

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549**

**FORM 8-K**

**CURRENT REPORT  
PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

Date of report (Date of earliest event reported): September 3, 2008

**Mercury Computer Systems, Inc.**  
(Exact Name of Registrant as Specified in Charter)

**Massachusetts**  
(State or Other Jurisdiction  
of Incorporation)

**000-23599**  
(Commission File Number)

**04-2741391**  
(IRS Employer  
Identification No.)

**199 Riverneck Road, Chelmsford, Massachusetts**  
(Address of Principal Executive Offices)

**01824**  
(Zip Code)

**Registrant's telephone number, including area code: (978) 256-1300**

**Not Applicable**  
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**Item 7.01 Regulation FD Disclosure.**

The management of Mercury Computer Systems, Inc. ("Mercury") will present an overview of Mercury's business on September 4, 2008 at the Kaufman Brothers 11<sup>th</sup> Annual Investor Conference. Attached as Exhibit 99.1 to this Current Report on Form 8-K (the "Report") is a copy of the slide presentation to be made by Mercury at the conference.

This information is being furnished pursuant to Item 7.01 of this Report and shall not be deemed to be "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section and will not be incorporated by reference into any registration statement filed by Mercury under the Securities Act of 1933, as amended, unless specifically identified as being incorporated therein by reference. This Report will not be deemed an admission as to the materiality of any information in this Report that is being disclosed pursuant to Regulation FD.

Please refer to page 2 of Exhibit 99.1 for a discussion of certain forward-looking statements included therein and the risks and uncertainties related thereto, as well as the use of non-GAAP financial measures included therein.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits.

| <u>Exhibit No.</u> | <u>Description</u>                              |
|--------------------|---|
| 99.1               | Presentation materials dated September 4, 2008. |

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned thereunto duly authorized.

Dated: September 3, 2008

MERCURY COMPUTER SYSTEMS, INC.

By: /s/ Alex A. Van Adzin  
Alex A. Van Adzin  
Vice President, General Counsel,  
and Corporation Secretary

EXHIBIT INDEX

| <u>Exhibit No.</u> | <u>Description</u>                              |
|--------------------|---|
| 99.1               | Presentation materials dated September 4, 2008. |



**Kaufman Bros. 11th Annual  
Investor Conference  
September 4, 2008**

**Mark Aslett**, President & Chief Executive Officer  
**Bob Hult**, SVP & Chief Financial Officer

# Forward-Looking Safe Harbor Statement

---

This presentation contains certain forward-looking statements, as that term is defined in the Private Securities Litigation Reform Act of 1995, including those relating to anticipated fiscal 2009 business performance and beyond. You can identify these statements by our use of the words "may," "will," "should," "plans," "expects," "anticipates," "continue," "estimate," "project," "intend," and similar expressions. These forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those projected or anticipated. Such risks and uncertainties include, but are not limited to, general economic and business conditions, including unforeseen weakness in the Company's markets, effects of continued geopolitical unrest and regional conflicts, competition, changes in technology and methods of marketing, delays in completing engineering and manufacturing programs, changes in customer order patterns, changes in product mix, continued success in technological advances and delivering technological innovations, continued funding of defense programs, the timing of such funding, changes in the U.S. Government's interpretation of federal procurement rules and regulations, market acceptance of the Company's products, shortages in components, production delays due to performance quality issues with outsourced components, the inability to fully realize the expected benefits from acquisitions or delays in realizing such benefits, challenges in integrating acquired businesses and achieving anticipated synergies, and difficulties in retaining key customers. These risks and uncertainties also include such additional risk factors as are discussed in the Company's recent filings with the U.S. Securities and Exchange Commission, including its Annual Report on Form 10-K for the year ended June 30, 2007. The Company cautions readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date made. The Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made.

## **Use of Non-GAAP (Generally Accepted Accounting Principles) Financial Measures**

In addition to reporting financial results in accordance with generally accepted accounting principles, or GAAP, the Company provides non-GAAP financial measures adjusted to exclude certain specified charges, which the Company believes are useful to help investors better understand its past financial performance and prospects for the future. However, the presentation of non-GAAP financial measures is not meant to be considered in isolation or as a substitute for financial information provided in accordance with GAAP. Management believes these non-GAAP financial measures assist in providing a more complete understanding of the Company's underlying operational results and trends, and management uses these measures, along with their corresponding GAAP financial measures, to manage the Company's business, to evaluate its performance compared to prior periods and the marketplace, and to establish operational goals. A reconciliation of GAAP to non-GAAP financial measures discussed in this presentation is contained in the Company's Fourth Quarter and Fiscal Year 2008 earnings release, which can be found on our [website at www.mc.com/mediacenter/pressreleaseslist.aspx](http://www.mc.com/mediacenter/pressreleaseslist.aspx).

# Mercury at a Glance

Mercury offers more than 20 years' experience in designing and delivering high-performance computing systems and software, for a broad range of image- and data-intensive applications, to customers around the world.



Semi Industry



Embedded Computing



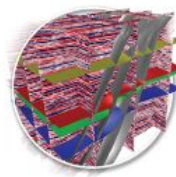
Telecommunications



Aerospace and Defense



Life Sciences

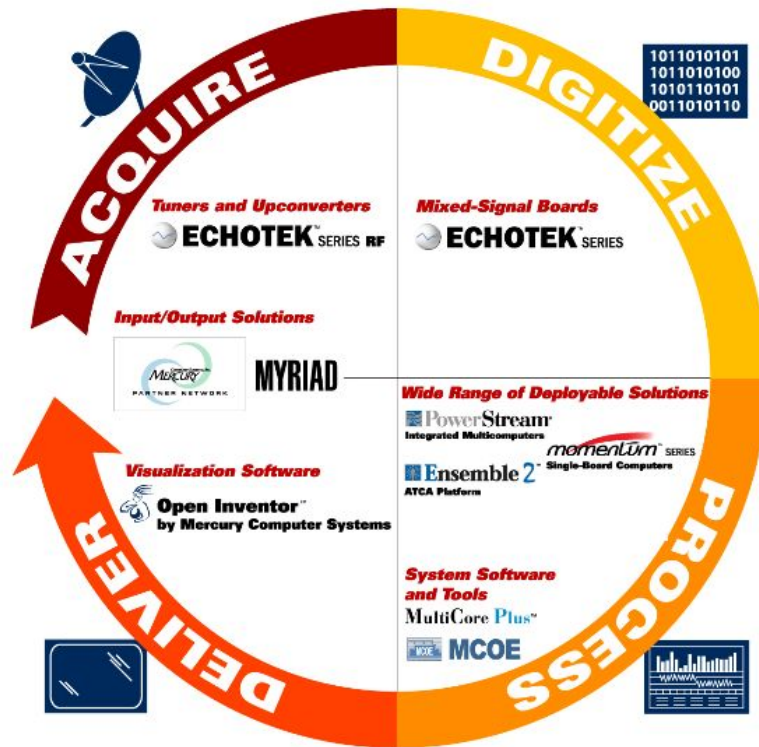


Oil and Gas

# Mercury spans the entire signal processing chain

## From RF to Visualization

- Modular boards and integrated systems
- Scalable multi core architectures
- Robust software and tools
- Open-standard COTS to custom solutions
- Ruggedized systems
- Comprehensive services
- Visualization software





# Advanced Computing Solutions

ACS focuses on specialized, high-performance computing solutions that leverage Mercury's capabilities in sensor computing, computational acceleration, and delivery of complex system-level solutions.

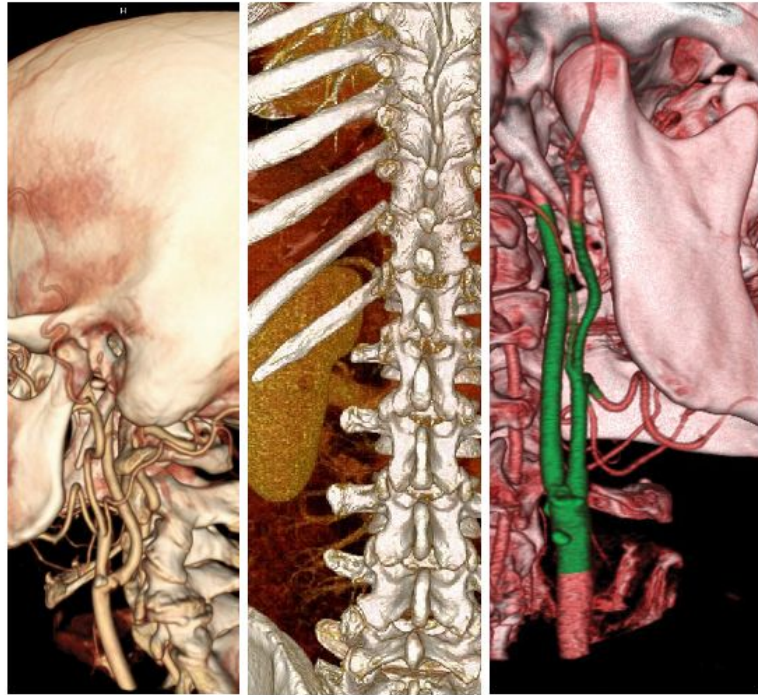
## Example Segments

- Aerospace and defense
- Semiconductor
- Telecommunications
- Medical imaging



# Visage Imaging, Inc.

Mercury's wholly owned subsidiary focuses on the development and distribution of 3D visualization and PACS (picture archiving and communications system) solutions, and other 3D software solutions in the life sciences segment.

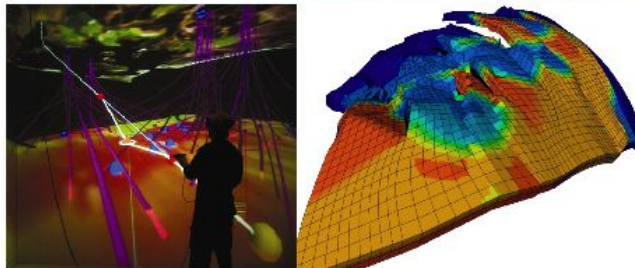
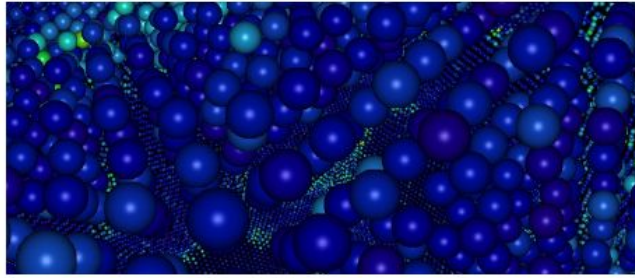


# Visualization Sciences Group

VSG focuses on the development and distribution of software developer toolkits and 3D application software for very-high volume-rendering applications.

## Example Segments

- Geosciences –Oil and Gas
- Engineering and manufacturing
- Material sciences
- Other industrial and scientific domains



# Why customers choose Mercury

---

- Significant and pioneering investments in specialized FPGA and multi core computing architectures and software
  - We maintain ongoing relationships with silicon providers that are unique
  - Significant multi computing R&D expenditures
  - The breadth and depth of our product line for specialized computing are unrivalled
- Our approach to technical problem-solving in the specialized computing arena is proven
  - Assessment of best silicon choices available
  - Thermal/Power evaluation
  - System-level architectural design
  - Application and algorithm performance optimization
- Our work on specialized computing-related problems typically results in significant business value for our customers
  - Making their products better
  - Reducing their risk
  - Lowering their cost
  - Speeding time to market

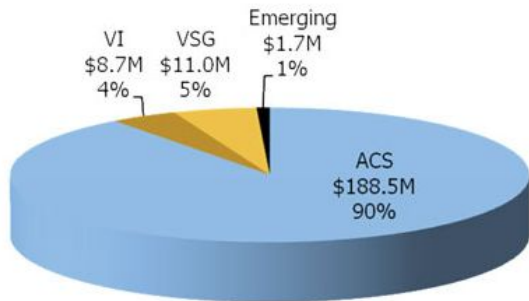
# Partial customer and partner list



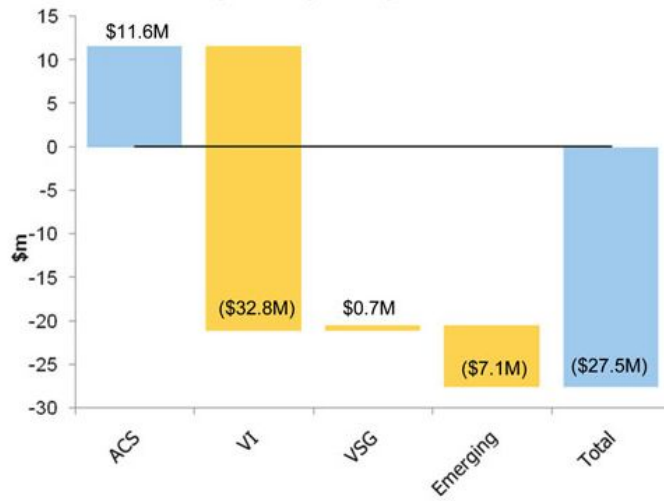
# Major Company Dynamics (#'s GAAP FY08)

- Revenue and profitability strength in ACS business
- Other businesses eroding operating profits

Segment Revenue FY08



Segment Operating Profit Waterfall FY08



Notes:

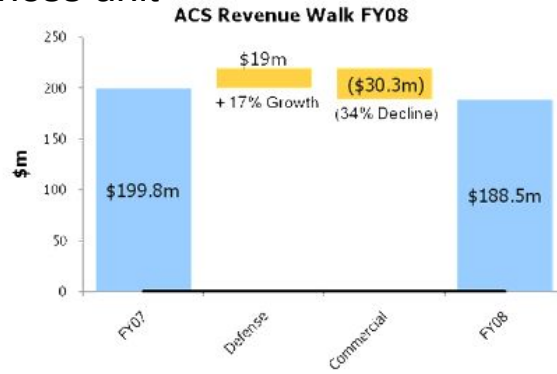
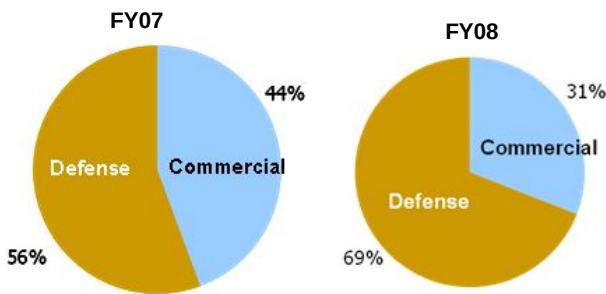
Figures represent "un-audited" GAAP Results

FY08 Operating Profit Total excludes stock-based compensation expense

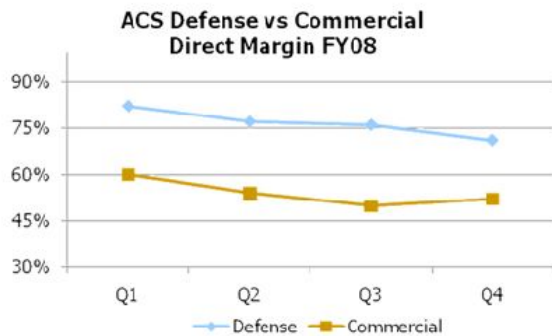
Includes \$7.3M amortization expense, \$5.2M restructuring, \$18M goodwill impairment, \$3.2M gain for sale of long-lived asset, and \$0.8M inventory write down

# Major ACS Business Dynamics

- Shift toward defense in ACS business unit



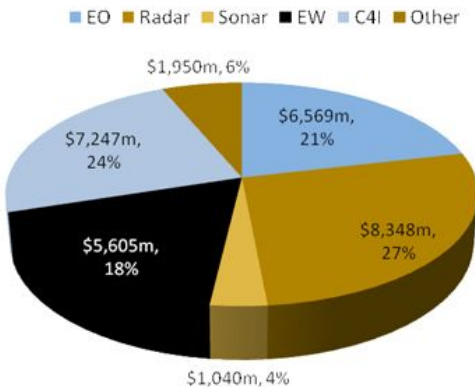
- Defense represents economic core of the business



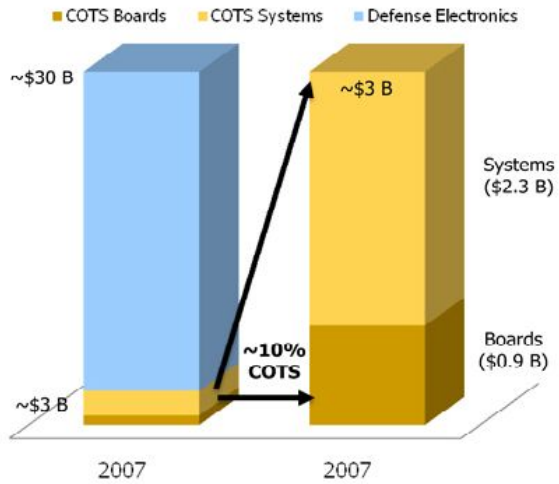
- Differentiation and sustainability largely in Defense
- Focus on strengthening Defense
- Higher margins in Defense
- Force R&D leverage back into model
- Selective new commercial pursuits

# Military Electronics Market

World Defense Electronics Funding  
Available to the US FY08 \$m\*\*  
Total >\$30B



Defense Electronics Market vs COTS Market\*

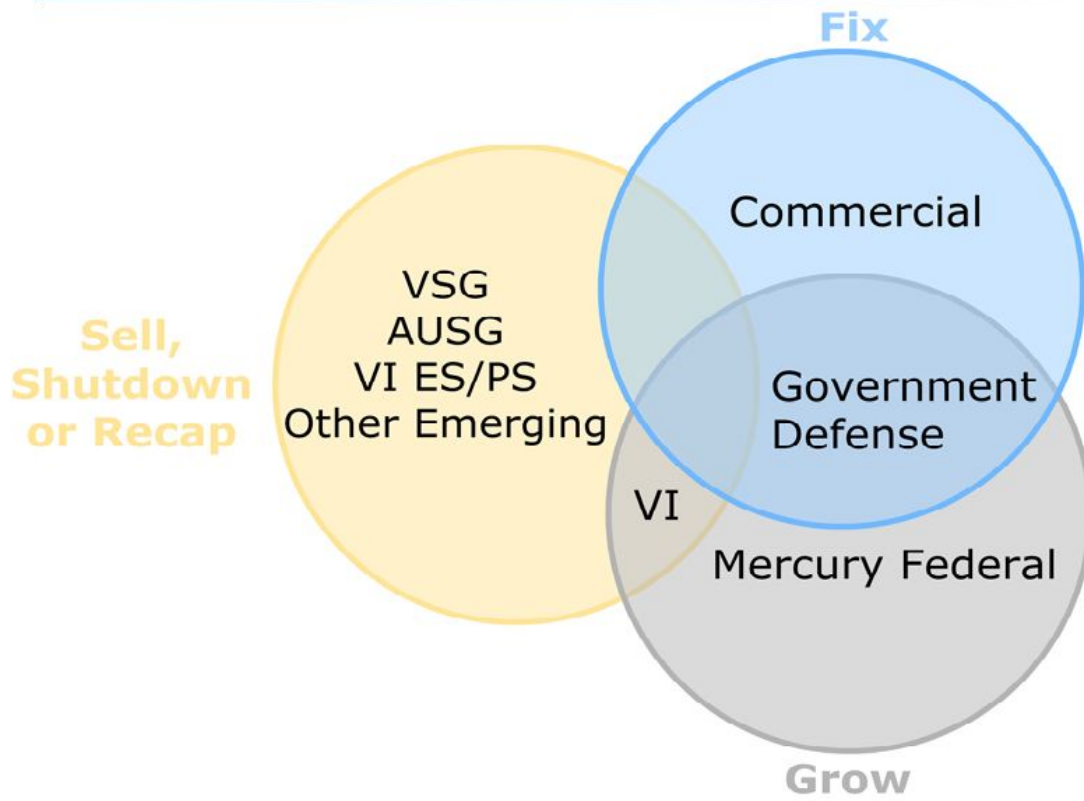


- COTS \$3B of \$30B total military electronics market
- Increased outsourcing and overall market growth
- Move toward collaborative COTS & system integration
- Platform upgrades, obsolescence, and new functionality
- New platforms with increased electronic content

Sources: \* Venture Development Corp. Embedded COTS in Military, Aerospace, & Defense Study, 2008 \*\*TEAL Group, Corp. Military Electronics Briefing with Mercury analysis



# Strategic Direction – Sell, fix or grow



# Strategic Sequence

---

- **Short Term: Improve operations and cash flow**
  - Enhance leadership team to tackle short, medium, long-term strategy
  - Improve supply chain, manufacturing operations and shipment linearity
  - Cash conversion cycle
  - Simplify operations, cross-functional coordination
- **Medium Term: Strengthen and grow core defense business**
  - Focus and align organization and resources
  - Accelerate new product development
  - Reduce time to market
  - Improve market penetration
  - Expand opportunities with existing customer base
- **Long Term: Improve strategic position**
  - Increase software and services
  - Explore adjacencies around the Core – Mercury Federal
  - Target larger profit pools
  - Optimize the return from the Company's portfolio of businesses

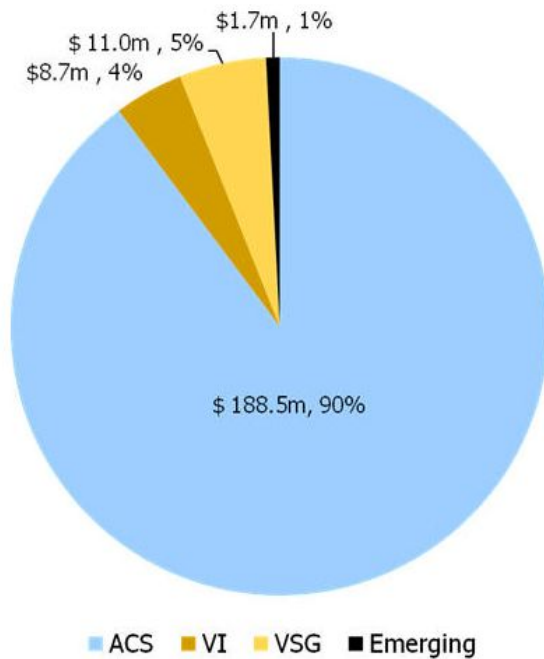


## Financial Overview

Note: FY08 figures are un-audited

# Mercury Overview

FY08 (Ended June) Revenue Mix



- Founded in 1981
- HQ in Chelmsford, MA
- Sales, support and R&D centers in U.S., Europe and Japan
- 670 employees worldwide ending Q408
- FY2008 revenues of \$210 million
- NASDAQ: MRCY

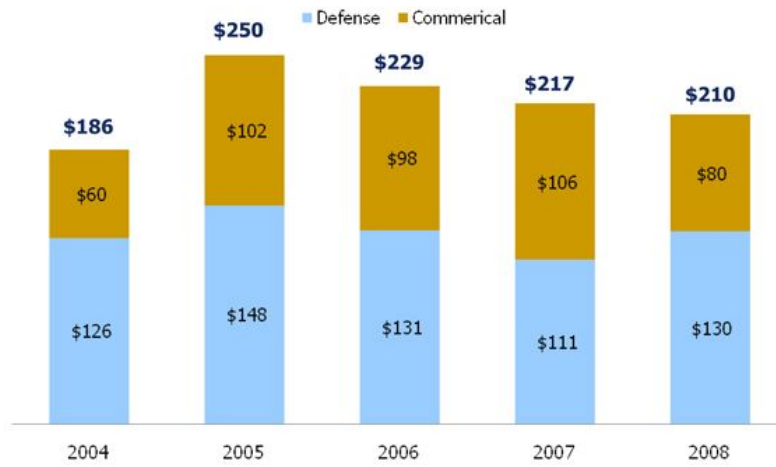
# Revenue Growth Follows Investment Cycles

June Fiscal Year End

~ 10% CAGR

FY98 – FY08E

Revenue (\$M)



Represents total Company revenues; VI, VSG and Emerging businesses revenue treated as Commercial

All historical figures adjusted for the discontinued operation of Embedded Systems & Professional Services

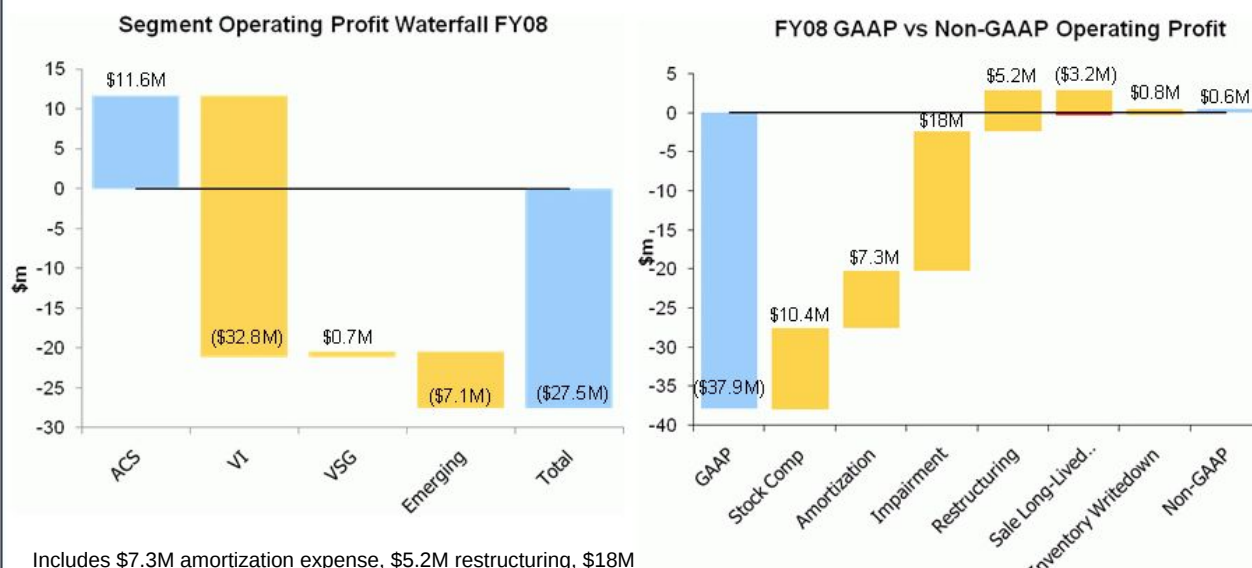
## FY07 Compared to FY08 (Non-GAAP)

|                            | FY07 Actual    | FY08 Actual | FY08 vs FY07             |
|----------------------------|----------------|-------------|--------------------------|
| Revenue                    | 217            | 210         | (3%)                     |
| Gross Margin % Revenue     | 56.4%          | 60.7%       | 4.3 pts                  |
| Operating Expenses         | 139            | 127         | 9% Improvement           |
| Operating Profit % Revenue | (16)<br>(7.5%) | 1<br>0.3%   | \$17M<br>Improvement     |
| EPS                        | \$(0.37)       | \$0.15      | \$0.52<br>Improvement    |
| Operating Cash Flow        | \$(10)         | \$14M       | \$24M Improvement<br>YTD |
| Employees                  | 729            | 670         | 8% reduction             |

All historical figures adjusted for the discontinued operation of Embedded Systems & Professional Services

# Segment Operating Profit (#'s GAAP)

- Profitability strength in ACS; non-core businesses eliminating operating profits



Includes \$7.3M amortization expense, \$5.2M restructuring, \$18M goodwill impairment, \$3.2M gain for sale of long-lived asset, and \$0.8M inventory write down

## Notes:

Figures represent "un-audited" GAAP results

FY08 Segment Operating Profit Total excludes stock-based compensation expense

# Strong Balance Sheet

- Historically strong balance sheet
- Net cash positive: \$41M
- FY08 capex of \$5M
- \$9M positive free cash flow in FY08

| <i>Quarter ended June 30, 2008</i> |       |
|------------------------------------|-------|
| Cash and Equivalents               | \$166 |
| Total Current Assets               | \$186 |
| Total Assets                       | \$339 |
|                                    |       |
| Total Debt                         | \$125 |
| Total Liabilities                  | \$192 |
| Stockholders' Equity               | \$147 |

Notes:

Cash and Equivalents includes \$47.2M of auction rate securities

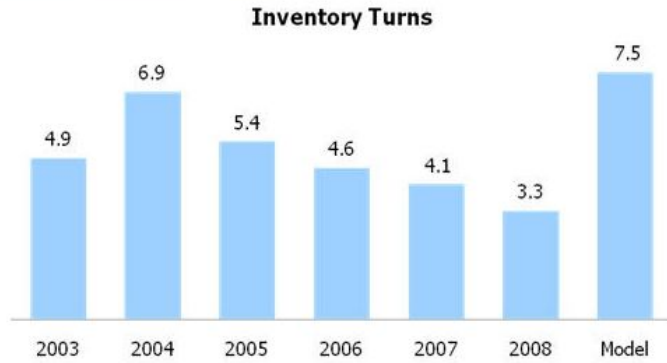
Access to margin loan facility of \$23.7M with UBS

Total Debt represents 2% convertible senior notes offering due 2024

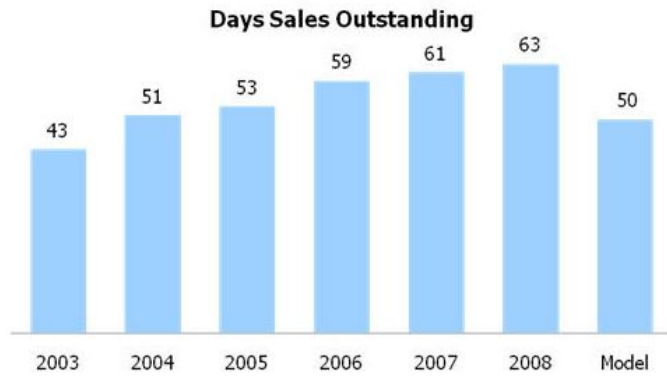


# Focus on Working Capital

- Supply chain transformation
  - Operational efficiencies
  - Manufacturing lead times
  - Cost of quality
  - Competitive advantage for Mercury and customers
  - Q408: turns of 3.8, \$3.9M net inventory decrease




- Customer satisfaction
  - End-of-quarter shipment skew
  - DSO dropped from 60 days in Q308 to 54 days in Q408
  - DSO target 50 days



# Gap to Target Business Model (#'s Non-GAAP)

| <i>Non-GAAP</i>        | Actual FY08 | Actual ACS FY08 | Target Business Model |
|------------------------|-------------|-----------------|-----------------------|
| Revenue                | 100%        | 100%            | 100%                  |
| Gross Margin           | 61%         | 59%             | 58+%                  |
| SG&A                   | 36%         | 27%             | Mid 20%               |
| R&D                    | 25%         | 22%             | High Teens            |
| Income from Operations | 0%          | 10%             | 15%                   |

  
 Declining gross margin  
 Costs Reduced

# Fiscal Year 2008 Summary (Non-GAAP)

|               | Q1       |           | Q2       |           | Q3       |                   | Q4       |                   |
|---------------|----------|-----------|----------|-----------|----------|-------------------|----------|-------------------|
|               | Reported | Guidance  | Reported | Guidance  | Reported | Guidance          | Reported | Guidance          |
| Revenue (\$M) | \$ 49.2  | \$ 48.0   | \$ 52.6  | \$ 51.0   | \$ 56.5  | \$53.0 - \$55.0   | \$ 55.2  | \$53.0 - \$56.0   |
| EPS           | \$ 0.09  | \$ (0.08) | \$ 0.04  | \$ (0.05) | \$ 0.04  | \$(0.04) - \$0.00 | \$ 0.01  | \$(0.05) - \$0.01 |

- All quarters' revenue and EPS exceeded or met the top end of guidance
- FY08 book-to-bill 1.04

Note: Q1, Q2, and Q3 historical figures are NOT adjusted for discontinued ops, to reflect appropriate comparison to guidance

# Q1 Fiscal Year 2009 Guidance

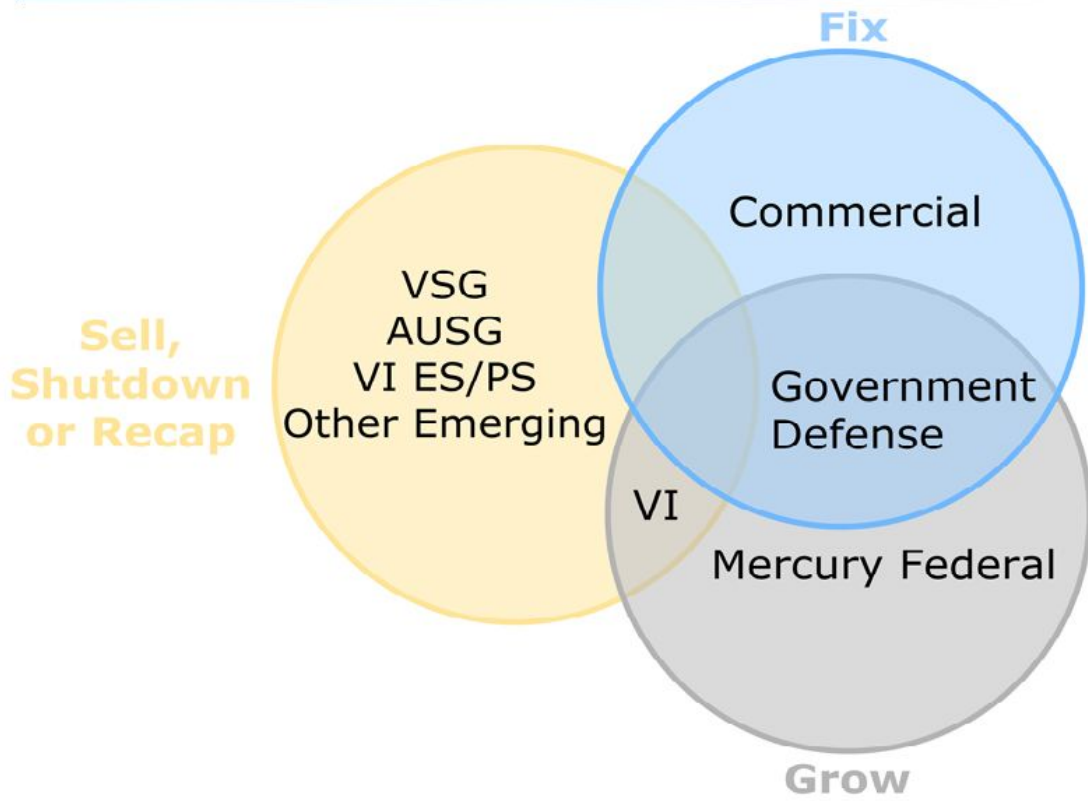
|                       | Quarter Ending September 30, 2008 |                            |
|-----------------------|-----------------------------------|----------------------------|
| <b>Revenues (\$M)</b> | <b>\$47 - \$49</b>                |                            |
|                       | <b>GAAP</b>                       | <b>Non-GAAP</b>            |
| <b>Gross Margin</b>   | <b>58% - 59%</b>                  | <b>58% - 59%</b>           |
| <b>EPS</b>            | <b>\$0.00</b>                     | <b>\$(0.07) - \$(0.03)</b> |

- Impact of equity-based compensation costs related to FAS 123(R) of approximately \$1.6M excluded from non-GAAP
- Acquisition-related amortization of approximately \$1.4M excluded from non-GAAP
- Restructuring charges of approximately \$0.2M excluded from non-GAAP

*Notes:*

- 1) *Figures in millions, except percent and per share data*
- 2) *Company guidance, July 30, 2008 earnings conference call*

# Strategic Direction – Sell, fix or grow



[www.mc.com](http://www.mc.com)  
NASDAQ: MRCY



## Appendix

# GAAP to Non-GAAP Reconciliation

## Q109 Guidance Reconciliation\*

|  | RANGE                            |                                  |
|--|----------------------------------|----------------------------------|
|  | Income (Loss) Per Share -Diluted | Income (Loss) Per Share -Diluted |
| GAAP expectation   | \$ -                             | \$ -                             |
| Adjustment to exclude stock-based compensation                   | 0.07                             | 0.07                             |
| Adjustment to exclude amortization of acquired intangible assets | 0.06                             | 0.06                             |
| Adjustment to exclude restructuring                              | 0.01                             | 0.01                             |
| Adjustment for tax impact  | (0.21)                           | (0.17)                           |
| Non-GAAP expectation   | \$ (0.07)                        | \$ (0.03)                        |

\* Per Company guidance range, July 30, 2008 earnings conference call