New low power semiconductor solution for portable audio devices with hard drive

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Leveraging its expertise in high performance digital audio solutions, Royal Philips Electronics today announced a highly integrated, low-power solution that will make it easy for manufacturers to build hard disk drive (HDD) based portable audio players with optimal battery life. The PNX0106 is the latest addition to Philips' Nexperia Personal family of ICs for portable audio and multimedia players, and brings the superb audio quality of Philips' IC solutions for flash MP3 players to the HDD market.

The market for HDD-based portable audio players is forecasted to grow from 13.9 million units produced in 2004 to 54.7 million units produced in 2008 according to Gartner. Helping manufacturers meet the growing demand for HDD-based portable audio players, Philips has designed its PNX0106 as a complete hardware and software solution for building HDD-based portable audio devices with fast time-to-market. The PNX0106 further helps manufacturers to compete in the market by offering a low-power solution for optimal battery life with the flexibility to support differentiating features. Additional features that can be supported by the PNX0106 include advanced user interfaces, interconnectivity and multimedia functions such as playback of images and simple video clips.

"Philips is already a leading provider of semiconductor solutions for flash MP3 players – powering portable devices with quality audio performance and optimal battery life," said Rutton Ruttonsha, vice president and general manager, personal entertainment solutions at

Philips Semiconductors. "With the PNX0106, Philips is making it easy for our customers to build hard disk drive-based portable audio players with the same key features while continuing our commitment to bring entertainment to the consumer anytime, any place."

The PNX0106 combines a host of features for building high-performance, low-power portable audio devices with image playback. These features include a powerful 32-bit ARM926EJ-S processor, dedicated DSP for audio processing, IDE interface and USB connectivity (high-speed On-the-Go). To enable low-power devices, Philips has optimized software and applied advanced clocking techniques and internal block management to the PNX0106 to significantly reduce power consumption. The device also supports low-power SDRAMs.

For audio applications, the PNX0106 features a programmable architecture that provides support for multiple audio decompression algorithms including MP3, AAC and Microsoft WMA (licensing required), as well as MP3 compression with LifeVibes Music audio enhancement algorithms.

Philips' PNX0106 will begin sampling in July 2005 with mass production to begin in October 2005.