

PRESS NOTE

Madrid, May 27th 2013

Uncooled MWIR 80x80 module for OEM applications: the new TACHYON 6400 CORE

New Infrared Technologies (NIT) is introducing a new range of high-performance MWIR infrared cores/engines for OEM applications based on a new and revolutionary 80x80 Uncooled FPA ROIC, also developed by NIT. These new systems are developed under SWaP-C (Size, Weight, Power and Cost reduction) concept design.

The **TACHYON 6400 CORE** offers two different versions: the CORE-HS version is focused to defense applications allowing an image acquisition frame rate of 2 kHz (2,000 frames per second), whereas the CORE-S version is focused to industrial applications with an image acquisition frame rate of 500 Hz (500 frames per second). Both versions work in complete uncooled operation.

The infrared detection of the new module is mainly centered in the so-called MWIR band (3 – 5 microns), a strategic zone of the electromagnetic spectrum both for industrial process monitoring and for defense applications. The plug-and-play module allows an easy integration into third party systems as the sensing component, and, in addition, the uncooled performance at room temperature will also bring a reduction of future maintenance costs.

Market researches, as well as the Multiannual Strategic Roadmap 2014-2020 from Photonics 21, indicate the need for upgrading the current sensors based on single-element infrared detectors, to small two-dimensional detector arrays focused on SWaP-C design. This change will provide a deeper knowledge and understanding of the scene surveyed.

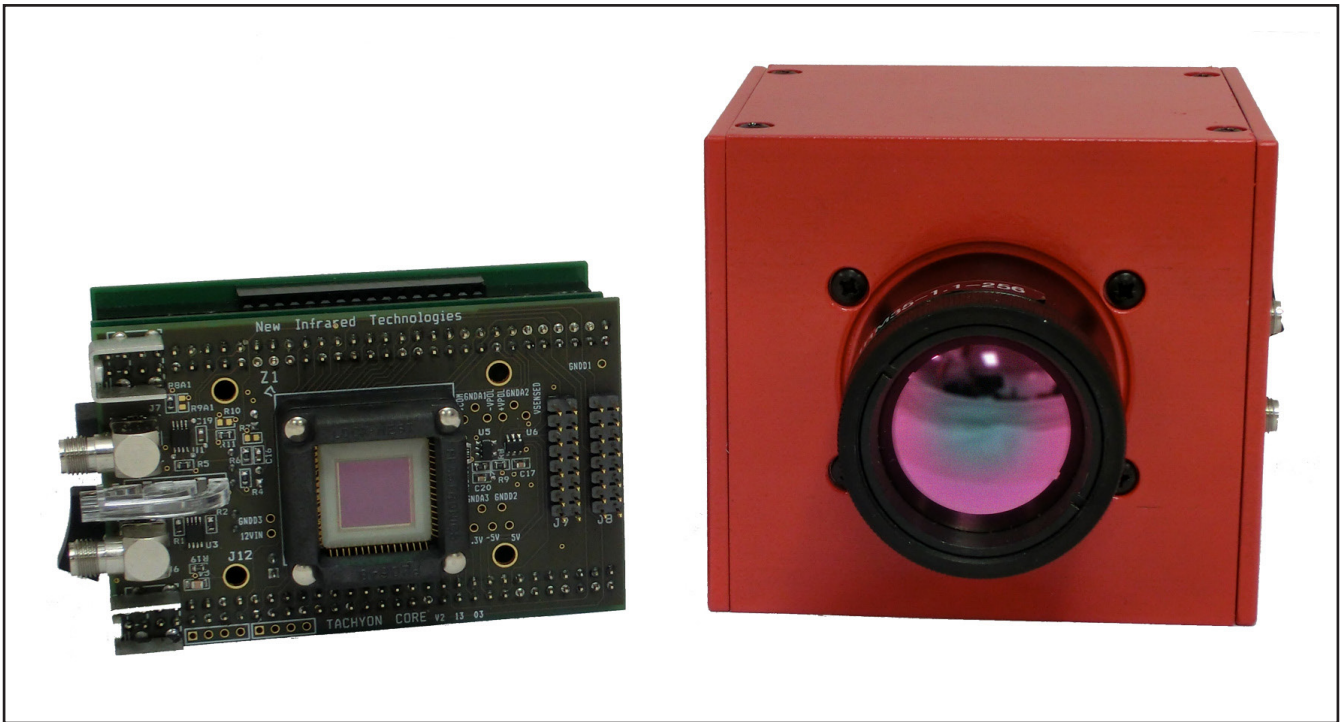
The small size, low power consumption and affordable price of the **TACHYON 6400 CORE** will improve the efficiency of manufacturing processes allowing better quality assurance during the different industrial processes due to the spatial information provided. Other applications include gas and fire detection & characterization, recycling identification and food inspection among others.

In addition, the new 80x80 **TACHYON 6400 CORE** from NIT will bring into the market a wide range of opportunities to develop multiple and new different applications based on affordable systems for the industrial sector. These types of application are needed to be identified in strong collaboration with OEM integrators and final equipment users, in order to develop the best performance.

In the defense industry, thanks to the high-speed of acquisition provided by the TACHYON 6400 CORE and its detector's characteristics, these systems will allow the development of passive infrared cueing systems (PICS), Active Protection Systems (APS), final guidance, intelligent ammunition and countermeasures, with an orientation to affordable system developments.

New Infrared Technologies manufactures MWIR (1 - 5 microns) uncooled detectors, being the only company offering high-speed imaging FPAs with these characteristics. The product offer is completed with linear arrays for scanning systems and single element detectors (cooled detectors also available), also offering electronic modules for high-speed acquisition (2,000 images per second and up to 20,000 lines per second), cameras for R+D and detectors for spectroscopy applications, all based on self-produced sensors.

For more information, visit www.the-new-tachyon-series.com or contact us at sales@niteurope.com.



New Infrared Technologies
Makes uncooled IR imaging fast and affordable!