

OPENING THE PLUGUP FAMILY TO STATE-OF-THE-ART IMAGE CORRECTION



The **ATI GALATEA SL™ Advanced Thermal Imager** is a SWaP module that streamlines camera development for diverse applications such as UxS (Unmanned systems) and surveillance.

The **ATI GALATEA SL™** incorporates a proven, high performance LYNRED thermal sensor combined with advanced image algorithms, ensuring the delivery of high-quality thermal images.

 **HIGH END ALGORITHMS**

 **EMBEDDED WITHIN PLUGUP™**

 **UNIQUE ELECTRICAL INTERFACE FOR C&CE**



# OPENING THE PLUGUP FAMILY TO STATE-OF-THE-ART IMAGE CORRECTION



HIGH  
PERFORMANCE  
ALGORITHMS



LOW POWER  
CONSUMPTION



COMPACT

## PRODUCT EMBEDDED FEATURES

IDDCA + PROXIMITY BOARD + CRYOCOOLER CONTROLLER + ATI BOARD

### ARRAY FEATURES

Detector spectral response	3.6 to 4.2 $\mu$ m
FPA operating temperature	Up to 150 K

### ROIC (READ-OUT INTEGRATED CIRCUIT)

Selection	IWR and ITR
Windowing modes	TBD
Charge handling capacity	2.1 Me-
Signal output rate	10 MHz
Frame rate	up to 60 Hz

### PERFORMANCES

NETD Sensor	< 28 mK (27°C, 50%WF, f/4)
NETD Post Process	< 20 mK
Array operability	> 99.5%
RFPN at 50% well fill	< 0.5 x RMS noise
Aperture	f/4; f/5.5
Lag Time	1 Frame

### INTERFACES

Video output	CameraLink®, USB3
Product Power Supply	12 Vdc typical
Connector	SAMTEC LSHM-140-025-L-DV-A-S-K

### PHYSICAL CHARACTERISTICS

Maximum Outline dimensions (LxWxH)	58.5 mm x 77 mm x 72.5 mm
Weight	375 g

### K588

Regulated Input power @20°C	4Wdc
Cooldown Input power @20°C	12Wdc
Cooldown time @20°C	3mim 30s
Cooler MTTF	32,000hrs

## EMBEDDED ALGORITHMS ONTO FINAL PRODUCT

### ALGORITHMS

- 2 point Non-Uniformity Correction (up to 4 tables)
- Bad Pixel Replacement
- Denoising (Spatial & Temporal)
- Evolutive Bad Pixel Detection
- Image Flip (H/V)
- Video Test Pattern
- Destripping
- Tone Mapping
- Digital Detail Enhancement
- Graphic Overlay

### AVAILABLE SERVICES

Technical training and support

LYNRED Toolbox™ (LTB)



RAW



CORRECTED

### LYNRED HEADQUARTERS DEVELOPMENT & PRODUCTION CENTER

Actipole - CS 10021 - 364, route de Valence  
38113 Vorey-Voroize - France  
Phone +33 (0)4 76 28 77 00  
info@lynred.com

### LYNRED ASIA PACIFIC PTE LTD

5 Shenton Way,  
#22-04 UIC Building  
068808 Singapore  
info@lynred.com

### LYNRED USA

373 US Highway 46W  
Fairfield, NJ 07004, USA  
Phone +1 973.882.0211  
info@lynred-usa.com

### NIT (New Imaging Technologies) Premium SWIR by LYNRED

1 impasse de la Noisette  
91370 Verrières-le-Buisson - France  
Phone +33 1 64 47 88 58  
info@new-imaging-technologies.com