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ASE news

Altera Qualifies ASE's Lead-Free Packages

Both companies demonstrate leadership in package technologies to meet industry's needs for lead-free solutions in electronics manufacturing

SANTA CLARA, Calif., February 24, 2003 – Advanced Semiconductor Engineering Incorporated (ASE, TAIEX: 2311, NYSE: ASX), one of the world's largest semiconductor packaging and testing companies, announced that Altera Corporation (NASDAQ: ALTR) has qualified several lead-free packages at ASE that includes TQFP, LQFP, PQFP, LPGA (Altera's Fineline BGA[®] packaging), and PLCC¹. These packages are available in Altera's lead-free packaging portfolio, which includes the Stratix[™], Stratix GX, Cyclone[™], and MAX[®] 3000A device families.

"Both Altera and ASE's research and development teams successfully collaborated to achieve this milestone which enables us to offer our customers a wide array of lead-free packaging solutions for FPGAs and CPLDs²," said Vincent Wang, vice president of package technology at Altera.

For more information about Stratix, Stratix GX, Cyclone, and MAX 3000A device families, please visit <http://www.altera.com/products/devices>.

"ASE's advancements in lead-free chip packaging aim to meet the stringent requirements of global environmental protection by eliminating the use of lead in the manufacturing of electronic products," said B.C. Chong, vice president of business development at ASE Electronics Malaysia. "We continue to work closely with customers to develop environmental-friendly chip packages that meet their precise package reliability for next generation ICs."

The qualified lead-free packages are available at ASE's leading edge facilities in Penang, Malaysia and Kaohsiung, Taiwan. For a list of ASE's lead-free portfolio, please visit <http://www.aseglobal.com> or contact your nearest ASE sales office.

About ASE Group

The ASE Group is one of the world's largest providers of semiconductor manufacturing services. As a global leader geared towards meeting the industry's ever growing needs for faster, smaller

and higher performance chips, the Group develops and offers a wide portfolio of technology and solutions including IC test program design, front-end engineering test, wafer probe, wafer bump, substrate design and supply, wafer level package, flip chip, system-in-package, final test and electronic manufacturing services through Universal Scientific Industrial Co Ltd, a member of the ASE Group. The Group generated sales revenues of \$2.33 billion in 2002 and employs 24,000 people worldwide. For more information about the ASE Group, visit

<http://www.aseglobal.com>

¹ TQFP (Thin Quad Flat Pack), LQFP (Low profile QFP), PQFP (Plastic QFP), LBGA (Low profile BGA), PLCC (Plastic Leadless Chip Carrier)

² FPGA (Field Programmable Gate Array), CPLD (Complex Programmable Logic Device)

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