

NEC Electronics meets demand for 16x Speed Rewritable DVD Drives with new chipset

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NEC Electronics Corporation and its subsidiary in Europe, NEC Electronics (Europe) GmbH, introduced a chipset for rewritable DVD drives that supports 16x recording speed in DVD-R and DVD+R formats. The improved efficiency enables users to record high data volumes on DVD recorders and personal computers in approximately half the time required by previous 8x speed devices. Compliant with recording and playback formats such as DVD-R/RW, DVD+R/RW, and DVD-RAM, the new chipset enables OEMs to easily configure rewritable DVD drives capable of handling all major standards.

The chipset consists of the μ PD63635 digital signal processor (DSP) with ATAPI interface, and the μ PC3335 analog signal processor (ASP), which controls the laser and servo systems of the optical pickup unit. The μ PD63635's new LVDS (Low Voltage Differential Signaling) driver, 50% reduction of clock jitter, write strategy for high-precision control of the recording laser power, and high logic speed enabled by optimizing the design flow in C, together with the μ PC3335's high-bandwidth amplifier optimized for higher operating speeds, help ensure stable recording at 16x speed for DVD-R and DVD+R.

Despite the higher recording speed, the power consumption of the μ PD63635 and μ PC3335 have decreased by 10 percent (to 1.0w at 8x playback speed) by deactivation of the clock when it is not performing necessary functions. Additionally, both processors are housed in thin

quad flat packages (QFP), making them ideal for the slim DVD drives used in notebook PCs.

"The global market for rewritable DVD drives is growing rapidly, especially in the area of personal computers, which we expect to grow 50% by next spring," said Kats Nakazawa, General Manager, PC Peripheral Systems Division, 2nd Systems Operations Unit, NEC Electronics Corporation. "As the world's leading supplier of chipsets for rewritable DVD drives, we will continue to meet the strong market demand for DVD recording applications."

The chipset is expected to be used by Pioneer Corporation and NEC Corporation for their new rewritable DVD drives. Both companies are among the world's leading manufacturers of DVD writers.

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