al, Proc SPIE 6542 (2007)*

# 2.2 $\mu\text{m}$ cutoff SWIR Focal Plane array, 320 $\times$ 256/30 $\mu\text{m}$ - 640 $\times$ 512/25 $\mu\text{m}$



## Low-Gain:

Dark Current  $\sim 2 \div 3 \mu\text{A}/\text{cm}^2$  @ -0.2V / -12 $^\circ\text{C}$

$\rightarrow$  Dark Current  $< 1 \mu\text{A}/\text{cm}^2$  @ -0.2V / -50 $^\circ\text{C}$