Imaging with USB3

Canada-based Lumenera Corporation, a leading manufacturer and developer of high performance digital cameras and custom imaging solutions, recently announced that they have appointed a Sales Engineer and Sales Director, based in Germany, to better serve the growing machine vision market in Europe. As a global leader with cameras on all continents, the new Sales positions demonstrate Lumenera’s strong commitment to supporting and better understanding the needs of their customers and partners in the European market, as Dany Longval, Vice President of Worldwide Sales at Lumenera, explains. He additionally highlights their performance USB 3.0 cameras, the Lt Camera Series, which recently received USB3 Vision Certification.

Lumenera has been part of Roper Industries, a diversified US-based industrial group with revenues exceeding 3 billion USD, since 2006. Being part of a strong group with a global presence has enabled Lumenera to make optimal use of growth opportunities resulting from the USB3.0 revolution, says Mr. Longval. The new USB standard was launched in 2008. “USB 3.0 is more than 10 times as fast as USB 2.0,” Mr. Longval explains.

“This added speed, combined with the other new features offered by USB 3.0 is making a huge difference in the world of USB peripherals, including cameras. USB 3.0 also allows for higher image quality, and has opened up new applications for our high performance cameras.”

One of those new applications is digital pathology. Pathologists are doctors and scientists who study tissue, blood and other biological specimens to find the cause of illness and a route to treatment. Many of them still wield a microscope as their main weapon. They load it with a sample slide, analyse the contents through the eyepiece and dictate their findings to a voice recognition system or an administrative assistant who transcribes them into a report. New digital pathology systems dramatically speed up the process by digitising glass slides and managing the resultant information for later educational, diagnostic, and analytic purposes. A related technology, telepathology is the act of performing pathology over a distance, and is predominantly performed using digital pathology representations. Lumenera develops the highly specialist cameras that are central to any digital pathology application is imaging under the INFINITY name. INFINITY microscopy cameras also include INFINITY ANALYZE software, allowing complete camera control and advance image acquisition and analysis.

In addition, Lumenera’s INFINITY CAPTURE provides an intuitive user interface that contains all of the basic features needed to control the camera and capture images.

Lumenera recently had the USB 3.0 cameras in its industrial Lt Camera Series certified to the USB3 Vision standard, which is appointed by the world’s largest machine vision trade association, the AIA. USB3 Vision, which is defined by the AIA, ensures that certified products are interoperable with a standard set of interfaces and APIs. This enables Lumenera cameras to work with a wider suite of third party software. The USB3 Vision interface is based on the standard USB 3.0 interface and uses USB 3.0 ports that will soon be standard on most PCs. “While we have a large number of software partners that have developed drivers for our cameras, including our USB 2.0 solutions, being USB3 Vision certified adds support to simplify third party application integration for our customers,” said Dany Longval, Vice President, Worldwide Sales. “Our USB3 Vision cameras simplify imaging by making our solutions interoperable with the most popular third party software programs in the industry, ensuring that we have the best camera for any USB 3.0 application.” He adds that the timing of gaining USB3 certification at this stage has been important to Lumenera. “We waited for the standard to gain more traction.”

He goes on to explain that Lumenera sells it’s high performance cameras to OEMs in various industry verticals, notably including life sciences and manufacturing. The company offers different sets of performance specifications to suit specific applications: for some, a higher resolution but lower speed is required, and vice versa, for example. As Lumenera’s technology is integrated into system solutions, much value is attached to partnering with other imaging companies such as Nikon and Olympus. While North America is Lumenera’s domestic market, Europe is important too, says Mr. Longval. “Europe overall is the largest vision market worldwide, and Germany in particular is a hotbed of the imaging industry.” The company recently strengthened its team in Germany with the appointment of Frank Steinborn as a Director of Sales, and Matthias Werner as a Sales Engineer. Their job is to increase Lumenera’s penetration in the region and to give support to Lumenera’s partners and existing customers in the region. “We look forward to closely interacting with the market and expanding our presence through a variety of initiatives such as our continued membership with the EMVA, attending trade shows like Vision Stuttgart and delivering some of the most advanced imaging solutions on the market,” Mr. Longval adds.

Lumenera has been a long time member of the European Machine Vision Association (EMVA), which helps ensure that the cutting edge technology of machine vision is known and applied worldwide. The EMVA currently has 126 members, representing 23 countries from all over Europe and worldwide and continues to grow.

Website: www.lumenera.com