

July 9, 2003

Development of Digital Pre-Distortion Power Amplifier Unit for IMT - 2000 BTS

Nagase Co., Ltd. and its subsidiary company Gigatec Inc. announced that they have developed and successfully implemented a highly efficient transmitting power amplifier unit: GT-3006 for IMT-2000 Base Transmit System with digital pre-distortion (DPD) technology. The GT-3006 achieves roughly 50% better the power efficiency of conventional feed-forward amplifiers.

Faster Internet connectivity and data transmission speeds are increasingly important requirements for mobile communications and IMT -2000 service is extended its area. Transmitter amplifiers for IMT -2000 system must provide good linearity and low distortion in amplifying broad and signals with high dynamic range, as well as high power efficiency to keep energy low. By saving power consumption, the typical wireless service provider will be able to save its operating costs.

Nagase and Gigatec developed the DPD power amplifier. DPD technology is well suited to dealing with fluctuations caused by device inconsistencies, temperature changes. The DPD control utilizes their alliance company's PMC-Sierra's* (NASDAQ: PMCS) PM7815 PALADIN-15** digital correction signal processor device which provides a total system solution.

GT-3006 satisfied W-CDMA specification requirement of IMT -2000 and achieved 14% power efficiencies. (@ 4carrier, 40W)

GT-3006 are sampling in July. 2003.

Nagase and Gigatec make a sales promotion not only Japanese market but also China, Europe, and another market.

* PMC-Sierra is accelerating the broadband revolution. PMC -Sierra is a leading provider of high-speed broadband communications semiconductors and MIPS -based processors for Enterprise, Access, Metro Optical Transport, and Wireless network equipment that makes up the backbone of the Internet. The company offers worldwide technical and sales support, including a network of offices throughout North America, Europe and Asia. PMC-Sierra is included in the S&P 500 Index which consists of 500 stocks chosen for market size, liquidity, and industry group representation and in the Nasdaq -100 Index (NDX) which contains the largest non-financial companies on the Nasdaq Stock Market. PMC-Sierra is publicly traded on the Nasdaq Stock Market under the PMCS symbol. For more information about

PMC-Sierra, visit <http://www.pmc-sierra.com>.

**PALADIN 15 device eliminates transmitter distortions and improves spectral efficiency in wireless Base Transceiver Stations (BTS) at dramatically lower power and cost than existing implementations.

For further information

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