

Atom® T320



Uncooled Infrared Camera Core with QVGA Resolution

- Plug and Play
- SWaP Optimized
- Enhanced Image Processing
- Fast Object Detection
- High Quality Images
- Longterm Reliability



The Atom T320 is a full function uncooled IR camera core supplied ready to integrate with or without lens.

The unit is the first in a new series to incorporate a ULIS 12 micron pixel pitch sensor with 320 x 240 resolution for detection and imaging in the LWIR spectral range. With a very small footprint and low power consumption, the Atom T320 is the perfect foundation for next generation professional grade systems. The incorporation of newly developed image processing algorithms ensures image clarity is maintained during all operating conditions.

Rugged, compact and lightweight, the Atom T320 is poised for use in weapon sights and other applications such as UAVs, 24/7 surveillance, handheld imagers, wearables, and automotive obstacle detection systems that necessitate the reliable performance of a long wave infrared detection unit under diverse weather/environmental conditions.

Sensor Type	ULIS Gen2 microbolometer
Array Size	320 x 240 pixels
Pixel Pitch	12 microns
Detector Spectral Range	8-14 microns
Frame Rate	30Hz (60Hz October '18)
Thermal Time Constant	8 ms nominal
Detector Sensitivity (f/1)	< 60 mK
Time to First Image	< 2 seconds
Video Processing	Non-uniformity correction, Auto/Manual gain, BPR, Digital Zoom, Image Enhancement, Local Area Processing, Noise Filters, Digital Filtering, Built-in Self Test, Test patterns, Image Orientation, External Synchronization.

FEATURES

- 320 x 240 resolution with 12 μ m pixel pitch
- Low SWaP/cost
- Advanced image processing
- 30Hz frame rate (60Hz October '18)
- 8ms thermal time constant nominal
- <1 Watt (configuration dependent)

BENEFITS

- Low cost core and optics
- Suitable for high volume, portable, consumer applications
- Improved image quality
- Smooth motion within scene
- Less image blur - sharp images of objects in motion
- Longer battery life

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Why choose Sofradir-EC?

Industry Experience

Sofradir-EC is recognized as a leader in engineered infrared detection technology for commercial, space and defense applications. For over 40 years the company has provided system integrators and OEMs the best infrared products that deliver exceptional performance, imagery, reliability and value. Having strategic partnerships with world renowned component manufacturers ensures only the most advanced and proven devices are used in our systems.

Product Development, Performance, Commitment to Quality

Sofradir-EC partners with system integrators and OEMs with the goal of the customer's successful project – one that utilizes the correct components that are easily integrated so the project can be completed on time and within budget. This is accomplished with a “concept to solution” approach which allows for the use of technically advanced components, group collaboration, quick responses and final products tested to spec.

Sofradir-EC is in control of the entire camera core development process. As part of the world renowned Sofradir Group and being the exclusive distributor in North America for Sofradir IDDCAs and ULIS thermal sensors, Sofradir-EC uses only validated/proven sensors with excellent operability and reliability. Sofradir and ULIS are large volume global manufacturers of infrared detectors. Sofradir is the leading developer and manufacturer of key classes of advanced infrared detectors for military, space, scientific and industrial applications. They are also the leading European manufacturer for IR detectors deployed in space. ULIS is the second largest producer of thermal sensors in the world.

Support

Sofradir-EC prides itself on the flexibility of products offered and the customer support/training that is available to OEMs and system integrators. Whatever level of integration is chosen - a detector, detector/proxy board, various levels of camera cores, or fully integrated systems Sofradir-EC is there to assist.

Sofradir-EC can help you deliver your products faster and better meet your customer needs with configurations ranging from:

- Device level solutions for your full custom in house designs
- Proxy solutions with clean interfaces so you can customize all your own processing and interfacing
- Proxy plus standard IO configurations (USB3, Camera Link) controllable via your own unique environment
- Additions of mounting and shutter control to any of the above
- Full lens to detector image processing with logic level 14 bit corrected and enhanced video to allow maximum integration with your SWAP environment
- Complete camera core solution with varied standard IO interfaces

Let us help you with your next project



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Edition: 05-18