ASE GROUP
A SUCCESS ENABLER

ASE news

ASE introduces Multi-Package Ball Grid Array Technology

MPBGA offers increased functional integration of chips and an alternative to System-on-a-Chip.

Taipei, Taiwan, October 25th, 2001 - Advanced Semiconductor Engineering, Inc, one of the world's largest semiconductor packaging and testing companies, announced today the availability of its Multi-Package BGA technology.

MPBGA is an advanced package type of the MCM (Multi-Chip Module) package family. In MPBGA, the dies are first packaged, tested and then stacked or assembled. MPBGA utilizes only KGD (Known Good Dies - dies that have been tested and are not shown to be defective) as opposed to traditional MCM package types which stack the dies first, then test the finished package. Hence, MPBGAs have an extreme low rate of package failure. Furthermore, as MPBGA is a single BGA package consisting of two or more packages, the area of the printed circuit board whereby the package will be assembled, can further be reduced. MPBGA is highly suitable for integrated graphics and memory chips; both of which require high speed and high performance capabilities.

Demand for miniaturization and increased functionality has brought SoC (System-on-a-Chip) and SiP (System-in-a-Package) technologies to the forefront of semiconductor developments. SoC, in particular, is seen as key to the development of next-generation digital communication products. However, SoC has yet to be commercially viable due to a high technology entry barrier, costly and lengthy development time and low production yields. In the meantime, MPBGA is seen to be a feasible alternative as it enables more chip functions to be integrated onto a package. This integration not only increases performance and allows miniaturization; it is also a lower-cost solution for customers desiring SoC-like qualities in their IC packages.

"As a leading packaging and testing company, ASE relentlessly invests in the research and development of advanced packaging technologies to support our customers' demanding and diverse requirements," said J.J. Lee, vice president of R&D, ASE Group. "MPBGA is a stepping stone for the semiconductor industry's transition from a single-function chip to system-on-a-chip."

Today, ASE has completed the successful development of its MPBGA technology with samples already qualified by its customers in the second and third quarter of this year. Volume production will be launched this quarter with a monthly capacity of 100,000 pieces.

About ASE Inc.

ASE Inc. (TAIEX: 2311, NYSE: ASX) is one of the world's largest independent providers of semiconductor packaging services and, together with its subsidiary ASE Test Limited (Nasdaq:ASTSF), the world's largest independent providers of semiconductor testing services, including front-end engineering testing, wafer probing and final testing services. The Company's international customer base of more than 200 blue-chip customers includes such leading names as Advanced Micro Devices, Inc., Altera Corporation, Cirrus Logic Inc., Conexant Systems, Inc., LSI Logic Corporation, and Qualcomm Inc. With advanced-process technological capabilities and a global presence spanning Taiwan, Korea, Hong Kong, Singapore, Malaysia and the United States, ASE Inc. has established a reputation for reliable, high quality products and services. For more information, visit the website, http://www.aseglobal.com

###