

# **Market Challenges Abound as DRAM Price Decline Continues**

**1Q08 Strategic Analysis**

**Report No: VM 101-08**

**April 2008**

**Analyst: Bob Merritt**



## Table of Contents

Executive Overview .....	1
Significant DRAM Events.....	3
2008 DRAM Market Assumptions.....	5
Bit Growth (1Gbit Equivalent Units) .....	6
Unit Growth by DRAM Density .....	8
The Monthly Outlook.....	10
The Quarterly Outlook .....	11
Annual Forecast of Bit Growth .....	12
Annual View .....	14
DRAM Diversification by Interface .....	16
DRAM Diversification by Density.....	19
Geographic Revenue Trends by Quarter .....	24
Geographic Market Forecasts by Year.....	25
Summary.....	26
Appendix .....	29

## List of Tables

Table 1: WW Shipments in 1Gigabit DRAM Equivalentents.....	6
Table 2: DRAM Average Sales Price.....	6
Table 3: Unit Production by DRAM density.....	8
Table 4: Unit Percentage by Density.....	9
Table 5: Quarterly DRAM Revenue and Unit Forecast .....	11
Table 6: DRAM Bit Growth.....	12
Table 7: Worldwide DRAM Revenue and Unit Shipments .....	14
Table 8: Quarterly Increase in 512Mbit Units .....	15
Table 9: DRAM Demand by Interface .....	16
Table 10: DRAM Unit % by Interface.....	17
Table 11: % Bits by Interface .....	17
Table 12: DRAM Bits by Interface .....	18
Table 13: Units (K) by Density .....	21

## **Appendix Tables**

Table 1: Review of Monthly DRAM Unit Output .....	30
Table 2: DRAM ASP per Gigabyte .....	30
Table 3: 2006 thru 2009 DRAM Monthly Revenue and Unit Shipments.....	31
Table 4: Revenue (\$) By Density .....	32
Table 5: Units By Density .....	33
Table 6: Revenue % by Density .....	34
Table 7: Units (%) by Density.....	35
Table 8: Bits by Density (B) .....	36
Table 9: Bits (%) by Density.....	37
Table 10: Geographic Revenue Quarterly Changes .....	38
Table 11: Yearly DRAM Revenue Shipments Geographically .....	38
Table 12: DRAM ASP by Year .....	39

## List of Figures

Figure 1: Review of Monthly DRAM Unit Output .....	2
Figure 2: Decline in DRAM ASP per Gigabyte .....	7
Figure 3: 2005 thru 2009 DRAM Monthly Revenue and Unit Shipments .....	10
Figure 4: Revenue (\$) By Density.....	19
Figure 5: Revenue (%) By Density .....	20
Figure 6: Percent Units by Density .....	22
Figure 7: Bits by Density .....	22
Figure 8: Bits (%) by Density.....	23
Figure 9: Geographic Revenue Quarterly Changes.....	24
Figure 10: Yearly DRAM Revenue Shipments Geographically .....	25
Figure 11: DRAM Average Sales Price.....	27

Copyright Semico Research, 2008. All rights reserved.

Reproduction in whole or part is prohibited without the express written permission of Semico.

The contents of this report represent the interpretation and analysis of statistics and information that is generally available to the public or released by responsible agencies or individuals, but is not guaranteed as to its accuracy or completeness