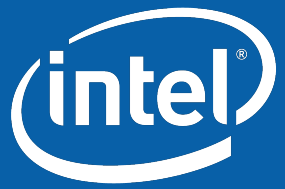


WiMAX: Delivering Multi-Megabit Wireless Broadband

14 Nov 2006

Carl Schmits

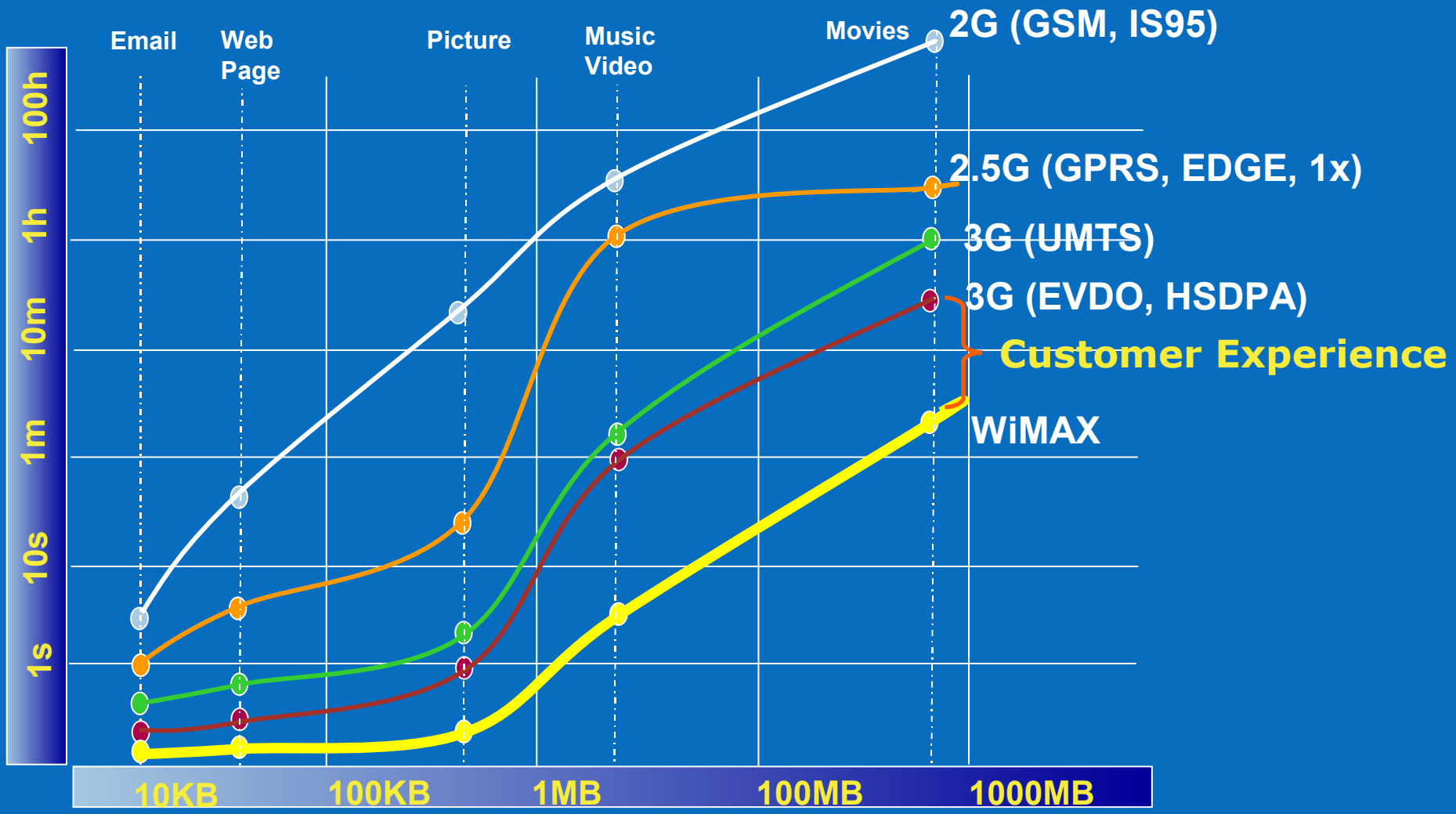
The WiMAX Market Opportunity

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.

Rich Media Drives New Requirements



Delivery Networks Must Keep Pace with What Consumers Want

Source: Intel Estimates

WiMAX Advantages

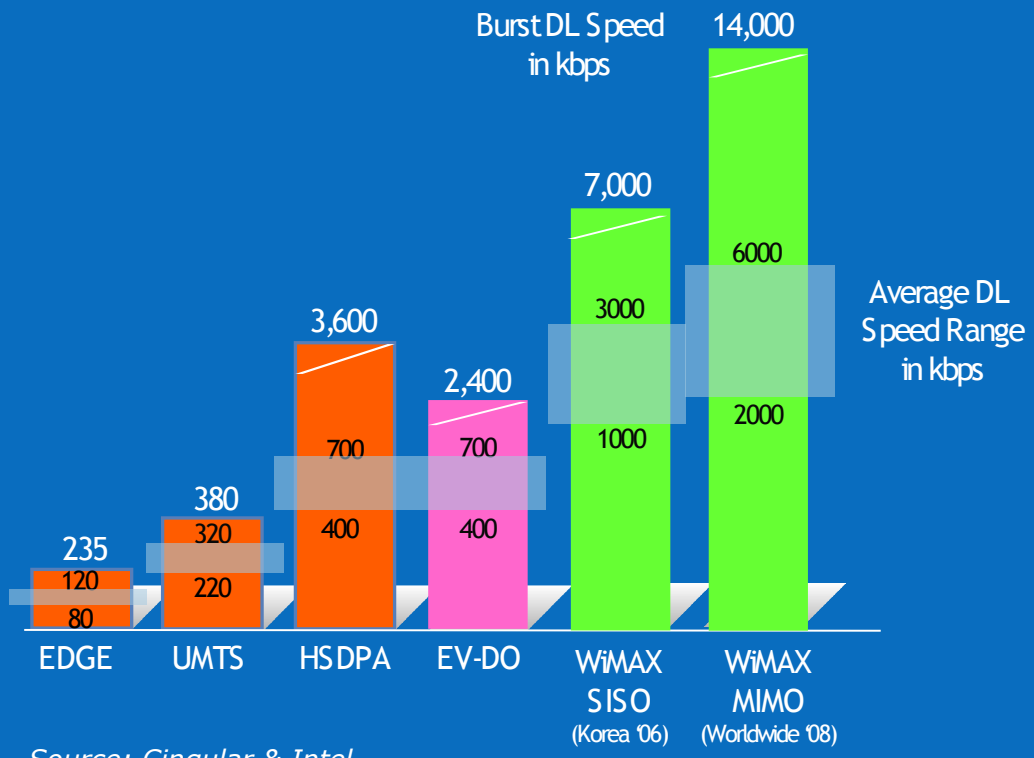
WiMAX Will Serve This Market Need

- 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.

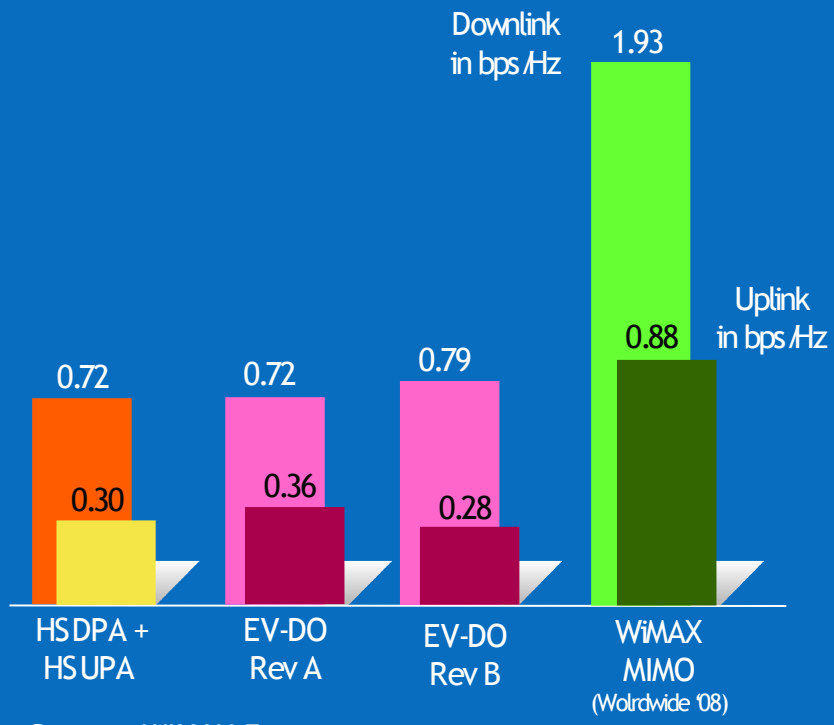
WiMAX: First Industry Standard OFDMA for High-Performance Wireless Broadband

End User Downlink Data Rates



Source: Cingular & Intel

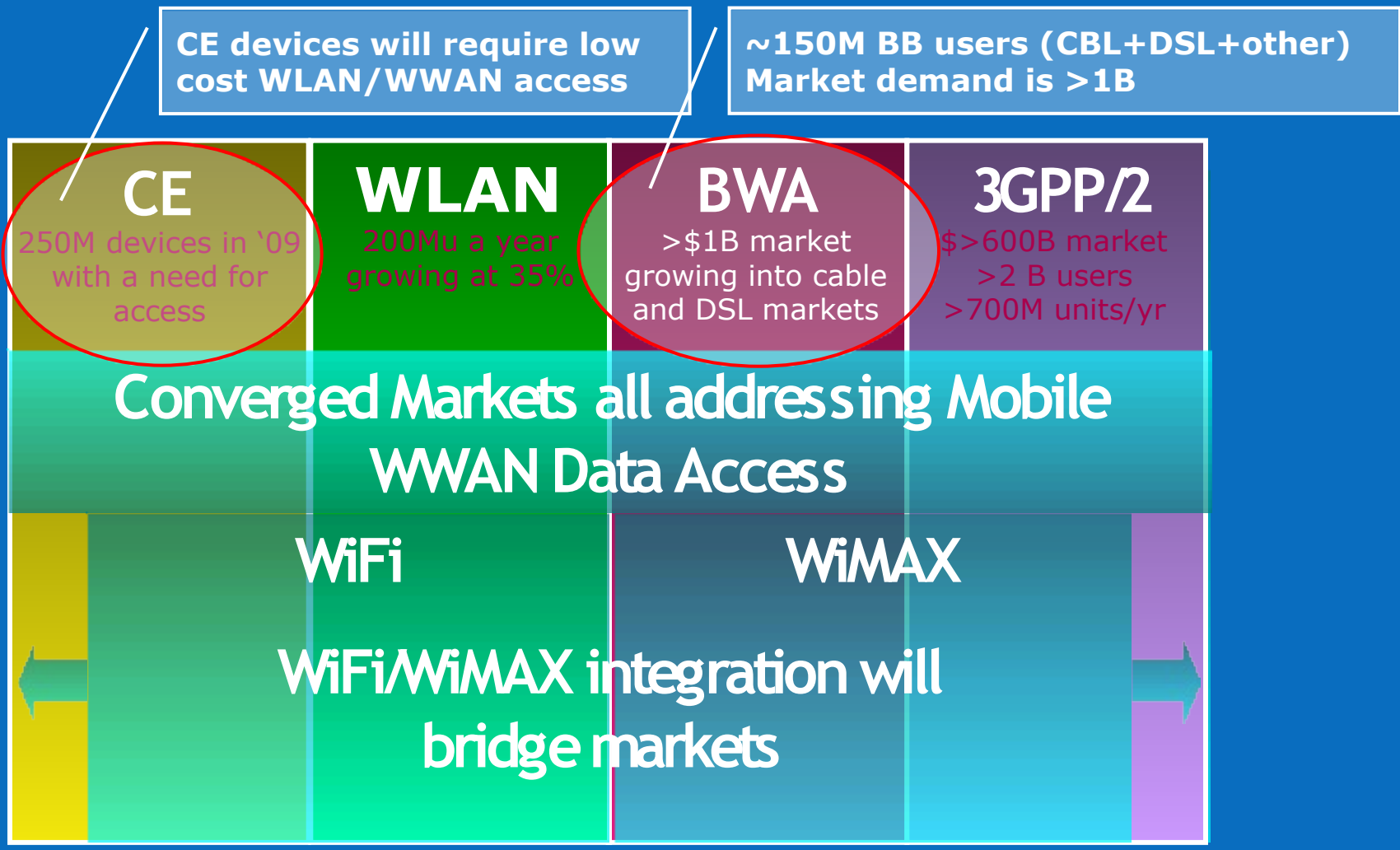
Up & Downlink Spectral Efficiency



Source: WiMAX Forum

intel

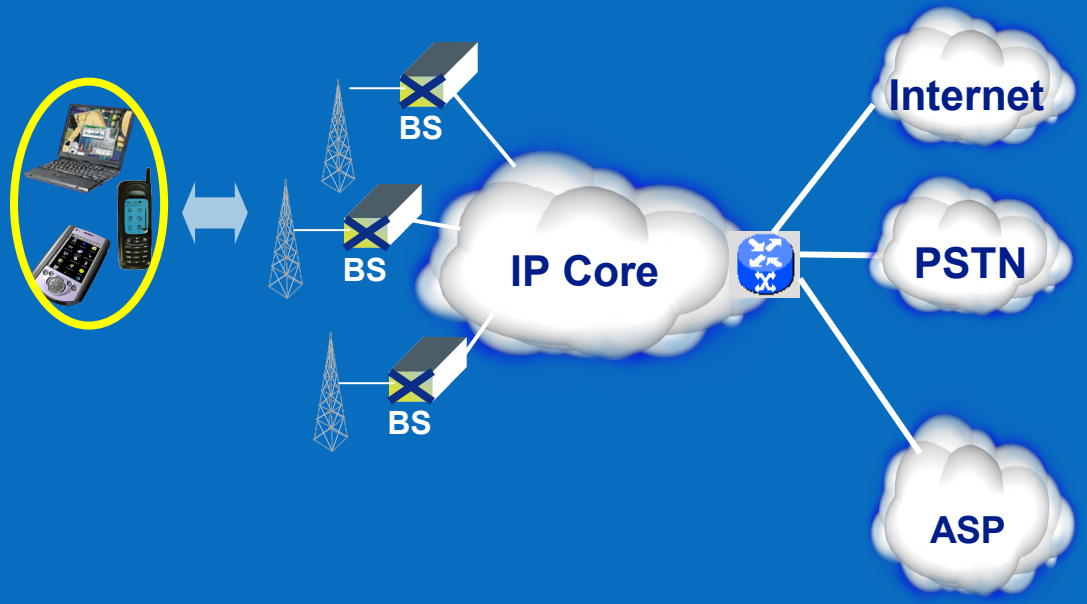
Convergence will Lead to Scale Economies



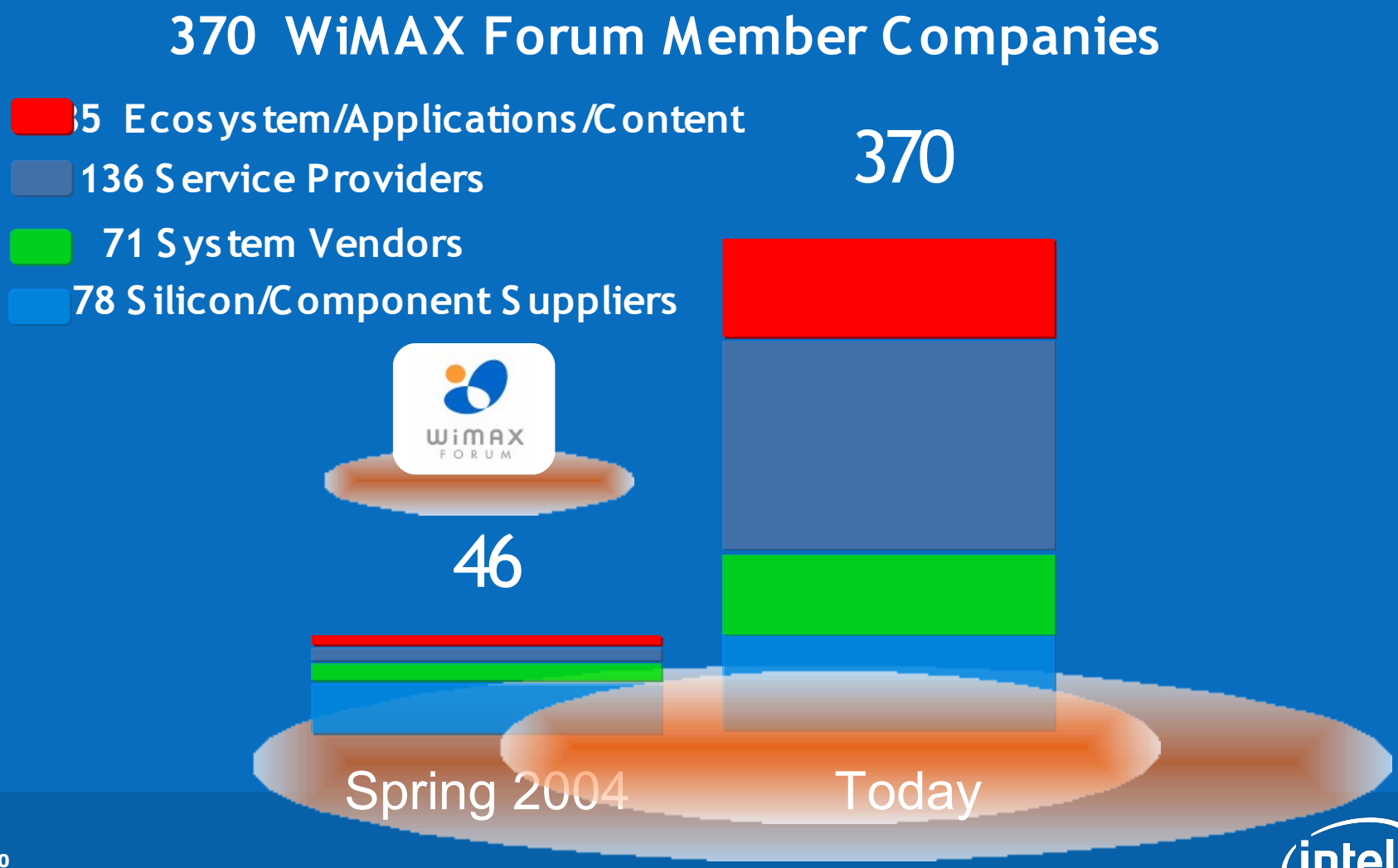
Source: Intel Estimates, IDC,

Benefits of All IP Networks

- 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



The WiMAX Forum Membership 4 Years and Growing!



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 in 30-40 MHz of new spectrum
- 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.

Intel's WiMAX Solutions Overview

2004-06

Intel® PRO/Wireless 5116 Broadband Interface (Rosedale)

2006-08

Intel® Fixed/Mobile WiMAX Si
Intel® WiFi/WiMAX Radio (Ofer-R)

2008+

Integrated WiFi/WiMAX Multi-mode Chipsets

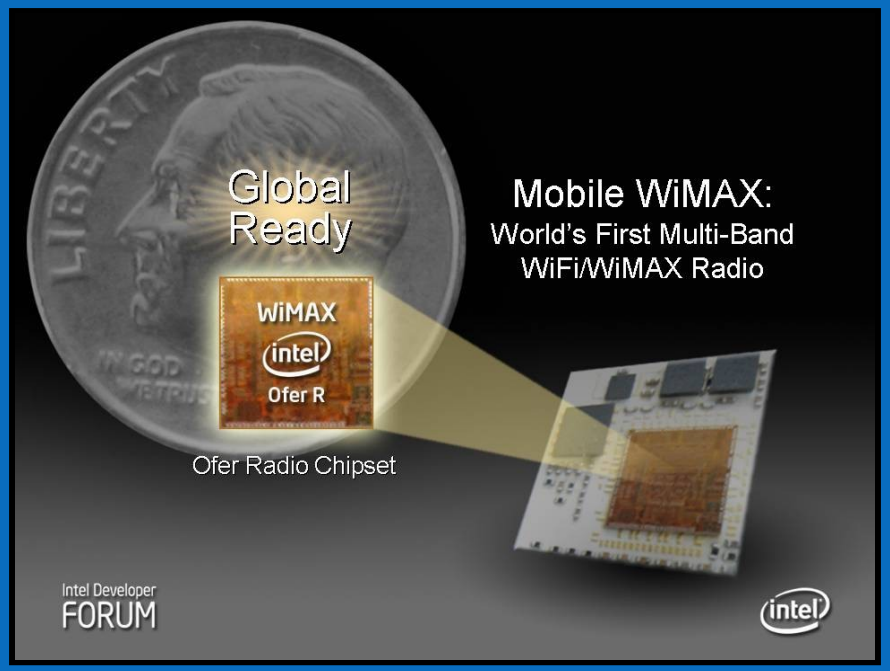
Rosedale 2: 802.16-2004/2005 SOC Optimized for Cost-Effective WiMAX Modems

Ofer-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)

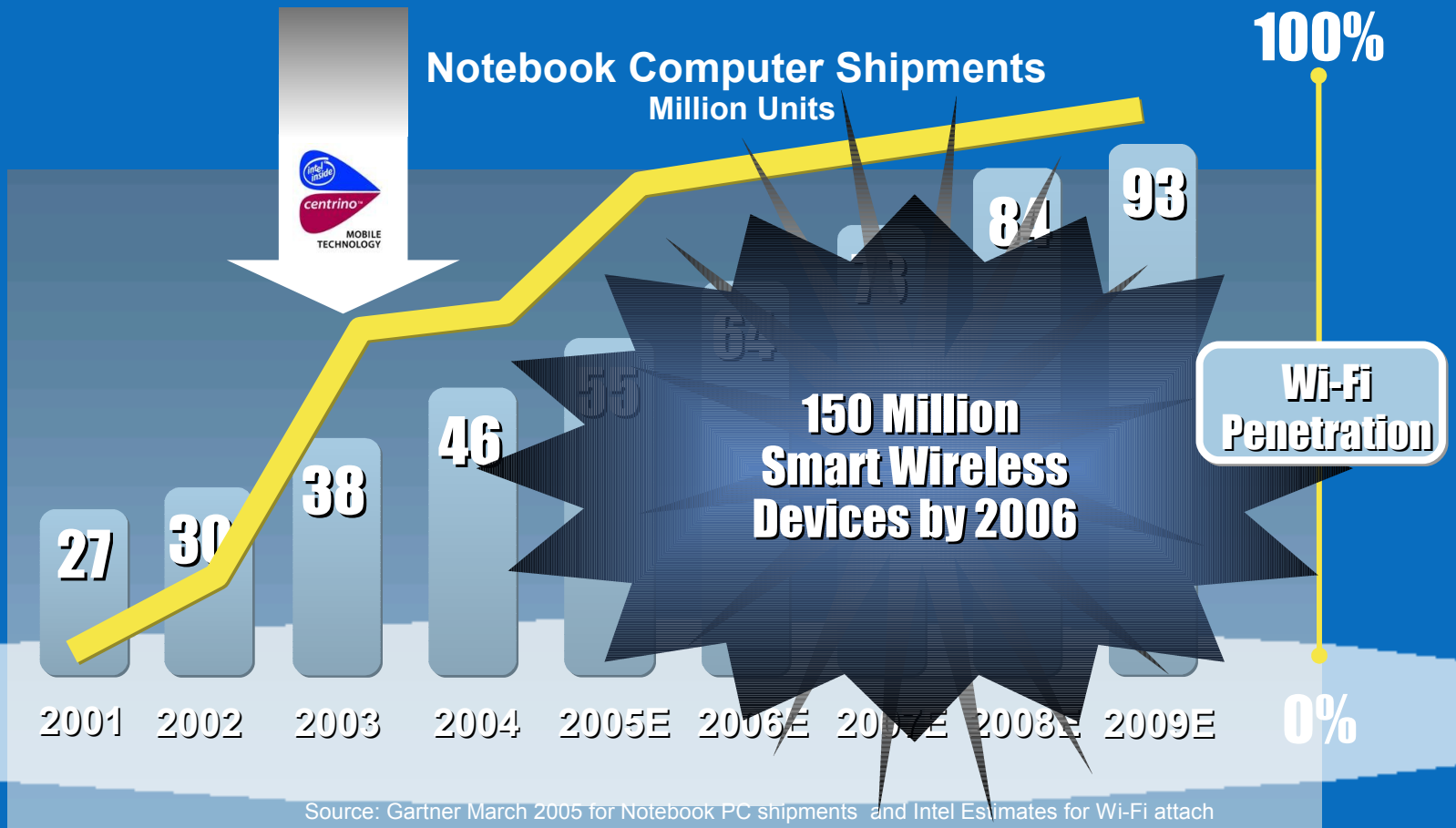
Ofer-R: World's First Single Chip Wi-Fi / WiMAX Radio for Mobile Devices

- 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 "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

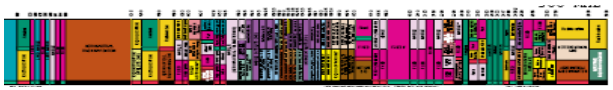
Intel WiMAX Solutions: PC Cards, CMT Profiles & Design Guide

Centrino: Embedded UMPC & Notebook Platforms

IEEE

WiMAX FORUM

Intel Participation in Standards Bodies & Government Affairs



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Worldwide Investments for Mobile Internet Ecosystem

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WiMAX Today

The world is going wireless …

Service Providers

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

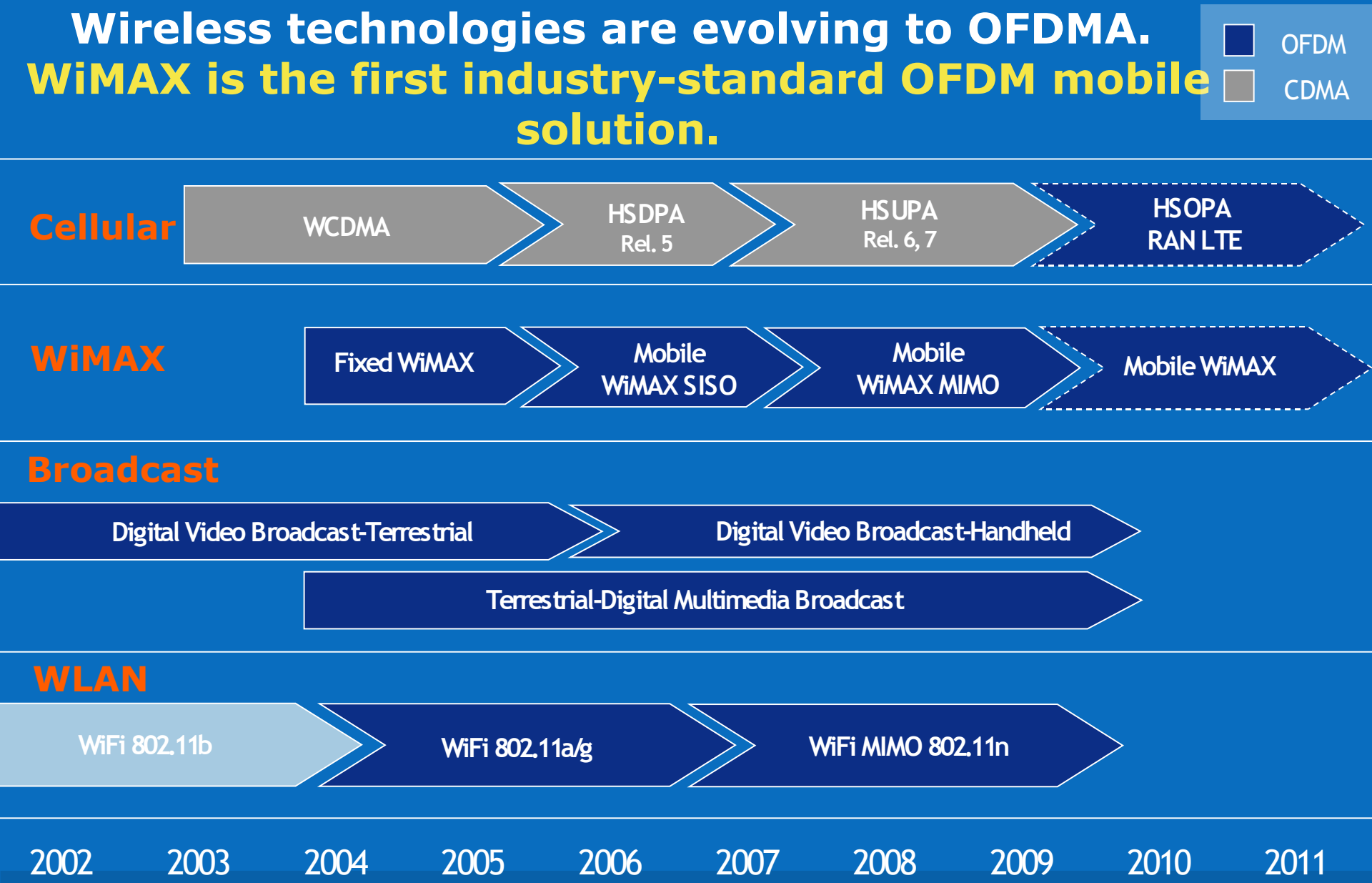
Enterprise

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

Consumer

Anytime, Anywhere
Entertainment,
Information,
Communication

Wireless technologies are evolving to OFDMA.
WiMAX is the first industry-standard OFDM mobile solution.



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

Source: Korea Telecom

WiMAX Gains Momentum Across the Globe

EETIMES ONLINE
Global news for the creators of technology

Intel wows with dual-mode WiMax chip.

June 26, 2006

THE WALL STREET JOURNAL. ONLINE

Sprint Bets On New Wireless 'WiMax' Network

August 8, 2006

DATAMONITOR COMPUTERWIRE

July 25, 2006

Alcatel, Siemens and Others Sample Intel Dual-Mode WiMax

The Mercury News
MercuryNews.com

July 5, 2006

Intel, Motorola bet $600 million on WiMax

WIRELESS WIMAX NETWORKS WOULD WORK WITH INTEL CHIPS


intel®
Leap ahead™

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