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TIDBITS

By Mark Long {8/21/00-03}

SiS Debuts 3C IC for Athlon and Duron

Taiwan-based logic products company SiS has unveiled its first 3C integrated single chip, the SiS730S, which the company says optimizes the performance of PCs with Athlon and Duron processors by adding enhancing core logic, graphics, and connectivity technologies. The SiS730S integrates a north-bridge chip, a south-bridge chip, an enhanced 128-bit 3D graphics accelerator (SiS300), and other telecommunications technologies into a single chip. Up to 64MB of video memory can be shared with system memory to enable a dramatic 3D VR effect at resolutions up to 1,920 x1,200 pixels. The SiS730S also provides PC133 SDRAM, ATA-100 IDE, and a standalone AGP 4x slot.

The SiS730S product release includes software that automatically implements the driver installation of built-in graphics, audio, and connectivity chips. The software, which supports hardware DVD playback and 5.1-channel Dolby Digital surround sound, is reportedly compatible with major OS platforms such as Windows 95/98/Me/2000, NT4.0, WinCE, and Linux.

The company also recently demonstrated the SiS630S, which supports Pentium II and Pentium III CPUs. Like the SiS730S, the SiS630S provides a standalone AGP 4x interface. Using 0.18-micron process technology, the SiS730S will start preproduction this September in a dedicated wafer fab that will assemble the 3C chip in a 672-pin-count BGA plastic package. The SiS730S will be priced at $42 in 10,000-unit increments. For more information: www.sis.com.tw.

Hitachi Intros 64MB MultiMediaCard

Hitachi Semiconductor (America) has introduced a high-capacity flash MultiMediaCard (MMC) storage device with a 64MB module that features fast read and write speeds and enough capacity to store a full hour or more of recording and playback in voice recorders and portable music players such as MP3 players.

Read speed is 14Mb/s and write speed is 3Mb/s, which allow a high-speed data-transfer path to PCs, handheld devices, and the Internet. The high-capacity flash card may also be used in high-resolution digital cameras, remote monitoring equipment, GPS navigation systems, palm-size PCs, and game machines and toys, to increase the storage and data-acquisition properties of those devices.

The flash card's high density was achieved by using Hitachi's 256Mb AND-type flash memory chips, built with multi-level cell technology in a 0.25-µm process, and a cell-based IC (ASIC) control device based on a 32-bit SuperH RISC microprocessor core. An advanced stacking technology is used to assemble the semiconductor chips inside the MMC form factor.

For applications requiring less storage capacity, Hitachi is introducing a 32MB MMC device called the HB288032-MM1. In addition, the company currently offers a 16MB version, the HB288016MM1.

The MultimediaCard Protocol Analyzer from the Electronics Division of Nissei Sangyo Co., Ltd. (www.nissei.com), is a test and measurement instrument that can help engineers integrate Hitachi 64MB, 32MB, and 16MB MultiMediaCard devices into their products and systems. The Protocol Analyzer captures the flash card's control and data signals and its voltage and current levels, displaying them on a host computer in real time for analysis and debug.

The 64MB MultiMediaCard is priced at $110 in 10,000-unit quantities, while the 32MB MultiMediaCard is priced at $60 for 10,000 units. Both these MMC devices will be available in sample quantities in August 2000, with volume shipments set to begin in 4Q00. For more information: www.hitachi.com/semiconductor.