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## **ASE's Packaging Technology Enables Wireless Communication Chips from Leading European IC Design House**

*Nordic VLSI nRF2401 transceivers packaged using ASE's QFN technology*

**Santa Clara, California, November 26th, 2002** - Advanced Semiconductor Engineering Incorporated (ASE, TAIEX: 2311, NYSE: ASX), one of the world's largest semiconductor packaging and testing companies, today announced that it continues to expand its leading edge packaging technology to enhance support for the wireless communication segment.

Nordic VLSI (website: [www.nvlsi.no](http://www.nvlsi.no)) has recently introduced the industry's smallest, lowest cost, lowest current consumption and low voltage supply, 2.4GHz transceiver; the nRF2401, suitable for wireless transceiver applications. The nRF2401 utilizes ASE's quad flat no-lead (QFN) packaging solution to enable a highly integrated single chip solution on a 5x5mm package. QFNs are leadframe-based packages that are small, lightweight and have excellent electrical and thermal performance due to its shorter lead length. With a lower pin inductance, QFNs are suitable in higher frequency applications such as RF and wireless devices.

Semiconductor packaging continues to play an increasingly crucial role to help wireless chip developers increase the level of integration by providing the lowest possible form factor and excellent RF connectivity characteristics to enhance the performance of the chip. Nordic VLSI chips are packaged in ASE's Chung Li, Taiwan manufacturing facility, providing customers with high performance and cost-effective technologies to help them achieve new heights in product development.

### **About Advanced Semiconductor Engineering Group (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 performing 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 revenues of \$2.17 billion in 2001 and employs 23,000 people worldwide. For more information about the ASE Group, visit <http://www.aseglobal.com>

## **About Nordic VLSI ASA**

Nordic VLSI is one of the leading European independent IC design houses developing, producing and delivering state-of-the-art integrated circuits for customers world wide. The company founded in 1983, has shown a strong growth and has now locations in Trondheim and Oslo in Norway.

The company has special focus on components for wireless communication, mixed signal and complex digital and analogue integrated circuit design. Nordic VLSI is well positioned in the following market segments: RF, data and telecom, industrial, medical, automotive and consumer electronics. The company develops, markets and sells standard off the shelf integrated circuits, as well as integrated circuits based on customers specifications (ASICs). All operations are managed according to an ISO9001 approved quality assurance system. Nordic VLSI is listed at the Norwegian stock exchange.

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