Marvell Intros World's First Silicon Solution that Embeds WLAN into Digital Cordless, VoIP, Video Phones

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Marvell, the technology leader in the development of extreme broadband communications and storage solutions, today introduced the world's first silicon solution that embeds WLAN into digital cordless phones, VoIP phones, video phones and other consumer electronic devices. The Marvell 88W8385 is the first chip to provide complete 802.11a/g/b WLAN processing for these consumer platforms by offering embedded CPU and on-chip memory. Marvell's 88W8385 reduces complexity for consumer electronics companies and service providers by offering a direct path to 802.11a/b/g WLAN functionality. Marvell will demonstrate 88W8385-based solutions at CeBIT 2005.

The need to integrate WLAN functionality into more and more consumer electronics products underscores the need for WLAN solutions that are highly integrated, have a small form factor, and provide complete WLAN protocol offload capabilities from host processors. Current solutions rely on host systems to provide much of the WLAN processing power. While this may be acceptable in solutions where there is ample processing speed, products such as cordless phones do not have such inherent capabilities. Furthermore, even if there is sufficient host processing power on current platforms, WLAN protocol processing will occupy a steadily increasing portion of the host processing power as a result of additions to WLAN security and Quality of Service standards. Therefore, a complete host offload solution is the preferred approach to ensure adequate performance and to decrease

overall expected costs of future upgrade requirements. .

The new Marvell 88W8385 is the world's first device to successfully embed a CPU and sufficient on-chip memory into a single chip for complete host off-load processing. In addition, Marvell's level of integration allows the chip to be manufactured in a small module – some as small as 9mm x 9mm – with the smallest number of external components and cost. Furthermore, these modules can be pre-tested and optimized for maximum performance before being integrated into a wide variety of product such as digital cordless phones and video phones for Voice over Wi-Fi (VoWiFi) functionality. The 88W8385 provides support for high-speed SDIO, SPI and other serial interfaces for reduced footprint.

"At Marvell we are focused on the consumer's need to integrate wireless capability into existing platforms. The 88W8385 chip continues to raise the bar on WLAN by offering this capability," said Kishore Manghnani, General Manager of Broadband Home Products at Marvell. "We are very excited to give manufacturers and consumers this flexibility as wireless becomes the standard in consumer products."