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UWB's inflection point is at hand!

With manufacturer's now working feverously on ultrawideband (UWB)-based consumer products and the radio chips that drive them, and the WiMedia Alliance (www.wimedia.org) and USB Implementer's Forum (www.usb-if.org) working on worldwide regulatory adoption and certifying products, it seems abundantly clear that the UWB industry is on the cusp of an inflection point. It has come to a critical point in its existence and is now facing a major turning point. Andy Grove, the founder of Intel, once defined inflection point as "an event that changes the way we think and act." For some, the commercialization of the first UWB protocol—Certified Wireless USB from the USB Implementer's Forum—may be just such an event.

Certified Wireless USB products are expected to start hitting the streets by the end of 2006 and will include things like dongles and add-in cards for upgrading legacy PCs. The roll out of Certified Wireless USB will then continue as it is integrated into virtually any application that today supports wired USB. In the process, it is expected to redefine mobility as we now know it. Or, as Andy Grove so astutely pointed out, it will change the way we think and act with regard to mobility. The new mobile experience will offer consumers wired USB functionality anytime, anywhere, but it will do so wirelessly. Consumers will also have access to a whole new range of multimedia applications and services, enabled by the high-speed data transmission capabilities of UWB.

Of course, Certified Wireless USB is not the only UWB protocol expected to leave a lasting mark on the industry. Earlier this year, the Bluetooth Special Interest Group (www.bluetooth.org) decided to work with the WiMedia Alliance to define the high-speed Bluetooth technology specification dubbed Bluetooth 3.0. This protocol, similar to Certified Wireless USB, runs atop the WiMedia Common Radio Platform, making it possible for silicon providers to offer simultaneous operation of both protocols on the same chip.

UWB will one day soon be implemented in battery-operated, handheld applications requiring miniaturized module solutions. The cellular phone is a prime example of just such an application. In fact, according to the market research firm IMS Research (www.imsresearch.com), roughly 120 million mobile phones will be equipped with UWB in the year 2010 alone. This makes perfect sense considering that Bluetooth and USB are so widely received, having recently reached an installed base of one billion products and of two and a half billion respectively. Certified Wireless USB and Bluetooth 3.0 offer different capabilities at the protocol layer, and integrating good implementations of the WiMedia UWB platform into consumer products will enable both protocols.

With such a range of activity and excitement being generated around UWB, it seems certain the inflection point for this industry is at hand. This issue of emerging wireless technology, written and pulled together with help from the WiMedia Alliance, the USB Implementer's Forum and many others heavily involved in UWB, is for anyone who intends to be an active participant in this growing industry. It is packed with information on every aspect of the UWB industry—business cases, market projections, hardware, software, testing, regulatory, certifications, etc...

We hope it serves you well as a trusted resource and guide in the months and years ahead. **EWT**

