Advanced Packaging Update:
Market and Technology Trends

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Volume 3 of the Advanced Packaging Update for 2007 features special coverage of advanced packaging technology for high-end devices. New developments include the transition to Pb-free bumps in many applications, regardless of RoHS exemptions, and the expansion of green requirements to new areas such as reduced product energy consumption. Layer counts are increasing for build-up substrates and larger body sizes are in production. Package-level underfill is being investigated to enhance reliability, and electroless palladium, immersion gold (ENEPIG) is being introduced to address concerns of copper dissolution in the solder. In addition, copper pillar is being investigated and implemented in various forms to replace or enhance the solder bumps. The report also provides an overview of electronics manufacturing in Vietnam, including background on that nation and its economy. New developments in assembly technologies are also described, including embedded components technology.

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4801 Spicewood Springs Road • Suite 150
Austin, Texas 78759
Tel: 512-372-8887 • Fax: 512-372-8889
tsi@techsearchinc.com • www.techsearchinc.com

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