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## **Business Partnership and New Product Announcement**

To extend the boundaries of surface mount technology, Fuji Machine Manufacturing Co., Ltd. has, in collaboration with Koh Young Technology Inc., developed an inspection head for performing SPI\* in the Fuji scalable placement platform, NXT II.

Koh Young Technology Inc. is a leading manufacturer of a wide range of inspection machines and has machines installed at customer sites throughout the world. To address SMT market needs, Fuji Machine, a leading manufacturer of mounting machines, and Koh Young Technology have cooperated on the following to quickly develop this technology.

- \* SPI stands for "Solder Paste Inspection". Solder paste inspection is the accurate measuring of the position and shape of solder after it has been printed. This aids in improving the printing, which in turn increases the placing quality.
- Development of the IH3 solder inspection unit that supports the NXT II platform Through combining the image analysis ability and optic technology of Koh Young Technology with our high-speed, high-accuracy mounting and vision processing technology, we had developed an unprecedented small 3D SPI system. Emphasizing Fuji's "Dynamic & Flexible Solution", Koh Young Technology redesigned the optic system and succeeded in making a small head that supports the NXT II. Accurate 3D measurements with no blind-spots is realized by four way Moiré pattern projection. It is easy to change the layout and add the solder inspection function by setting a dedicated module equipped with the IH3 solder inspection head and IH3 controller processing unit on an NXT II base. In addition, inspection data is made in the same manner as the placing data with the general production program creation tool, Fuji Flexa. This contributes to a reduction in the number of required engineering resources since the data for each process is managed together in the same job<sup>\*</sup>.

By selecting the IH3 specification from double conveyors for small PCBs to single conveyors for large PCBs that matches the NXT II specifications, all NXT II lines can be supported. It is also possible to select a high resolution type for 0402 (01005") parts or a standard resolution type for parts down to 1005 (0402") in size.

- \* Job: Includes all of the data necessary to produce a PCB.
- 2. Development of the compact high-precision solder inspection machine, "Fuji SPICA" Koh Young Technology has developed a standalone SPI machine called the SPICA. In order to maximize space productivity and performance, the new small inspection head, IH3 is employed. This machine is also available from Fuji under the name "Fuji SPICA" which includes an interface for programming in Fuji Flexa. This provides a turnkey solution for users of previous machines.

An IH3-equipped NXT II module will be exhibited along with Fuji SPICA at Protec 2011 (to be held from June 1st). Orders for both machines will start to be accepted from October of this year.