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A*STAR to commercialize nanospectrometers

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Singapore: The Institute of Microelectronics (IME), a research institute of the Agency for Science, Technology and Research (A*STAR) in Singapore, has collaborated with Tornado Medical Systems, to commercialize nanospectrometers for optical coherence tomography (OCT) applications. OCT is a technique for obtaining high-resolution sub-surface images of translucent or opaque materials based on light, rather than sound or radio frequency. OCT has attracted interest from the medical imaging community for its ability to provide live 3D images at near microscopic levels, offering an 'optical ultrasound' alternative for doctors.

This collaboration brings together Tornado's industry-leading nanophotonics capabilities with IME's deep expertise in silicon photonics fabrication to provide the first commercial nanospectrometers for OCT applications. The commercial availability of small, robust, high performance on-chip spectrometers will meet the needs of the current OCT market as well as opens up exciting new commercial opportunities for low-cost, high-performance OCT applications.

"This partnership builds on Tornado's deep experience with conventional OCT and nanophotonics to deliver an affordable, high performance and robust spectrometer optimized for OCT applications," said Dr Stefan Larson, president and chairman, Tornado Medical Systems. "This partnership, along with our recent announcement regarding the acquisition of the spectroscopy assets of Arjae Spectral, will streamline our commercialization efforts significantly and position us for an exciting 2013."

"Tornado's collaboration with IME will ensure that we have a robust commercial product which can be delivered on time to our customers in 2013," said Mr Frederic Sweeney, VP, business development and strategic alliances, Tornado.

"The partnership demonstrates tremendous potential of IME's silicon photonics technology platform being applied beyond the traditional communications domain," said Professor Dim-Lee Kwong, executive director, IME. "This collaboration also exemplifies our continuous commitment to help our partners to be successful in commercializing their innovation, and contribute to the growth of the Silicon photonics industry. We are excited to be a partner of Tornado Medical Systems to realize their vision of delivering a compact OCT system that will revolutionize the marketplace."