

UWB 2008: Short-Term Problems and Long-Term Potential

SKU: IN0804103MI
Analyst: Brian O'Rourke
borourke@reedbusiness.com
+1.480.609.4527
December 2008

Report Summary

The market for ultrawideband (UWB) devices was bumpy in 2008, with multiple chip companies leaving the market in the second half of the year. However, regulatory hurdles have been cleared to some extent, allowing for the release of worldwide chip SKUs by some chip vendors. There are currently five mobile PC vendors shipping UWB-enabled products. Hub and dongle solutions remain a transition to more embedded devices on the market.

The primary question for UWB now is: Will other product segments follow where PCs lead? UWB is a very flexible technology in that it supports multiple standards, including WUSB, Bluetooth 3.0, and IP over UWB. This should enable the technology to gain design wins in a wide range of product segments, including PC peripherals, consumer electronics (CE), and mobile phones.

This report contains analysis and annual shipment forecasts through 2012 for the penetration of UWB into 22 separate applications within the following product segments: PC, PC peripheral, CE, communications, and industrial/medical. The annual penetration forecast for UWB into each application is broken down by WiMedia UWB and proprietary UWB. Profiles of leading UWB chip vendors and IP suppliers are included.

HIGHLIGHTS

- § PCs are the leading UWB segment in 2008, with 265,000 devices expected to ship.
- § Aftermarket UWB hubs and adaptors comprise all of the UWB peripheral shipments in 2008.
- § The first UWB-enabled digital televisions shipped in 2008 in Japan.
- § Wi-Fi, WirelessHD, and WHDI are the chief competition for UWB.

What's in the Report?

- § UWB penetration broken out by application into WiMedia and proprietary UWB
- § Analysis of UWB penetration into 22 separate applications within PC, PC peripherals, CE, communications, and industrial/medical
- § Detailed analysis of UWB-based standards and UWB competitors
- § UWB ASPs forecast through 2012 provided

Who Will be Interested in This Report?

- § PC, PC peripheral, CE, and mobile phone vendors
- § UWB, Wi-Fi, wirelessHD, and WHDI chip vendors
- § Financial analysts who cover the market for wireless semiconductors

Table of Contents

Executive Summary.....	1	TransferJet	22
Introduction	5	Other	22
Multiband Orthogonal Frequency Division Multiplexing (MB-OFDM).....	5	Bluetooth	22
Ultrawideband Standards and Issues.....	8	Near Field Communications.....	22
WiMedia Alliance.....	8	Applications and Forecasts	23
Certified Wireless USB.....	9	PCs.....	23
Bluetooth over UWB and High-Speed Bluetooth	10	Mobile PCs.....	23
IP over UWB.....	11	Mobile PC Docking Stations	25
Video over UWB.....	12	Desktops	25
UWB Through the Air	12	Aftermarket UWB Express Cards	26
UWB over Coax	12	Aftermarket UWB PC Dongles.....	27
DAA and World Regulatory Environment.....	13	UWB Wireless VGA Adaptor Host	28
Low-Band UWB.....	13	Summary	28
High-Band UWB.....	13	PC Peripherals	29
Conclusion	14	Printers.....	29
Microsoft Support	14	Multifunction Peripherals.....	30
UWB Semiconductor ASP Forecast.....	15	External Hard Disk Drives and Enclosures...30	
Competitive Technologies	17	LCD PC Monitors	31
Wi-Fi	17	Aftermarket UWB Hubs.....	32
Cliffside: Wi-Fi as Wireless PAN.....	18	UWB VGA Adaptors.....	33
Bluetooth over Wi-Fi.....	19	Summary	33
WirelessHD	20	Consumer Electronics	34
WHDI	21	Digital Still Cameras.....	34
		Digital Camcorders	35
		Digital Televisions	36

UWB 2008: Short-Term Problems and Long-Term Potential
SKU: IN0804103MI

Portable Media Players.....	37	NEC.....	46
Audio/Video Receivers.....	37	Pulse~LINK.....	46
Aftermarket UWB CE Dongles.....	38	Radiospire Networks.....	47
Summary.....	39	Realtek.....	48
Communications.....	39	Sigma Designs.....	48
Mobile Phones.....	39	Staccato Communications.....	48
UWB Network Ports.....	40	ST-NXP Wireless.....	49
Summary.....	41	Synopsys.....	49
Industrial/Medical.....	41	Time Domain.....	50
Forecast Summary.....	42	Tzero Technologies.....	50
UWB Silicon and IP Competitors.....	44	Ubisense.....	50
Alereon.....	44	Wipro.....	51
Artimi.....	44	Wisair.....	51
CSR.....	45	Methodology.....	52
General Atomics.....	45	List of Tables.....	53
Intel.....	45	List of Figures.....	54
LucidPort Technology.....	46	Related In-Stat Reports.....	55
MCCI.....	46		

Methodology

This report covers applications for ultrawideband (UWB) chip technology in PCs, PC peripherals, consumer electronics, communications, and industrial/medical applications. The information contained in this report comes from both primary and secondary sources and includes the following:

- § Telephone, email, and in-person interviews with UWB chip suppliers, PC, PC peripheral, CE, and communication device vendors throughout 2008.
- § Background research about UWB, including magazines, journals, trade show attendance, trade publications, and Web searches throughout 2008.
- § Analysis of previous In-Stat reports, and consultation with other In-Stat analysts in the fourth quarter of 2008.

All forecasts represent worldwide figures. UWB-enabled product forecasts in this report represent the shipment of UWB-enabled products, not UWB-enabled product sell-through or UWB chip shipments.

List of Tables

Table 1.	UWB Chip Solution ASP 2007–2012 (US\$).....	15
Table 2.	UWB Penetration of Mobile PC Shipment Forecast 2006–2012 (Units in Thousands).....	24
Table 3.	UWB Penetration of Notebook PC Docking Station Shipment Forecast 2006–2012 (Units in Thousands)	25
Table 4.	UWB Penetration of Desktop PC Shipment Forecast 2006–2012 (Units in Thousands)	26
Table 5.	Aftermarket UWB Express Card Shipment Forecast 2006–2012 (Units in Thousands)	27
Table 6.	Aftermarket UWB PC Dongle Shipment Forecast 2006–2012 (Units in Thousands).....	28
Table 7.	UWB Wireless VGA Adaptor Host Shipment Forecast 2006–2012 (Units in Thousands)	28
Table 8.	UWB Penetration of Total PC Shipment Forecast 2006–2012 (Units in Thousands)	29
Table 9.	UWB Penetration of Printer Shipment Forecast 2006–2012 (Units in Thousands).....	30
Table 10.	UWB Penetration of Multifunction Peripheral Shipment Forecast 2006–2012 (Units in Thousands) .	30
Table 11.	UWB Penetration of External Hard Disk Drive and Enclosure Shipment Forecast 2006–2012 (Units in Thousands)	31
Table 12.	UWB Penetration of LCD PC Monitor Shipment Forecast 2006–2012 (Units in Thousands)	32
Table 13.	Aftermarket UWB Hub Shipment Forecast 2006–2012 (Units in Thousands).....	32
Table 14.	UWB VGA Adaptor Shipment Forecast 2006–2012 (Units in Thousands).....	33
Table 15.	UWB Penetration of Total PC Peripheral Shipment Forecast 2006–2012 (Units in Thousands).....	33
Table 16.	UWB Penetration of Digital Still Camera Shipment Forecast 2006–2012 (Units in Thousands).....	35
Table 17.	UWB Penetration of Digital Camcorder Shipment Forecast 2006–2012 (Units in Thousands)	36
Table 18.	UWB Penetration of DTV Market Shipment Forecast 2006–2012 (Units in Thousands)	37
Table 19.	UWB Penetration of Portable Media Player Shipment Forecast 2006–2012 (Units in Thousands)...	37
Table 20.	UWB Penetration of A/V Receiver Shipment Forecast 2006–2012 (Units in Thousands)	38
Table 21.	Aftermarket UWB CE Dongle Shipment Forecast 2006–2012 (Units in Thousands).....	38
Table 22.	UWB Penetration of Total CE Market Shipment Forecast 2006–2012 (Units in Thousands)	39
Table 23.	UWB Penetration of Mobile Phone Shipment Forecast 2006–2012 (Units in Thousands)	40

Table 24. UWB Network Port Shipments Forecast 2006–2012 (Units in Thousands) 40

Table 25. UWB Penetration of Total Communications Market Shipment Forecast 2006–2012 (Units in Thousands) 41

Table 26. UWB Penetration of Total Industrial/Medical Market Shipment Forecast 2006–2011 (Units in Thousands) 42

Table 27. UWB Penetration of Total Market Shipment Forecast by UWB Type 2006–2012 (Units in Thousands) 42

Table 28. UWB-Enabled Device Shipment Forecast by Product Segment 2006–2012 (Units in Thousands) ... 43

List of Figures

Figure 1. UWB-Enabled Device Shipment Forecast by Product Segment 2006–2012 (Units in Thousands) 2

Figure 2. UWB Chip Solution ASP 2007–2012 (US\$)..... 16

Figure 3. UWB-Enabled Device Shipment Forecast by Product Segment 2006–2012 (Units in Thousands) ... 43

[Return to Table of Contents](#)

Related In-Stat Reports

- #IN0804099MI *DVI and HDMI 2008: A Time of Transition*, November/2008
<http://www.instat.com/abstract.asp?id=161&SKU=IN0804099MI>
- #IN0804097MI *Bluetooth 2008: New Standards Signify an Increasingly Complex Market*, July/2008
<http://www.instat.com/abstract.asp?id=161&SKU=IN0804097MI>
- #IN0804104MI *Wireless USB 2008: The Journey Begins*, July/2008
<http://www.instat.com/abstract.asp?id=161&SKU=IN0804104MI>
- #IN0803980WS *Wi-Fi in Consumer Electronics: The Swiss Army Knife Technology*, September/2008
<http://www.instat.com/abstract.asp?id=167&SKU=IN0803980WS>

Offices

North America

Arizona
+1.480.483.4440

California
+1.408.345.4495

Massachusetts
+1.781.734.8674

China
+86 10 6642 1812

Europe/Middle East/Africa
+1.480.483.4470

Copyright In-Stat 2008. All rights reserved.

Reproduction in whole or in part is prohibited without written permission from In-Stat.

This report is the property of In-Stat and is made available to a restricted number of clients only upon these terms and conditions. The contents of this report represent the interpretation and analysis of statistics and information that is either generally available to the public or released by responsible agencies or individuals. The information contained in this report is believed to be reliable but is not guaranteed as to its accuracy or completeness. In-Stat reserves all rights herein. Reproduction or disclosure in whole or in part to parties other than the In-Stat client who is the original subscriber to this report is permitted only with the written and express consent of In-Stat. This report shall be treated at all times as a confidential and proprietary document for internal use only. In-Stat reserves the right to cancel your subscription or contract in full if its information is copied or distributed to other divisions of the subscribing company without the written approval of In-Stat.