

2010 Computer Semiconductors

Semiconductor Applications Service



2010 Computer Semiconductors

Semiconductor Applications Service

Susie Inouye

Myson Robles-Bruce

Matt Scherer

Publication Number: 10SemiApps-Computers

April 2010

© 2010 **databeans** Incorporated

Reno, NV 89523

Phone: 775.624.6200

www.databeans.net

Abstract

The first half of 2009 was difficult for PC manufacturers who saw unit sales decline as consumers held off on new or replacement PC purchases in light of the global recession. However, the newly emerged netbook category helped to buoy sales throughout the year end. The release of the Microsoft Windows 7 operating system in the latter part of the year also had a positive impact in hardware revenue. Many of these trends that influenced the worldwide PC market in 2009 will continue to resonate in 2010, however their impact will change as the market recovers and new forces come into play.

The economic recession of 2009 directly caused PC prices to decline, but going into 2010 the average selling price of PCs will remain somewhat consistent thanks to stronger demand from businesses and consumers. What's more, the market for higher end ultra thin laptop and all-in-one desktop PCs will fair particularly well and return to positive growth at the expense of low end laptops and netbooks.

The computer market is still the largest consumption market for semiconductors, constituting about a 31 percent share of overall market value. Databeans projects that this market will reach \$78.9 billion in global revenue in 2010. Unit growth in all major markets will continue to increase strongly over the next few years as home PC demand accelerates and professional replacements increase in the recovery from the global recession.

Consumption of semiconductors is largely driven by the ubiquitous computer market due to the numerous devices needed in each product. Memory is currently the largest semiconductor product market by revenue with 33 percent of this market. Microprocessors currently comprise the second largest product segment with 30 percent of the market thanks to market leader Intel's widely spread x86 architecture. Logic will remain the third largest IC product with \$16.1 billion in sales, followed by analog, discrete chips, and optoelectronics.

This study is available through individual report purchase for **\$3,500.00 USD**, or available at a discounted rate through our **Total Technology Service**, our **Computer Markets Service**, the **Semiconductor Markets Service**, and the **Semiconductor Applications Service**. For our subscription service subscribers, all of our research is backed by a coverage guarantee meaning if you purchase a report and need additional information, our analysts are available to continue the analysis, customized to your organization's needs.

ABOUT DATABEANS

Databeans, Inc., headquartered in Reno, Nevada, USA, is an internationally recognized market research firm focused on the semiconductor and electronics industry. Databeans publishes over 50 market research reports annually that are available for purchase as individual studies, or bundled together in cost-saving subscription services. Databeans' detailed quality studies, industry leading customer service, and unparalleled responsiveness are unmatched in the electronics market research industry.

BENEFITS OF A SUBSCRIPTION SERVICE WITH DATABEANS:

Databeans will become an extension of your group

For our subscription services clients, Databeans will help with presentations, fact-finding inquiries, and essentially any project that internal groups may not have the time or resources to accomplish.

Inquiry hours

All our subscription services include inquiry hours, allowing clients to take full advantage of our analysts for contribution to internal marketing and business planning.

Corporate-wide site licensing

We encourage our clients to post our reports on their internal website, at no additional cost. This allows for maximum visibility and value of Databeans data and reports within your company.

Work within your budget

We can create any type of payment plan that you desire. Call us to see which options will work best for your group or company.

Ease of doing business

By ordering once a year, your company will automatically receive the reports or services ordered when they first become available.

Additional Savings

- Our minimum discount with our smaller services is about 25% off list price, while our full service customers save about 48% off list price.
- The Total Technology Service includes our Databeans Market Database and Share Database, free.
- Enjoy any Databeans service and your company qualifies for a 20% discount on any non-subscription report Databeans publishes.

For more information, please contact us at 775.624.6200 or visit our website at www.databeans.net.

Table of Contents

Significant Findings	1
Computer Market Overview	1
Semiconductors in the Computer Market.....	4
Regional Forecast.....	7
Americas	9
Europe	11
Japan.....	12
Asia Pacific.....	14
China	14
Taiwan.....	16
Korea	17
India	18
Consumption Forecast.....	19
Desktops.....	21
Notebooks.....	24
Servers.....	27
Peripherals.....	29
Printers.....	31
Displays	32
External Storage	33
Worldwide Computer Electronics Revenue and Shipment Forecast.....	34
Production Forecast	37
Discretes	39
Optoelectronics	41
Sensors	43
Analog.....	45
Logic.....	48
Memory	51
Processors	55
DSP	56
Microcontrollers	57
Microprocessors	60
Supplier Market Share	63
Intel	66
Samsung.....	67
Hynix.....	69
AMD.....	70
Texas Instruments	71
Micron.....	72
Elpida.....	73
NEC.....	74
nVidia.....	75
STMicroelectronics	76

Methodology.....	77
Databeans Market and Product Segmentation Definitions	79
Market Segmentation.....	79
Product Segmentation	86

Table of Figures

Figure 1: Worldwide Semiconductor Revenue Forecast by Market Segment.....	3
Figure 2: 2010 Worldwide Semiconductor Revenue Share by Market Segment	3
Figure 3: Worldwide Computer Semiconductor Market Forecast (Revenue, Units, and ASP)	5
Figure 4: Worldwide Computer Semiconductor Revenue Forecast by Product	6
Figure 5: 2010 Worldwide Computer Semiconductor Revenue Share by Product.....	6
Figure 6: 2010 and 2015 Worldwide Computer Semiconductor Revenue Share by Region	8
Figure 7: Worldwide Computer Semiconductor Revenue Forecast by Region.....	9
Figure 8: Americas Computer Semiconductor Revenue Forecast	10
Figure 9: Europe Computer Semiconductor Revenue Forecast	12
Figure 10: Japan Computer Semiconductor Revenue Forecast.....	13
Figure 11: Asia Pacific Computer Semiconductor Revenue Forecast.....	14
Figure 12: Worldwide Computer Semiconductor Revenue Forecast by Application Area	20
Figure 13: 2010 Worldwide Computer Semiconductor Revenue Share by Application Area.....	20
Figure 14: Worldwide Desktop Computer Semiconductor Revenue Forecast	23
Figure 15: 2010 Worldwide Desktop Computer Semiconductor Revenue Share by Product	23
Figure 16: Worldwide Notebooks Computer Semiconductor Revenue Forecast.....	25
Figure 17: 2010 Worldwide Notebooks Computer Semiconductor Revenue Share by Product.....	26
Figure 18: Worldwide Server Computer Semiconductor Revenue Forecast.....	28
Figure 19: 2010 Worldwide Server Computer Semiconductor Revenue Share by Product	28
Figure 20: Worldwide Peripherals Computer Semiconductor Revenue Forecast	30
Figure 21: 2010 Worldwide Peripheral Computer Semiconductor Revenue Share by Product	30
Figure 22: 2010 Worldwide Computer Semiconductor Revenue Share by Product.....	38
Figure 23: Worldwide Computer Discretes Market Revenue Forecast.....	40
Figure 24: Worldwide Computer Discretes Market Forecast (Revenue, Units, and ASP)	40
Figure 25: Worldwide Computer Optoelectronics Market Revenue Forecast.....	42
Figure 26: Worldwide Computer Optoelectronics Market Forecast (Revenue, Units, and ASP)	42

Figure 27: Worldwide Computer Sensors/MEMS Market Forecast (Revenue, Units, and ASP)	43
Figure 28: Worldwide Computer Sensors Revenue Forecast by Product	44
Figure 29: Worldwide Computer Analog Market Forecast (Revenue, Units, and ASP)	46
Figure 30: 2010 and 2015 Worldwide Computer Analog Revenue Share by Product	47
Figure 31: Worldwide Computer Logic Market Forecast (Revenue, Units, and ASP)	49
Figure 32: Worldwide Computer Logic Revenue Forecast by Product	50
Figure 33: 2010 Worldwide Computer Logic Revenue Forecast by Product	50
Figure 34: Worldwide Computer Memory Market Forecast (Revenue, Units, and ASP)	53
Figure 35: Worldwide Computer Memory Revenue Forecast by Product	54
Figure 36: 2010 Worldwide Computer Memory Revenue Share by Product	54
Figure 37: Worldwide Computer Processors Revenue Forecast by Product	55
Figure 38: 2010 Worldwide Computer Processors Revenue Share by Product	56
Figure 39: Worldwide Computer DSP Market Forecast (Revenue, Units, and ASP)	57
Figure 40: Worldwide Computer Microcontroller Market Forecast (Revenue, Units, and ASP)	58
Figure 41: Worldwide Computer Microcontroller Revenue Forecast by Resolution	59
Figure 42: Worldwide Computer Microprocessor Market Forecast (Revenue, Units, and ASP)	61
Figure 43: 2009 Worldwide Computer Semiconductor Revenue Share by Supplier	63

Table of Tables

Table 1: Worldwide Semiconductor Revenue Forecast by Market Segment	2
Table 2: Worldwide Computer Semiconductor Market Forecast (Revenue, Units, and ASP)	4
Table 3: Worldwide Computer Semiconductor Revenue Forecast by Product	5
Table 4: Worldwide Computer Semiconductor Revenue Forecast by Region	7
Table 5: Worldwide Computer Semiconductor Shipment Forecast by Region	9
Table 6: Worldwide Computer Semiconductor Revenue Forecast by Application Area	19
Table 7: Worldwide Desktop Computer Semiconductor Revenue Forecast by Product	22
Table 8: Worldwide Notebook/Netbook Computer Semiconductor Revenue Forecast by Product	26
Table 9: Worldwide Server/Workstation Computer Semiconductor Revenue Forecast by Product	29
Table 10: Worldwide Peripheral Computer Semiconductor Revenue Forecast by Product	31
Table 11: Worldwide Computer Electronics Revenue Forecast by Application	34

Table 12: Worldwide Computer Electronics Shipment Forecast by Application	35
Table 13: Worldwide Computer Semiconductor Revenue Forecast by Product	38
Table 14: Worldwide Computer Semiconductor Shipment Forecast by Product.....	39
Table 15: Worldwide Computer Discretes Market Forecast (Revenue, Units, and ASP).....	41
Table 16: Worldwide Computer Optoelectronics Market Forecast (Revenue, Units, and ASP).....	42
Table 17: Worldwide Computer Sensors/MEMS Market Forecast (Revenue, Units, and ASP).....	44
Table 18: Worldwide Computer Sensors Revenue Forecast by Product.....	44
Table 19: Worldwide Computer Analog Market Forecast (Revenue, Units, and ASP).....	45
Table 20: Worldwide Computer Analog Revenue Forecast by Product.....	46
Table 21: Worldwide Computer Logic Market Forecast (Revenue, Units, and ASP)	49
Table 22: Worldwide Computer Logic Revenue Forecast by Product	51
Table 23: Worldwide Computer Memory Market Forecast (Revenue, Units, and ASP)	53
Table 24: Worldwide Computer Memory Revenue Forecast by Product	53
Table 25: Worldwide Computer Processors Revenue Forecast by Product	55
Table 26: Worldwide Computer DSP Market Forecast (Revenue, Units, and ASP)	57
Table 27: Worldwide Computer Microcontroller Market Forecast (Revenue, Units, and ASP)	59
Table 28: Worldwide Computer Microcontroller Revenue Forecast by Resolution.....	59
Table 29: Worldwide Computer Microprocessor Market Forecast (Revenue, Units, and ASP)	61
Table 30: 2009 and 2008 Worldwide Computer Semiconductor Supplier Market Share	64

This report is the property of Databeans Inc., and has been distributed to a select group of clients upon specified terms and conditions. Data presented in this report is an interpretation of the modeled market, and is believed to be reliable, but is not guaranteed for accuracy or completeness. Reproduction of this report, in whole or in parts, is permitted only by express consent of Databeans, Inc.



© 2010 **databeans** Incorporated

Publication Number: 10SemiApps-Computers

Research Analyst: Susie Inouye

✉ sinouye@databeans.net

Research Analyst: Myson Robles-Bruce

✉ myson@databeans.net

Research Analyst: Matt Scherer

✉ matt@databeans.net
