Tattile introduces Multi-Camera Vision Controller M100 CLink

Brescia, 23 January 2017. Tattile, a manufacturer of custom vision solutions used by OEM's and Systems Integrators in machine and quality control in production plants worldwide, introduces its M100 CLink Multi-Camera Vision Controller.

Open Platform Camera Link Multi-Camera Vision Controller with Real Time I/O
The Tattile M100 CameraLink is an industrial PC specifically designed for vision systems. Compared to classic industrial PCs the M100 CLink Vision Controller combines a number of advantages for ease of installation: It is Fanless with a compact and rugged construction, and comes out of the box ready-to-use requiring no loading of any OS software or drivers or any additional components such as a frame grabber or switch, and it contains an FPGA-enabled real time I/O allowing for extremely low-latency synchronization between vision system, cameras and machine automation.

The M100 has four Camera Link ports allowing the connection of Tattile or other manufacturers' Camera Link cameras using only one cable by Power over Camera Link (PoCL). The device supports four base links with maximum band of 255MB/s, two medium links with maximum band of 510MB/s, two full links with maximum band of 680MB/s or two 80-bit links with maximum band of 850 MB/s.

The ports are directly connected to an FPGA which performs image acquisition and preprocessing in real time and will be easily and independently programmable by users e.g. to implement real-time logics. All channels can be operated independently and simultaneously. In addition to the four Camera Link ports two ports allow the connection of high-speed USB 3.0 Vision cameras and another two USB 2.0 ports are accessible from the front panel; while a third internal protected USB 2.0 port can be used to connect sensitive devices.

Entirely industrial PC design from Tattile

"The M100 is an entirely in-house designed, developed and manufactured Vision Controller series from Tattile. Thanks to the open architecture by use of standard Windows Embedded Standard 7 64 bit or Linux O.S., it is possible to develop vision applications

with Tattile software as well as with third party software and libraries. The open system design also ensures the maximum freedom of choice for the components composing the modular architecture", explains Fulvio Pozzalini, Technical Product Manager with Tattile and highlights another advantage of the M100, the PCI-Express expansion slot: "This feature increases the concept of open design; users can expand the system by using third-party boards connected through the PCI-Express expansion bus without modifying the main module".

Other relevant features of the M100 Series Multi-Camera Vision Controller include third generation Intel i3/i7 processors with 8GB (max. 16 GB) of DDR3 RAM for the system control and the fanless 'maintenance-free' design, allowing the uninterrupted operation of the system. It is also possible to install an additional fan when the operation occurs in especially tough environments.

The advantages of 'made in Tattile'

"Our main strength comes from all Tattile products being internally developed: from board design, to circuit realization, to assembly, to testing in climatic chamber and in anechoic chamber, to quality control," Pozzalini adds. "We have therefore a total process control, that allows us to be effective, efficient and - most of all - to have a deep knowledge of the product and its life." Therefore, the Tattile approach also ensures a longer lifetime of the product, which is guaranteed for at least 10 years. Because the main markets are the OEM and the distributor/integrator markets, this guarantee allows offering a 'plug and play' product that will typically follow the machine along its whole life cycle.

Though Tattile tends to offer off-the-shelf products, the entire control of the design and manufacturing processes allows to easily performing customizations required by the clients. This is a concept very well expressed by the company motto 'Custom Vision Solutions'.