

**Shifting to Embedded:  
2008 Worldwide Cellular Modem Market**

SKU: IN0804013WBB  
Analyst: Daryl Schoolar  
Daryl.Schoolar@reedbusiness.com  
+1.480.609.4510  
December 2008

## Report Summary

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2007 and 2008 have been banner years for the cellular modem market, as many operators worldwide have aggressively beefed up their 3G data service offerings, and, consequently, cellular modem manufacturers have offered a wide variety of 3G cellular modems. 2007 shipments reached 12.6 million, with 2008 shipments expected to reach over 20 million. Although In-Stat expects the economic downturn to affect cellular modem purchases negatively in 4Q08, the 1H08 and the third quarter 2008 were still quite strong, in terms of shipment growth.

This report provides the following:

- End-user data on cellular laptop data usage
- Profiles of key vendors in the cellular modem market
- Shipment forecasts for external and embedded cellular modems.
- Forecast breakout between USB modems and PC cards
- Revenue forecasts for external and embedded cellular modems

### What's in the Report?

- Global forecasts for external and embedded modems
- End-user research on current usage of mobile broadband
- Vendor profiles
- Advice in the end-user data section on how to grow services, discussions about the impact of embedded modems on the market

### HIGHLIGHTS

- Embedded modem shipments will overtake external by the end of 2011.
- USB modems have become the preferred external modem form factor.
- Per In-Stat's TAP survey most users get their mobile broadband service paid for by their employer.
- Foreign operators are more aggressively selling embedded devices than US operators.

**Who Will be Interested in This Report?**

- Laptop/mobile PC makers
- The financial community

**What Questions Does This Report Answer?**

- What is the size of the market?
- What are the annual shipments?
- How are prices adjusting to changing demands?
- Who are the leading suppliers are in the market?
- What are the expectations for future growth?
- What are the form factor trends in terms of PC cards to USB and external to embedded?

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## Methodology

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Primary research for this report was accomplished through direct interviews and/or email exchanges with cellular modem vendors during the 3rd and 4th quarters of 2008. Secondary sources included financial documents from public companies, and information gleaned from vendor websites.

The forecasts in this report are based on In-Stat's broad database of device and subscription forecasts, along with cellular network deployment data tracked in In-Stat's quarterly 3G/4G Deployment Tracker. Additional data and statistics have been provided by various organizations, such as the CDMA Development Group, the GSM Association, and 3G Americas.

This report focuses on 3G and 4G cellular modems, including CDMA1X 2000 EV-DO, WCDMA/HSPA, and LTE cellular modems, which allow a mobile PC to connect to a cellular data network. Both external modems (including PC cards and USB modems) and embedded modems (modems built-in to mobile PCs) are included. Cellular modem cards intended for use in other consumer electronics devices, outside of mobile PCs, are not included in this report, nor are embedded cellular modems in cellphones.

The survey results featured in the report are from a survey of In-Stat's Technology Adoption Panel (TAP). In-Stat's TAP is a dynamic, online panel of almost 18,000 of US technology users and decision makers interested in contributing their opinions and insights about technology usage and technology issues in the workplace and at home. The panel is comprised of a diverse group of people who represent a wide range of company sizes, industries, and areas of expertise. The diversity of the panel allows us to gather information about a variety of topics from many different perspectives.

Since the panel was recruited primarily as a business panel, it should not be considered representative of all US consumers. Although the panelists are also consumers, and can give their opinions as such, there are many differences in the composition of the panel vs. the overall consumer population in the US. In particular, the panel is under-represented by younger people (average age of respondents is currently 42 years old), and the majority of TAP panelists (~86%) are men. In addition, TAP panelists tend to be more highly educated, have a higher average household income and, in general, are more "tech savvy" than the average US consumer. Even though TAP survey findings can not be applied to the consumer market as a whole, the "tech savvy" nature of the panel does provide good insight into early market trends.

The TAP survey was conducted between June and July of 2008 with 1,077 participants.

Note that some numbers in this report may not calculate exactly due to rounding. The numbers are calculated at a higher precision than shown.

All numbers are worldwide. All revenue figures, unless noted, are for US dollars.

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## Related In-Stat Reports

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- #IN0804004WBB *Devices Take Center Stage: The Global Outlook for WiMAX Devices*  
December/2008  
<http://instat.com/catalog/wcatalogue.asp?id=281#IN0804004WBB>
- #IN0803987WBB *The Road to 4G: LTE and WiMAX Lead the Way Worldwide*, October/2008  
<http://instat.com/catalog/wcatalogue.asp?id=281#IN0803987WBB>
- #IN0803986WBB *2008 Global Hotspot Market—A Time of Change and Growth*, August/2008  
<http://instat.com/catalog/wcatalogue.asp?id=281#IN0803986WBB>
- #IN0803969WBB *Waiting for WiMAX—US Consumers Want More from Wireless Broadband*,  
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## Offices

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### 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

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