



Intel and WiMAX

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The Next Wave: “On the Go” Data and Internet Services

- Consumers now expect a high-performance Internet experience
- Consumers and enterprises are going mobile
- Service providers want to expand markets and raise revenue per subscriber

Wireless multi-megabit, affordable data and Internet services don't exist today.

WiMAX Advantages

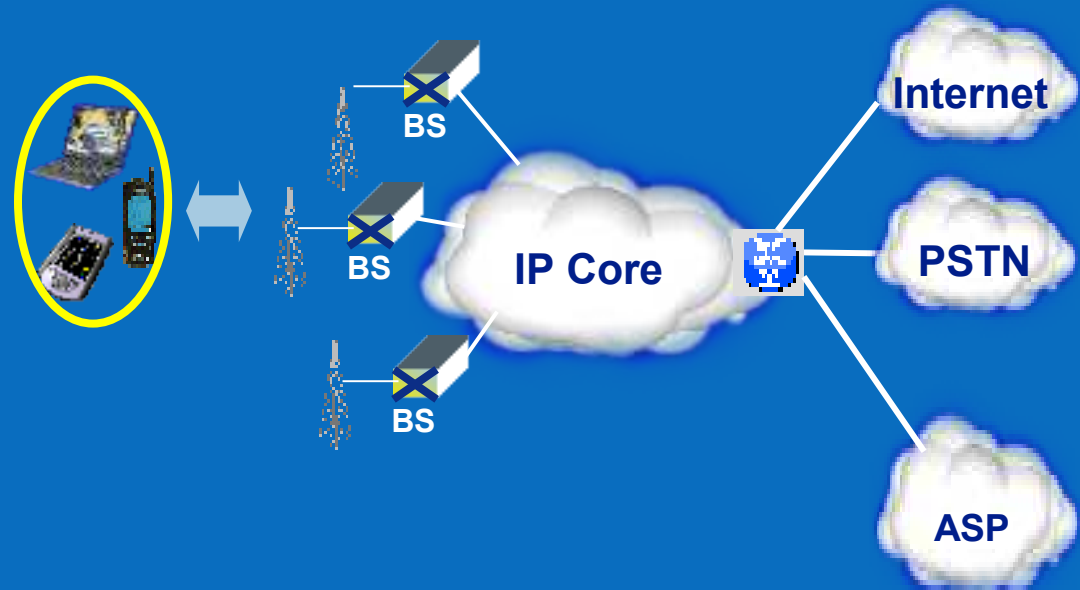
WiMAX Will Serve This Market Need

- Superior OFDMA performance
- Attractive economics
- Advanced IP-based architecture
- Strong, diverse ecosystem

WiMAX, with its technical and economic advantages, holds the key to the mainstream adoption of personal broadband.

Benefits of WiMax IP Network

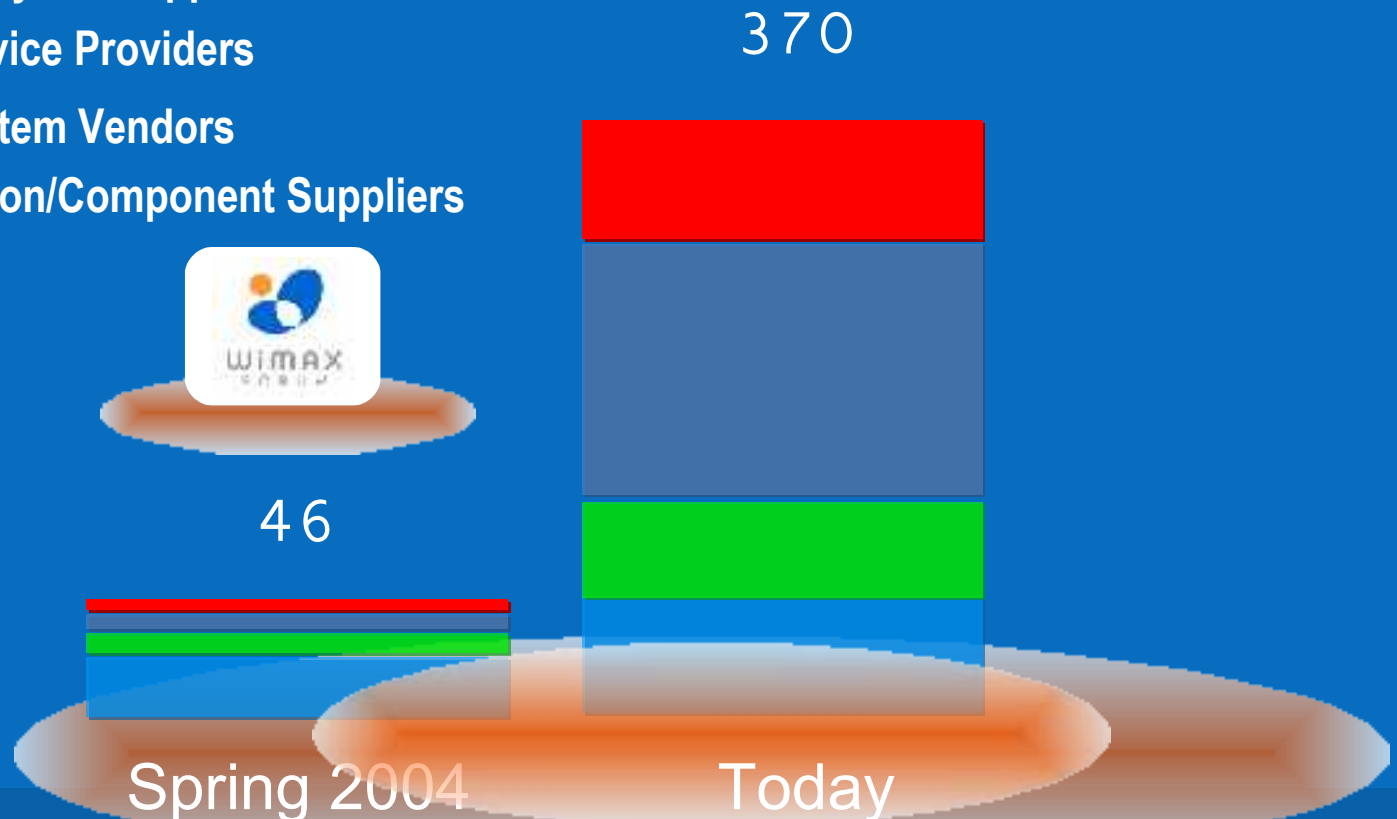
- Increased Revenue: rapid roll-out of advanced services.
 - Internet commonality; full IMS support
- Lower CAPEX and OPEX
 - Cost-efficient management & provisioning; lower cost standard IP infrastructure equipment.
- Compatibility, Lower Complexity
 - QUAD-play services with QoS.
- Simplified internetworking with other IP technologies
 - WiMAX fits easily into wired and wireless ecosystem
 - www.intel.com/go/wimax



The WiMAX Forum Membership 4 Years and Growing!

368 WiMAX Forum Member Companies

- 85 Ecosystem/Applications/Content
- 136 Service Providers
- 71 System Vendors
- 78 Silicon/Component Suppliers



WiMAX for the Mobile Internet

- Deliver *multi-megabit performance* of your home broadband connection “on the go”
- Maximize per cell throughput with *high spectral efficiency* of MIMO WiMAX
- Minimize *total cost of ownership* including CapEx, OpEx, and opportunity costs with an all-IP Network for non-cellular devices
- Lower *subscriber acquisition costs* with integrated WiFi + WiMAX notebooks and mobile CE devices pushed into market by platform vendors

Intel's WiMAX Leadership

Intel: key ingredients for WiMAX success

- Low-cost chipsets for low-cost clients
- Integration for mass market volumes: service-enabling the platform:
 - Wi-Fi-like distribution model: cost-effective, ubiquitous, flexible
- Leadership in standards development and profiles for roaming and interoperability

Intel, with its technical, economic and ecosystem leadership, will spur WiMAX success.

How Portable / Mobile WiMAX Works



802.16e PC Card

Laptop Connected Through 802.16e

802.16

802.16

802.16

Line of Sight BACKHAUL

Telco Core Network or Private (Fiber) Network



Intel's WiMAX Solutions Overview

2008+

Integrated Wi-Fi/WiMAX
Multi-mode Chipsets

2006-08

Intel® Fixed/Mobile WiMAX Si
Intel® Wi-Fi/WiMAX Radio
(Offer-R)

2004-06

Intel® PRO/Wireless 5116
Broadband Interface
(Rosedale)



Offer-R is the World's First Single Chip Wi-Fi/WiMAX Radio

Intel® PRO/Wireless 5116 Broadband Interface is the first highly integrated and programmable IEEE 802.16-2004 compliant system on chip (SOC)

Other names and brands may be claimed as the property of others

Ofer-R: World's First Single Chip Wi-Fi / WiMAX Radio for Mobile Devices

- Single RF System on Chip, multi-band solution
- Able to connect to any Wi-Fi or mobile WiMAX network worldwide (supporting the 2.3/2.4, 2.5, 3.5/5GHz bands.)
- Combines best in class wireless broadband technology with low power draw
- Targeting embedded mobile devices



Where ever you see Wi-Fi today, expect to see WiMAX tomorrow.

The Rosedale Family of Products: Low-Cost, High Value for Highest Volume Markets

Rosedale 2 for Horizontal High-Volume Markets



Driving down costs
Increasing functionality
Marching towards DSL price points
& adoption curves

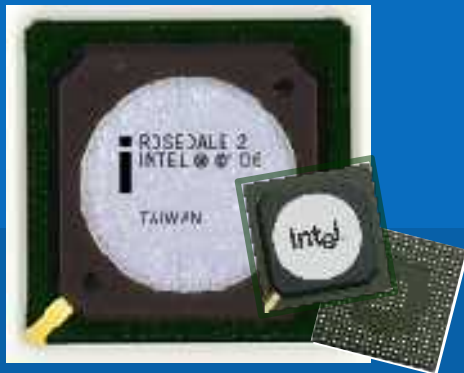
Rosedale 2 for Vertical Markets



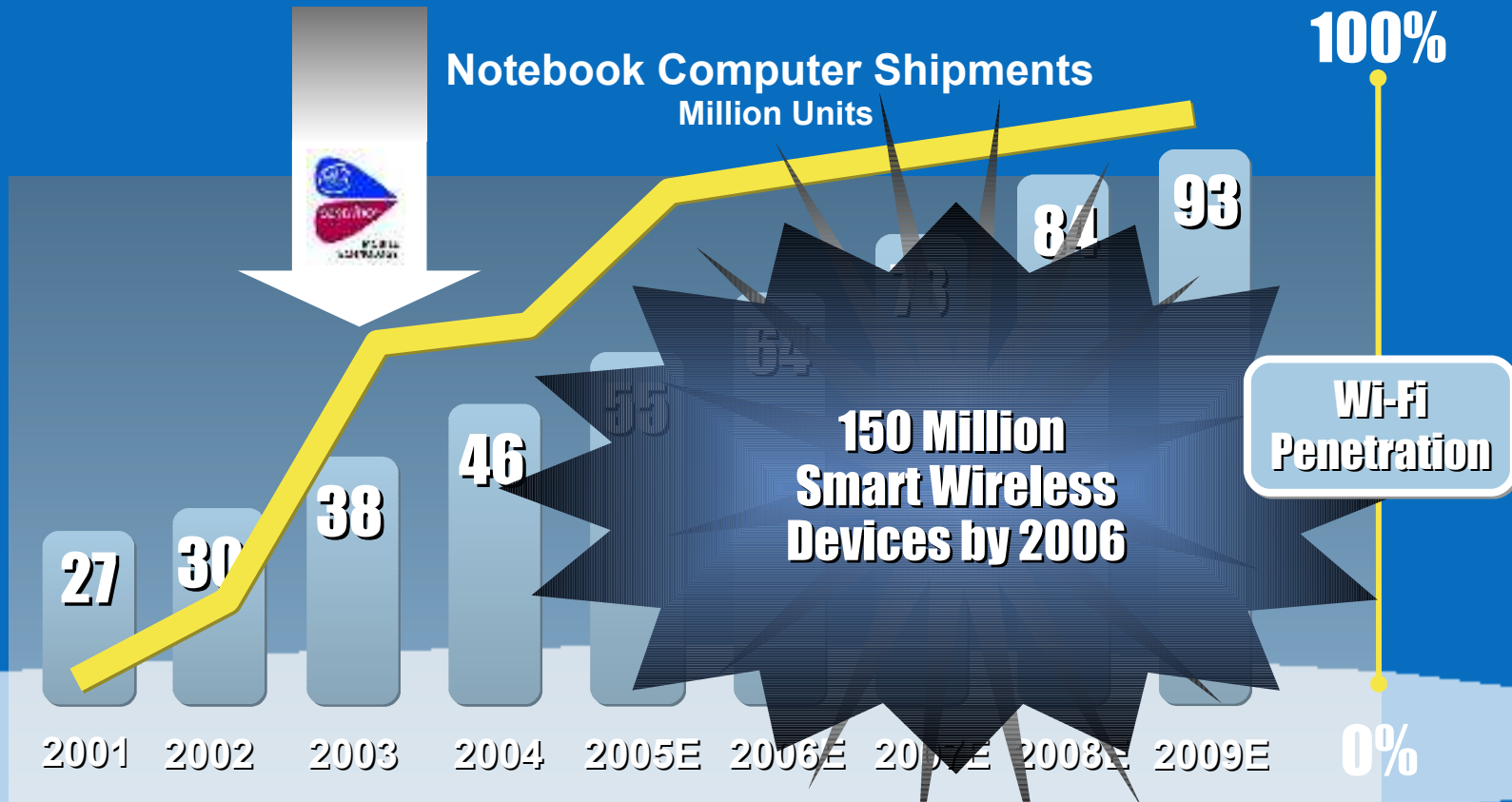
Driving down costs
Driving up enterprise efficiency
Enabling new applications & services
through embedded designs

Rosedale 2: Low Cost, High Value, High Volume

- Rosedale 2 is an integrated 802.16-2004 and 802.16-2005 system on chip optimized for cost-effective WiMAX modems
 - **Cost effective:** Low-cost WiMAX chipset for largest volume WiMAX segment – basic modems
 - **Easy upgrade:** Supports 802.16-2004 and 802.16-2005 software stacks for flexibility in equipment design, deployment and application
 - **Fixed and mobile:** Adds nomadic capability to Intel® PRO/Wireless 5116 broadband interface (Rosedale 1)
 - **Path to Centrino Mobile Technologies*-ready networks**
 - Use RD2 as starting point for CMT profile convergence



The "Centrino" Phenomenon: Integration is Key



Source: Gartner March 2005 for Notebook PC shipments and Intel Estimates for Wi-Fi attach

Wi-Fi & WiMAX commonality makes incremental cost to integrate WiMAX in laptops highly cost effective.

Intel's Commitment to WiMAX



Rosedale, Ofer-R: Low-Cost Embedded Fixed and Mobile Modem Silicon, Wi-Fi/WiMAX Radio



Intel WiMAX Solutions: PC Cards, CMT Profiles & Design Guide



Centrino: Embedded UMPC & Notebook Platforms



Intel Participation in Standards Bodies & Government Affairs



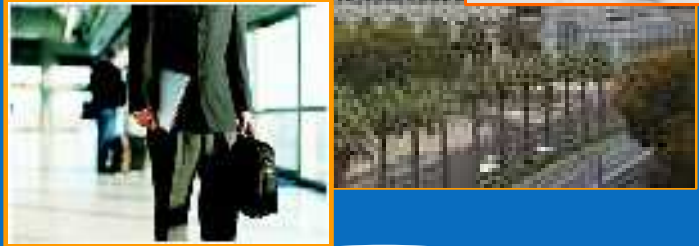
Worldwide Investments for Mobile Internet Ecosystem

WiMAX Today

The world is going wireless ...



Service Providers
Last Mile Market
Expansion
Cost-Effective Backhaul
New High-Value Services



Enterprise
Always Connected
Productivity
Unwired Offices, Factories,
Campuses...Employees.
Form Factors Meet Function



Consumer
Anytime, Anywhere
Entertainment,
Information,
Communication

Wireless Networks Will Co-Exist



The Result: Always Best Connected

WiMAX Is Progressing

>175 Trials

> 35 Commercial Networks

> 40 Networks With Confirmed Intel Design Wins



WiMAX Worldwide

- IEEE-approved 802.16e-2005 specification for Mobile WiMAX
- WiMAX will emerge first as three systems evolving to one global network:
 - 2.X Asia
 - 2.X North America
 - 3.X Europe and Latin America
- Intel published Intel® Centrino® Mobile Technology Reference Guide for WiMAX Networks in June, 2006



