

## **FlipChip International Announces Expansion of Spheron™ Wafer Level Packaging Manufacturing Capacity for Wireless and High Speed Applications**

PHOENIX, Arizona, July 9, 2004---FlipChip International, LLC today announced a major expansion in Phoenix, Arizona of its Spheron™ wafer level packaging capacity for wireless and high speed devices. FlipChip International's Spheron product is an innovative semiconductor packaging solution which preserves the device performance for radio-on-chip and broadband devices utilized in next generation video phones and wireless sensors.

Due to high customer demand and a number of design wins with this technology, FlipChip International, (FCI) is doubling its wafer level packaging (WLP) capacity at its Phoenix facility between now and the end of 2004. As the semiconductor industry migrates rapidly to devices that handle higher data rates for video phones and other data rich portable devices, the need for the smallest semiconductor packaging that retains electrical properties in the 2-10 Gigahertz range is essential. Utilizing advanced low K polymer build-up technology and proprietary FCI processes, the Spheron WLP enhances the performance of these devices in tight pitch configurations and improves reliability. In addition, Spheron WLP now offers the smallest packaging profile available with miniaturization capability of 0.4mm pitch as compared with the various packaging alternatives such as PBGA, QFN, MLF, and PLGA.

Bruce Bowers, Vice-President Operations of FCI, said, "Our customers are excited by our unique Low K solution available now with our Spheron WLP package. As a key part of our 45% WLP manufacturing capacity expansion this year in Phoenix, we are doubling our Spheron capacity to meet the rapid adoption by current FCI global customers. With this expansion, we feel confident of our ability to ramp with the industry as it adopts this key technology and the move to advanced lead (Pb) free wireless packaging solutions. Spheron production has accelerated faster than the semiconductor industry growth and is expected to continue through 2005."

Dr. Haluk Balkan, Director of Engineering of FCI, said, "Because of the excellent reliability enhancement and improvements in electrical performance over competing chip packages, we are excited about the potential for the further adoption of Spheron in the WLP marketplace. In addition, we see a migration away from QFN and MLF type semiconductor packages due to the electrical enhancement of the die performance and the smaller profiles thereby allowing OEMs to design smaller, more capable cell phones with wireless enhancements including high data rates, Wireless Local Area Network (WLAN) and Personal Local Area Network (PLAN) capabilities."

FlipChip International, LLC (FCI) is a privately held supplier of products and services for the wafer bumping and wafer level packaging semiconductor market. FCI products include the Flex-on-Cap (FOC) flip chip bumping process and the *Ultra* CSP® wafer level packaging process. FCI also provides Eutectic, 90Pb10Sn, 95Pb5Sn, Low Alpha and Ultra Low Alpha solder solutions in addition to its SnAgCu lead-free alloys. FlipChip International, LLC is a wholly owned subsidiary of RoseStreet Labs, LLC, a

supplier of products and services for wireless infrastructure in the life science and homeland security markets.

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