

READY TO SENSE, READY TO IMAGE



The **ATI640™ Advanced Thermal Imager** is a plug-and-play module that streamlines camera development for diverse applications such as outdoor leisure, surveillance, and UAVs.

The ATI640™ incorporates a proven, **high performance** LYNRED thermal sensor combined with advanced image algorithms, ensuring the delivery of high-quality, **corrected, and focused thermal images.**



Experience seamless integration with the ATI640™, arriving fully calibrated from the factory. Its advanced **shutterless** technology ensures uninterrupted imaging, eliminating freezing moments, and offering unrivaled experience.



HIGH IMAGE QUALITY WITH EMBEDDED CORRECTION AND SHUTTERLESS FUNCTION



SWAP



ACCELERATE YOUR SYSTEM DEVELOPMENT



LEISURE



SURVEILLANCE



DEFENSE

•• ATI640™: READY TO SENSE, READY TO IMAGE ••

ATI640S-SL™



ATI640L17™



ATI640L33™



ATI640L60™



COMPACT

LOW POWER CONSUMPTION

IMAGE QUALITY

SHUTTERLESS IMAGING

FACTORY CALIBRATED

KEY FEATURES

Shutterless design for uninterrupted imaging	■ ATI640™ features an embedded proprietary shutterless image processing enabling continuous imaging.
Easy interface	■ Outputs: Parallel LVCMOS 14 bits or 24 bits with colorization (3*8 bits) Serial MIPI CSI2 D-PHY (single data lane, 4 wires, Raw8, Raw14, YUV422)
Flexible and versatile solution	■ Available with or without a lens; ATI640™ provides the best versatility to match camera makers needs
Embedded advanced correction and features	■ NUC, BPR, Temporal and spatial denoising, Digital Detail Enhancement, Tone mapping, Colorization, Symbol and text Overlay

MAIN TECHNICAL ATTRIBUTES

Resolution; pixel pitch	■ 640 X 480; 12µm pixel pitch		
Sensitivity NETD (60 Hz, F/1, 300K, Denoising)	■ ≤ 24mK		
NUC (Non Uniformity Correction) and BPR (Bad Pixel Replacement)	■ Factory pre-calibrated and compensated		
Operating temperature	■ [-40°C ; +65°C]		
Image quality temperature range	■ [-20°C ; +65°C]		
Frame rate	■ 60 Hz full frame		
Power consumption (ambient temperature)	■ < 1.0 W		
Time to first image	■ 1 second		
Frame Latency	■ ~ 1.25 ms		
Packaging	■ Size: 24.6 x 24.6 mm ■ Weight: ATI640S: 15g, ATI640L17: 101g, ATI640L33: 54g, ATI640L60: 60g		
Focus range	ATI640L17™	ATI640L33™	ATI640L60™
EFL	■ 3m - ∞	■ 9m - ∞	■ 2m - ∞
F/#	■ 25 mm	■ 13 mm	■ 7.5 mm
HFOV	■ 1.0	■ 1.0	■ 1.2
	■ 17°	■ 33°	■ 60°
Qualification	■ MIL-STD-883L, MIL-STD-810H		
Regulatory	■ REACH; ROHS		



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