

New Agreement between PAC TECH and NSMAT

Berlin, Germany – PAC TECH and NIPPON STEEL MATERIAL (NSMAT) to sign LICENSE AGREEMENT for Wafer Solder Ball Transfer Technology. As a leader in single ultra small solder ball transfer (SB²), PAC TECH plans to expand to mass production with NSMAT gang ball placement technology.

The new system will be introduced at the SEMICON KOREA 2013. PAC TECH's Ultra SB² Platform is designed for solder ball transfer from 6" up to 12" wafers. The flexible concept offers automatic flux printing, solder ball transfer, inspection and optional reflow with PAC TECH's innovative small footprint oven (RF200).

About PAC TECH:

With almost 20 years of experience, PAC TECH is a prime manufacturer of leading-edge technology equipment and processes for the advanced packaging industry. PAC TECH designs, manufactures and supports solder jetting equipment (SB²), wafer-level solder ball transfer systems (Ultra-SB²), wafer-level solder rework equipment (Ultra-SB² 300 WLR), laser assisted flip-chip bonders (Laplace) and automatic plating tools for high volume eless Ni/Au and Ni/Pd/Au UBM and OPM (PacLine 300 A50) through its global sales network.

In its worldwide sales and application centers in PAC TECH ASIA (Penang, Malaysia), PAC TECH USA (Santa Clara, CA) and PAC TECH EUROPE (Berlin, Germany). PAC TECH offers the capability to do demonstration including samples and prototyping under ISO certified and ISO TS certified production conditions. More over PAC TECH has an unique dual business model in which it offers its customers especially low volume production customers or new starters in to that industry the option to use in the initial phase PAC TECH's demo centers for services. After qualification of the product the customer has the option of further cost reduction by having full turnkey solution with equipment, process and technology. This reduces the cost of a new product at introduction customer side and at the same time give the customer the option to qualify and intensively study the technology and the cost of ownership. Together with its partner and main shareholder NAGASE, PAC TECH is also developing embedding technologies for wafer and substrate level CSP technologies. The solder ball jetting equipment addresses markets like Hard Disk Drive, Camera Module, Sensors and Stacked TSV chip packages. The eless plating line addresses applications in power MOSFET devices for clip attach, contactless RFID devices, High reliability power devices for Wire Bonding using Ni/Au and Ni/Pd respectively Ni/Pd/Au Over Pad Metallization. Ni/Pd Metallization is qualified for

volume production for low cost Cu Wire Bonding over active pad. The new Ultra SB² tool is addressing all wafer and substrate related solder ball applications in mass volume production.

PAC TECH has leading edge technology for Solder Ball Transfer, Minimum Solder Ball diameter is 30 µm. For eless Plating Tool PAC TECH is worldwide leading with more than 30 Automatic Tools installed worldwide.

It is PAC TECH's mission to provide the highest level of innovative technology solutions with an unparalleled degree of customer service orientation, corporate integrity and attention to its clients individual technology demands.