

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): November 21, 2006

**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

N/A  
(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 Tuesday, November 21, 2006 at its seventh 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 November 21, 2006.

**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 hereunto duly authorized.

MERCURY COMPUTER SYSTEMS, INC.  
(Registrant)

Date: November 21, 2006

By: /s/ Alex N. Braverman  
Alex N. Braverman  
Vice President, Controller and  
Chief Accounting Officer

EXHIBIT INDEX

Exhibit No.

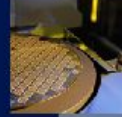
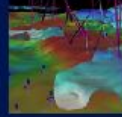
Description

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99.1

Presentation materials dated November 21, 2006.

Computer Systems, Inc.  
**MERCURY**  
*Challenges Drive Innovation*



# 7th Annual Investor Conference

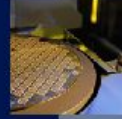
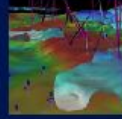
## November 21, 2006

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 2007 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 quarter ended June 30, 2006. 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 non-cash and other 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 results discussed in this presentation is contained in the company's First Quarter Fiscal Year 2007 earnings release, which can be found on our website at [www.mc.com/mediacenter/pr/](http://www.mc.com/mediacenter/pr/).

<b>9:00-9:10</b>	<b>Bob Hult, SVP, Chief Financial Officer</b>
<b>9:10-9:25</b>	<b>Jay Bertelli, President, CEO &amp; Chairman</b>
<b>9:25-10:00</b>	<b>Didier Thibaud, SVP, Defense &amp; Commercial Businesses</b>
<b>10:00-10:30</b>	<b>Marcelo Lima, VP &amp; GM, Commercial Imaging &amp; Visualization</b>
<b>10:30-10:45</b>	<b>Break &amp; Trade Show</b>
<b>10:45-11:15</b>	<b>Mark Skalabrin, VP &amp; GM, Advanced Solutions Business</b>
<b>11:15-11:30</b>	<b>Philippe Roy, Dir. &amp; GM, Navigation &amp; Simulation Systems</b>
<b>11:30-11:45</b>	<b>Bob Hult, SVP, Chief Financial Officer</b>
<b>11:45-12:15</b>	<b>Jay Bertelli's Closing Remarks, Q&amp;A</b>



# Corporate Overview

**Jay Bertelli, President, CEO & Chairman**



Leading provider of:

Computing solutions  
for specialized,  
compute- and data-  
intensive applications

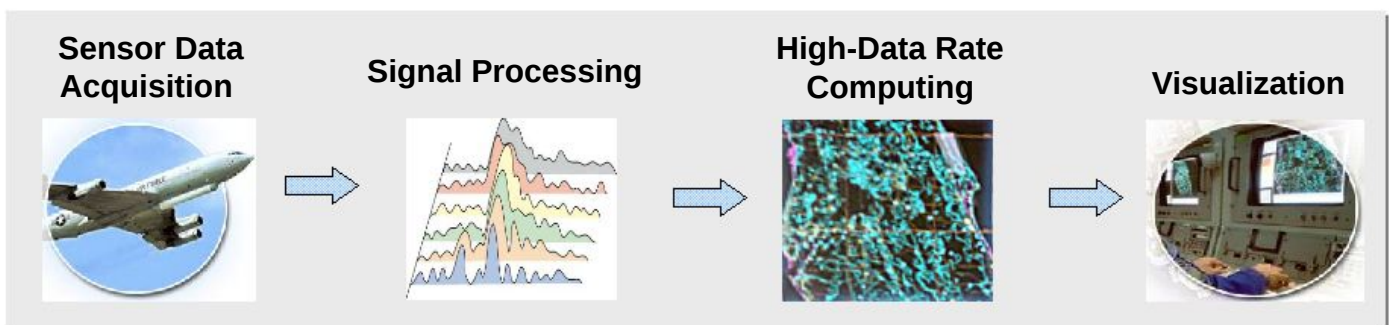
For diverse customers in:

Aerospace & Defense  
Communications  
Geosciences  
Life Sciences  
Semiconductor



- **Focus on relatively small (\$200-400M) niche markets that are not well served by mainstream suppliers**
- **Leverage technology investments across multiple markets**
- **Focus on solving problems that are challenging and can command high margins**
- **Focus on core competencies**
  - Multicomputer architectures
  - Signal and image processing
  - Visualization
- **Market-specific domain expertise**

- **Unique skill set and software for processing and visualizing data**
- **Years of development in software libraries and tools for embedded multicore computing**
- **Domain expertise in niche markets**



## History of finding challenging computing problems that can be solved with Mercury technology

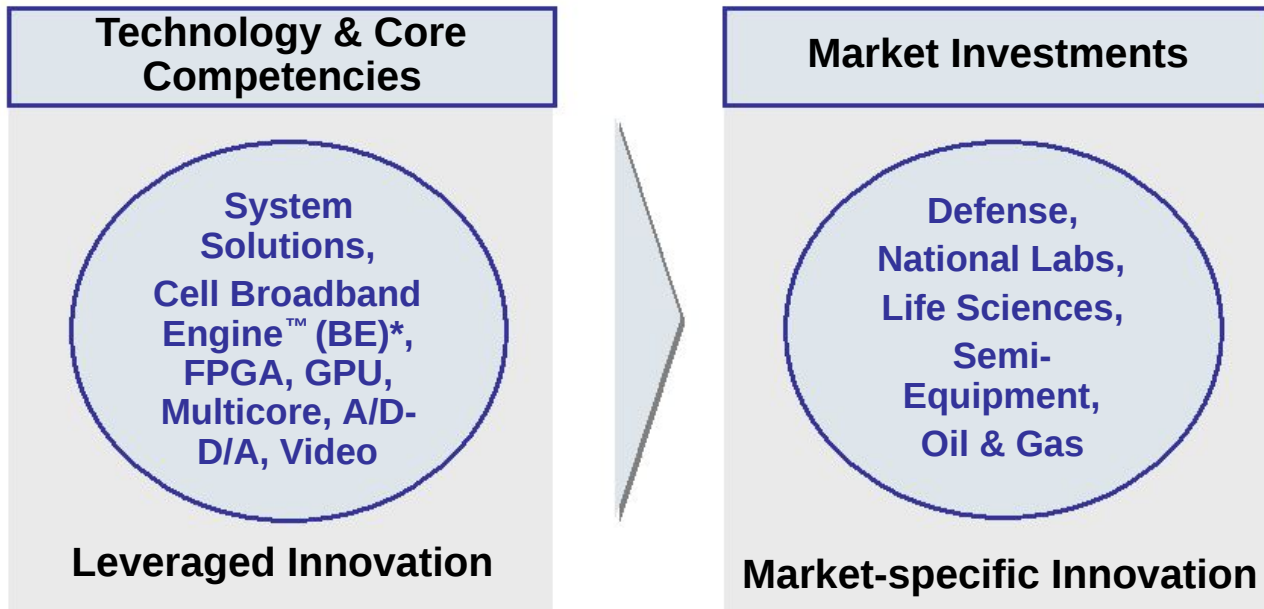
- **Developing market opportunities**

- Defense Business Unit (DBU) - Synthetic vision, wideband data links
- Commercial Imaging & Visualization (CIV) - 3D medical imaging, geosciences (oil & gas)
- Advanced Solutions Business Unit (ASBU) - Semiconductor, Design for Manufacturing (DFM)

- **Discovery Phase**

- Biotechnology - Drug discovery
- Video processing - Intelligence to compensate for bandwidth limitations
- Defense - Homeland security

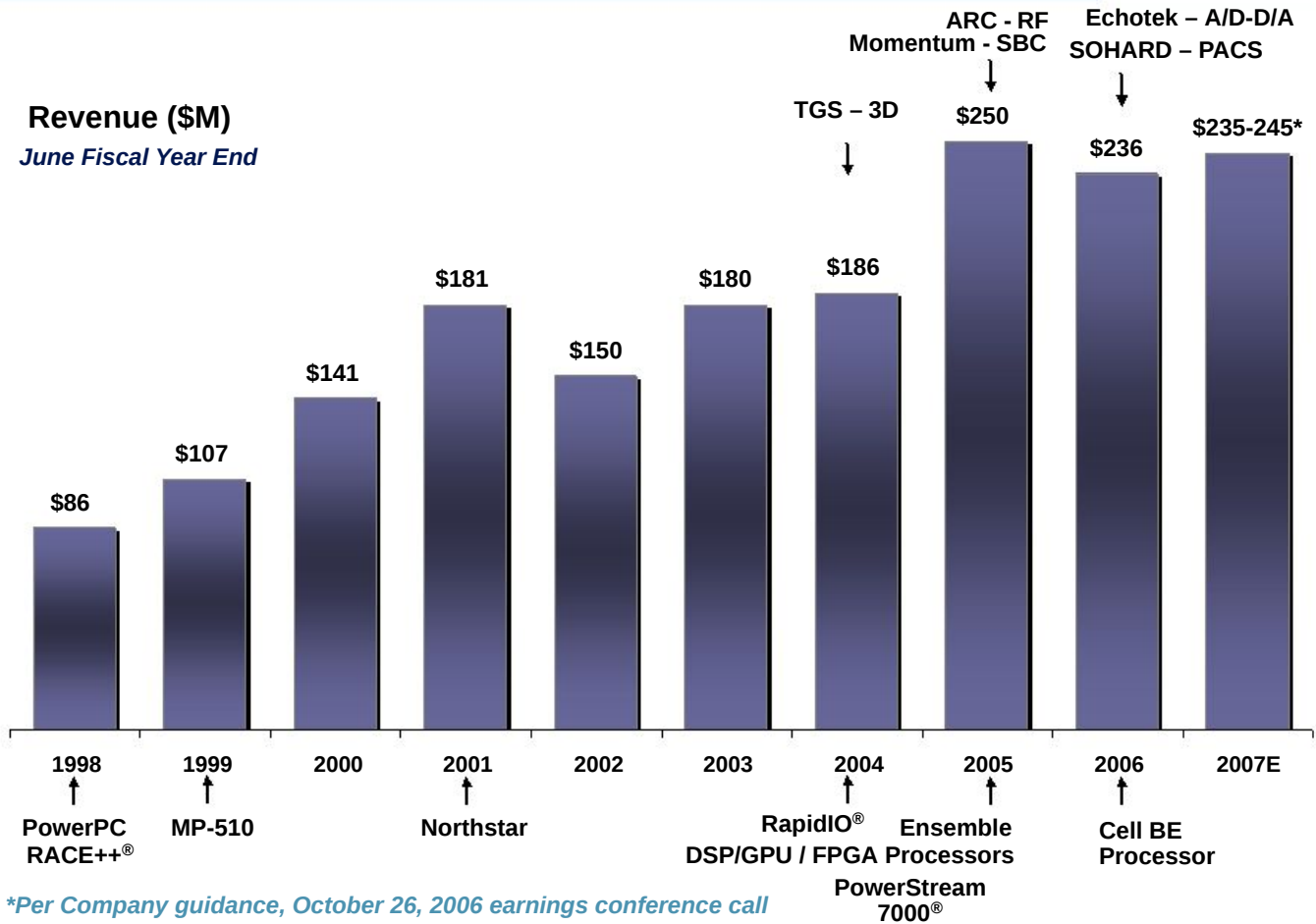
## Multi-market leverage of technology and core competencies results in strong competitive advantage and significant barriers to entry



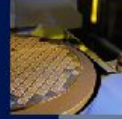
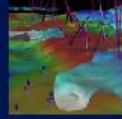
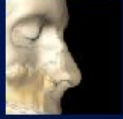
\*Cell Broadband Engine is a trademark of Sony Computer Entertainment Inc.

# Revenue Follows Technology Cycles

**Revenue (\$M)**  
 June Fiscal Year End

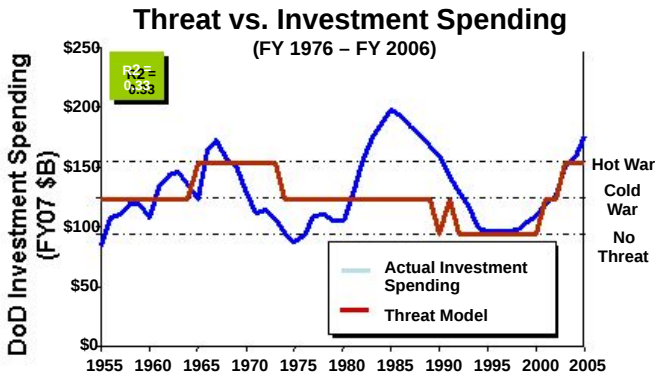


\*Per Company guidance, October 26, 2006 earnings conference call



## Defense Market

**Didier Thibaud, SVP, Defense & Commercial Businesses**



- Historical defense investment spending is cyclical in constant year dollars; does not follow threat, does follow political office
- President dominates
- Democratic house and senate = Case 2 (~flat defense investment)
- Democratic President in '08 = Case 3 (~ -3.9% CAGR)

- Major DoD investment programs will remain funded if they perform
  - AEGIS – BMD (Korea, Iran)
  - MP-RTIP – (Global Hawk, possible JSTARS upgrade to offset E-10A cancellation)
  - SIGINT – (GWOT)
- Deficit issues and follow-on expenses to the war will challenge new program investment – but offer increasing opportunities for upgrades to existing systems

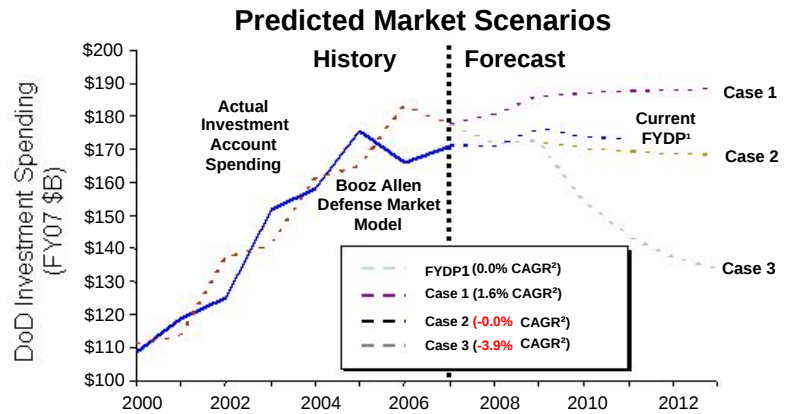
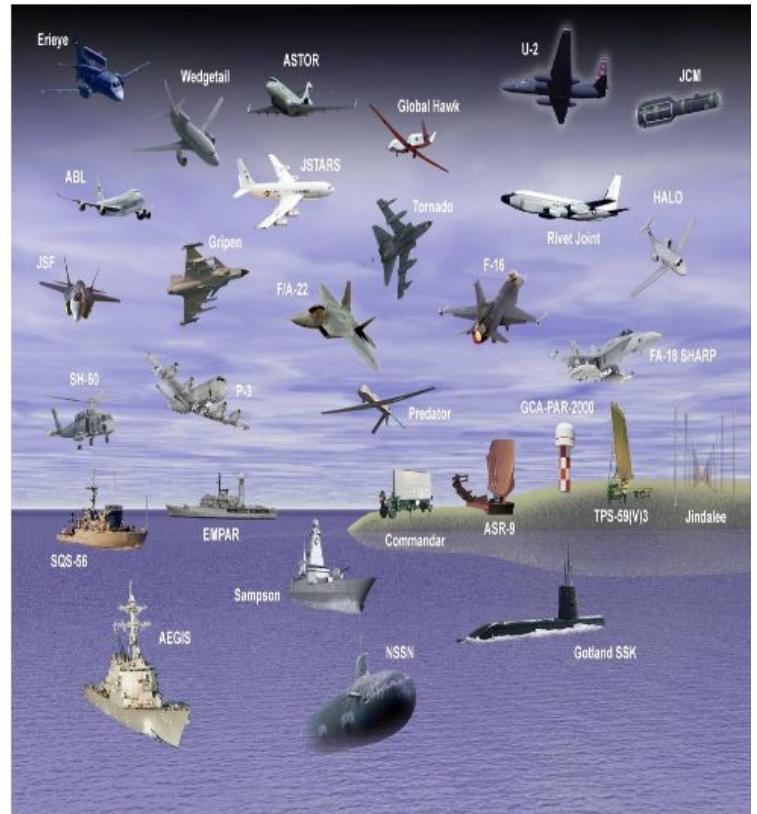


Chart sources: John H.J. Niehaus, Principal, Global Aerospace & Defense, Booz Allen Hamilton and Ronald J. Epstein, Ph.D. Senior Director, Aerospace & Defense Equity Research Merrill Lynch. Other Sources : DoD Green Book FY07, historical Congressional records, Booz Allen analysis



- **Leader in airborne surveillance**
  - 14 years of experience
- **Investing and innovating to maintain leadership position**
- **Strong business relationships and partnerships with defense primes**



Representative

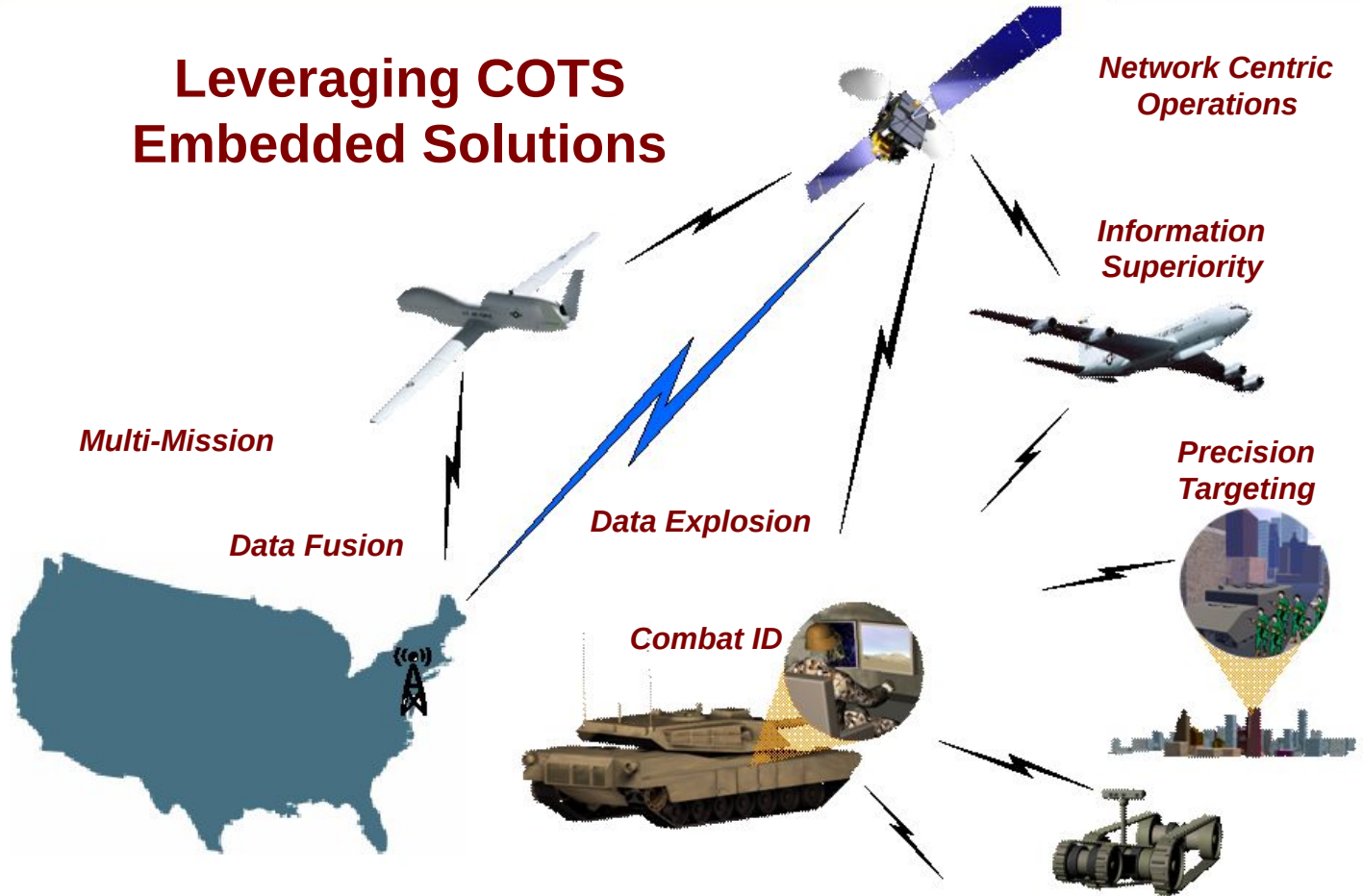
- **Track record of success**
  - Leveraging technology to deliver best value
  - Strong COTS model
  - Aboard demanding platforms in air, on land, under sea
  - Full life-cycle support
- **Market focus**
  - C4ISR
  - Defense embedded computing
- **Technology to enable new application**
  - Wideband data links and satellite communications
  - Situation awareness
  - Synthetic vision and unmanned vehicles



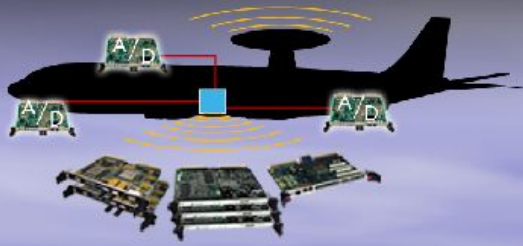
- **The nature of war has changed**
  - “The enemy is mobile and our war fighters must be connected to strategic and tactical aircraft, along with weapons and unmanned aerial vehicles (UAVs), in order to successfully engage time-critical targets.” -Anonymous
- **Reduce casualties**
- **Better utilization of deployed forces**
  - Improved communications
  - Enhanced speed and effectiveness
- **Improve intelligence**
  - Reduce data pollution
  - Sort, extract & fuse data into information
  - Understand first, act decisively
- **Transition from platform-centric to network-centric**



## Leveraging COTS Embedded Solutions



## Transmit & Receive



## Connect



## Visualize, Fuse & Archive



## Compute & Control

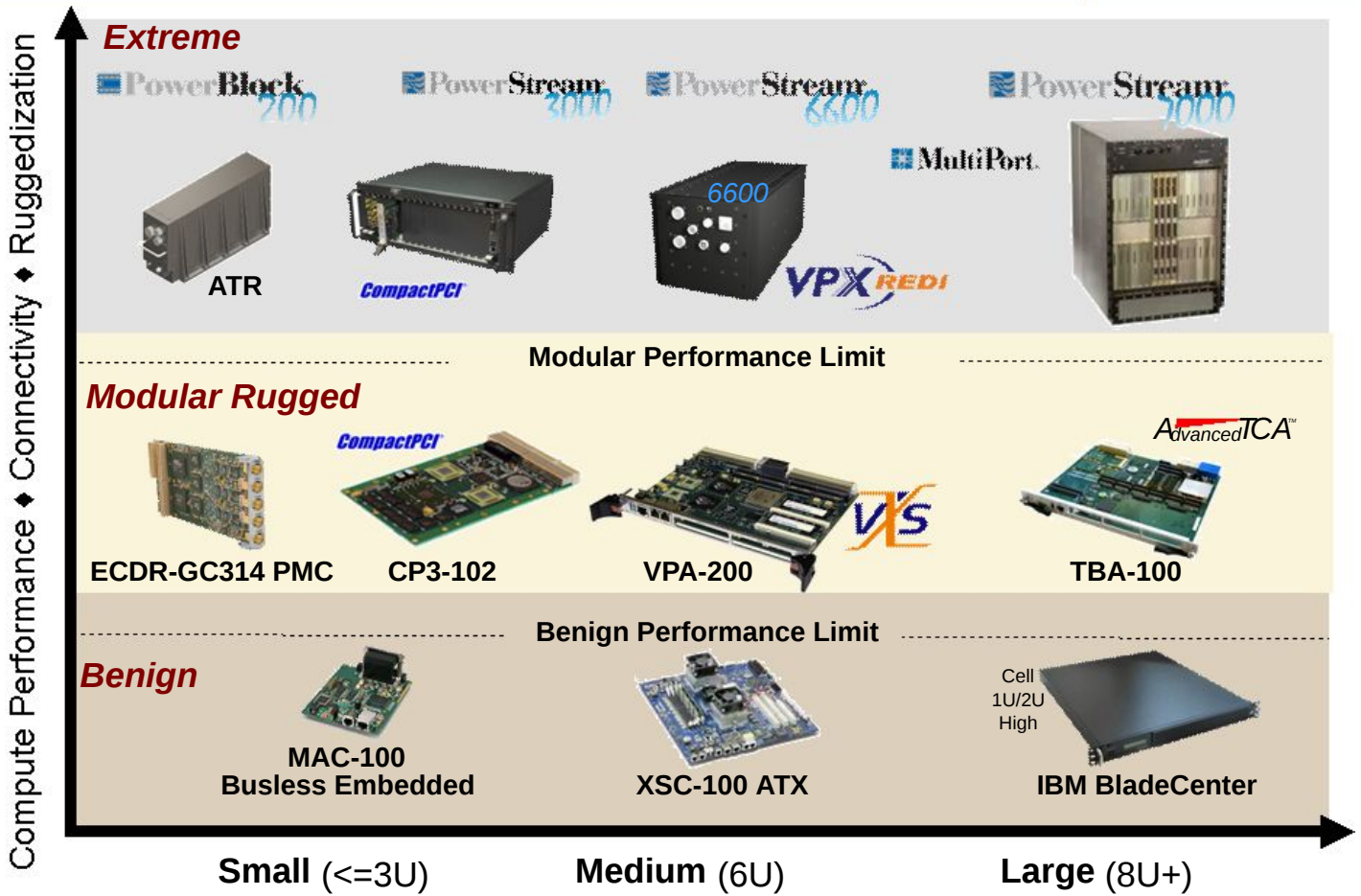


## Software & Tools

```
void in_diptx(  
FFT_setup setup, /* FFT we  
COMPLEX *filter_freq, /* input f  
COMPLEX *signal, /* time  
long j, /* adjace  
COMPLEX *t /* tempo  
unsigned long log2N  
long F,  
long flag  
);
```

**SAL™**





# Innovation for Today's Warfare

Serial RapidIO  
 AdvancedTCA &  
 AdvancedMC



Ultimate  
 Interconnectivity  
 Rugged  
 Managed Air-  
 Cooling



**Large**



Open Inventor  
 from AGEAS 2007



Amira  
 3D Framework

Image  
 Archiving



Rugged  
 Conduction  
 Cooled  
**VPX REDI**

(VITA 46/48)



**6U**

Rugged Air Cooled  
 VME64 Backwards  
 Compatibility



(VITA 41)



**3U**

Compact  
 Rugged Conduction-  
 & Air-Cooled



**CompactPCR**



**VPX**

(VITA 46)



**Race**

**RapidIO**



**DigitalIP**  
 (VITA 49).org

FPGA  
 Dev Kit

**SFPDP**

**Solutions & Services**

**Processing**

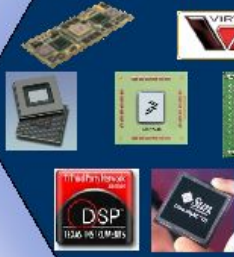
**Visualization 3D**

**Systems**

**Software**

**IP & Cores**

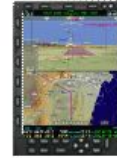
**Modules**



Mixed Signal  
 AD/DA  
 FPGA  
 VME, VXS,  
 PMC, XMC



Navigation &  
 Visualization 3D



**CELL BE**  
 200 GLOPS per  
 Cell BE Processor



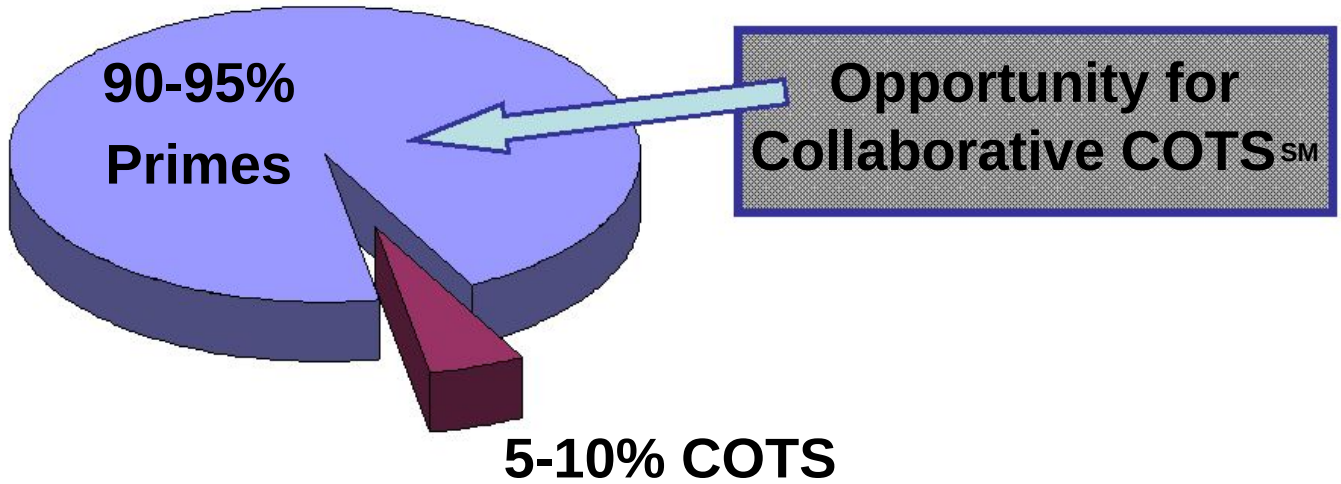
Radio Frequency  
 Ultra-fast Tuning  
 Very Low Phase Noise



Single Board Computers  
 Fast & Flexible



## A \$14.2 Billion Available Market



Source: The Embedded Computing Market 2006, Electronic Trend Publications Inc & Internal Estimates.  
Defense Weapons & C3 Boards and Systems



## • Solutions & Services

- Computer integration
- System assembly
- Module development
- Architecture and research
- Custom software
- Ruggedization
- Life-cycle management
- Intellectual property
- Migration services
- On-site support

- **Shortening Development Cycles**
- **Lengthening Product Life Cycles**
- **Strengthening Our Relationship**



*...when customers need a helping hand...*

- **Airborne surveillance: MP-RTIP**
  - Global Hawk (15 platforms)
  - JSTARS and AWACS upgrade potential
- **Tactical fighters: F-35, F-22, F-16**
- **Shipboard missile defense: Aegis**
- **UAV: Predator LYNX SAR**
- **Land-based/mobile radar**

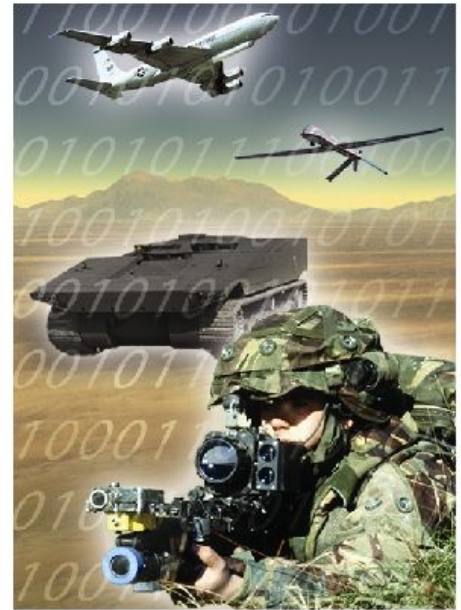
JSF (F-35)



Aegis (BMD)

## Projected widespread deployment of battlefield visualization and decision aids

- Multi-sensor visualization for war fighters on the move
- Comprehensive battlefield imagery for war fighters
- Super-smart compression when link bandwidth is limited
- Detection and identification of targets in urban/civilian environments

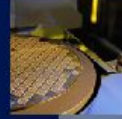
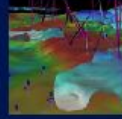


- **Ground, shipboard, and airborne communications via satellite**
  - Deployment of broadband closer to the war fighter
  - Drives the need for new compute solutions
- **Mercury is well positioned with COTS software-defined radio (SDR) and scalable FPGA and DSP solutions**
- **Technology demonstrated at MILCOM (Oct. 2006)**



- **Budget uncertainty**
- **Strong customer base**
- **Strengthened pipeline**
  - 2x increase in business opportunities in 8 months
- **Broadened product portfolio**
- **Technology leadership**
- **Increased market penetration**
  - Services
  - Collaborative COTS





# Commercial Imaging and Visualization Markets

**Marcelo Lima, Vice President & General Manager**

- **Big markets @ the forefront of socio-economic issues**
- **Exciting new businesses (s/w centric)**
- **Excellent growth potential**



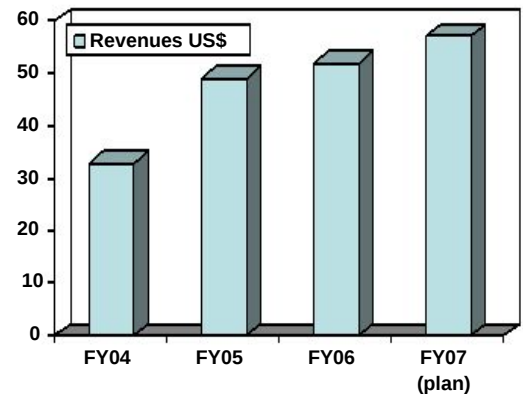
- **Leading OEM provider of image processing and visualization solutions**
- **Main markets: Life Sciences and Geosciences**
  - Annualized served markets size of approximately \$700M to \$900M
- **Continued revenue growth**
- **170 associates in six centers (US and Europe) organized by unit:**

- **Visualization Sciences Group (VSG)**

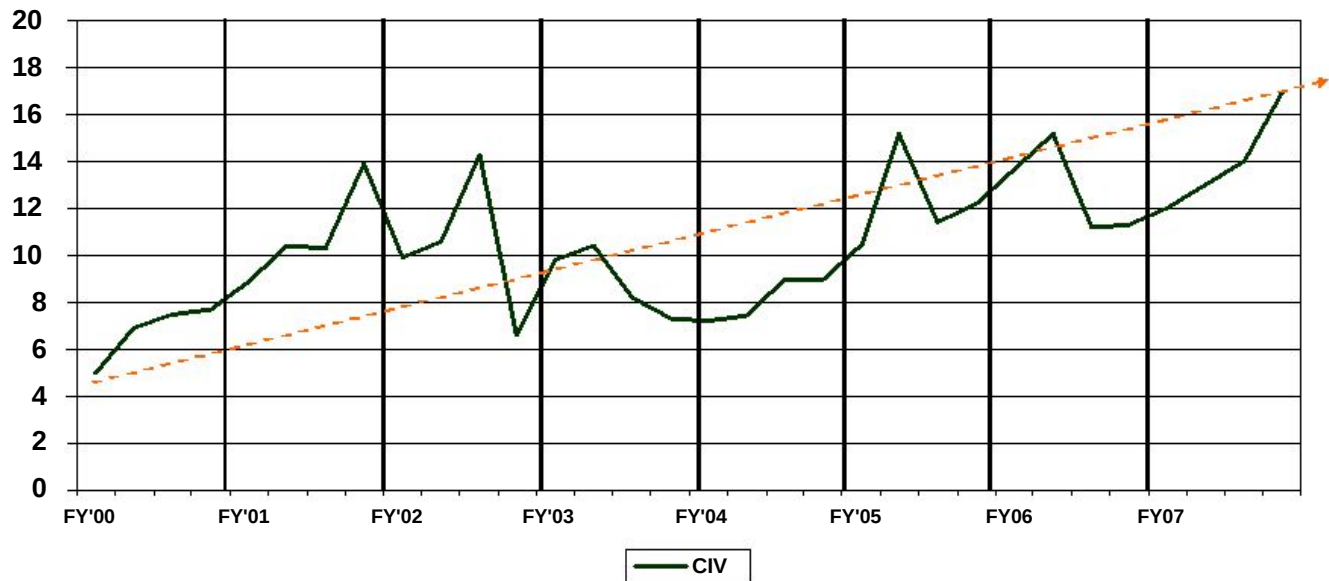
- TGS business had record revenue in FY06, 20%+ growth over FY05

- **Life Sciences Group (LSG)**

- SOHARD business had record revenue in FY06
- Won 20 new customers in last 12 months
- Legacy decreasing by about \$10M annually
- Gained ISO 13485 certification and FDA clearances







## CIV Timeline of Events

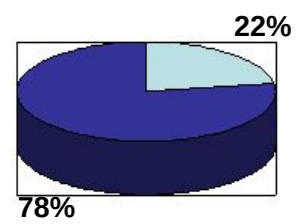
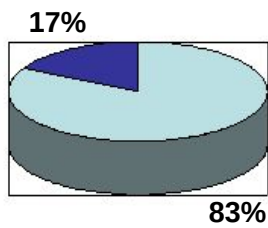
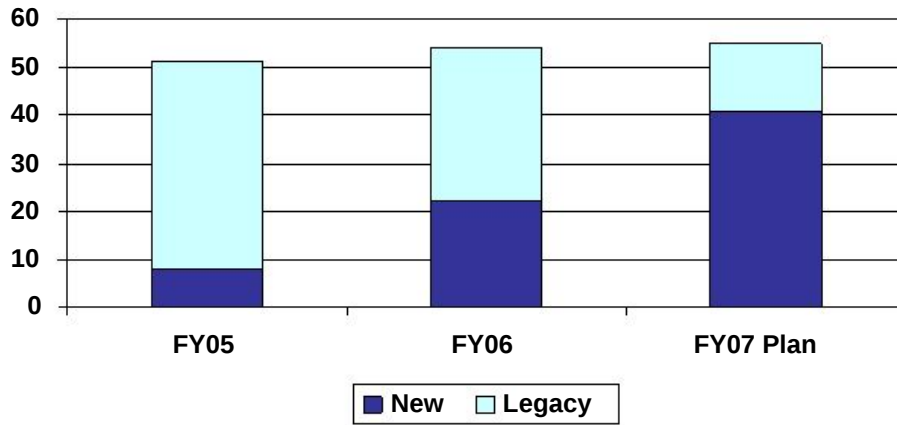
FY02-03 - CT designed out

FY04 - DX & PET ramp, Q4 TGS acquisition

FY05 - MR production full swing & TGS

FY06 - Design phase out of 2D Business; crossover new business; SOHARD acquisition

# Transition in Revenues FY05 – FY07

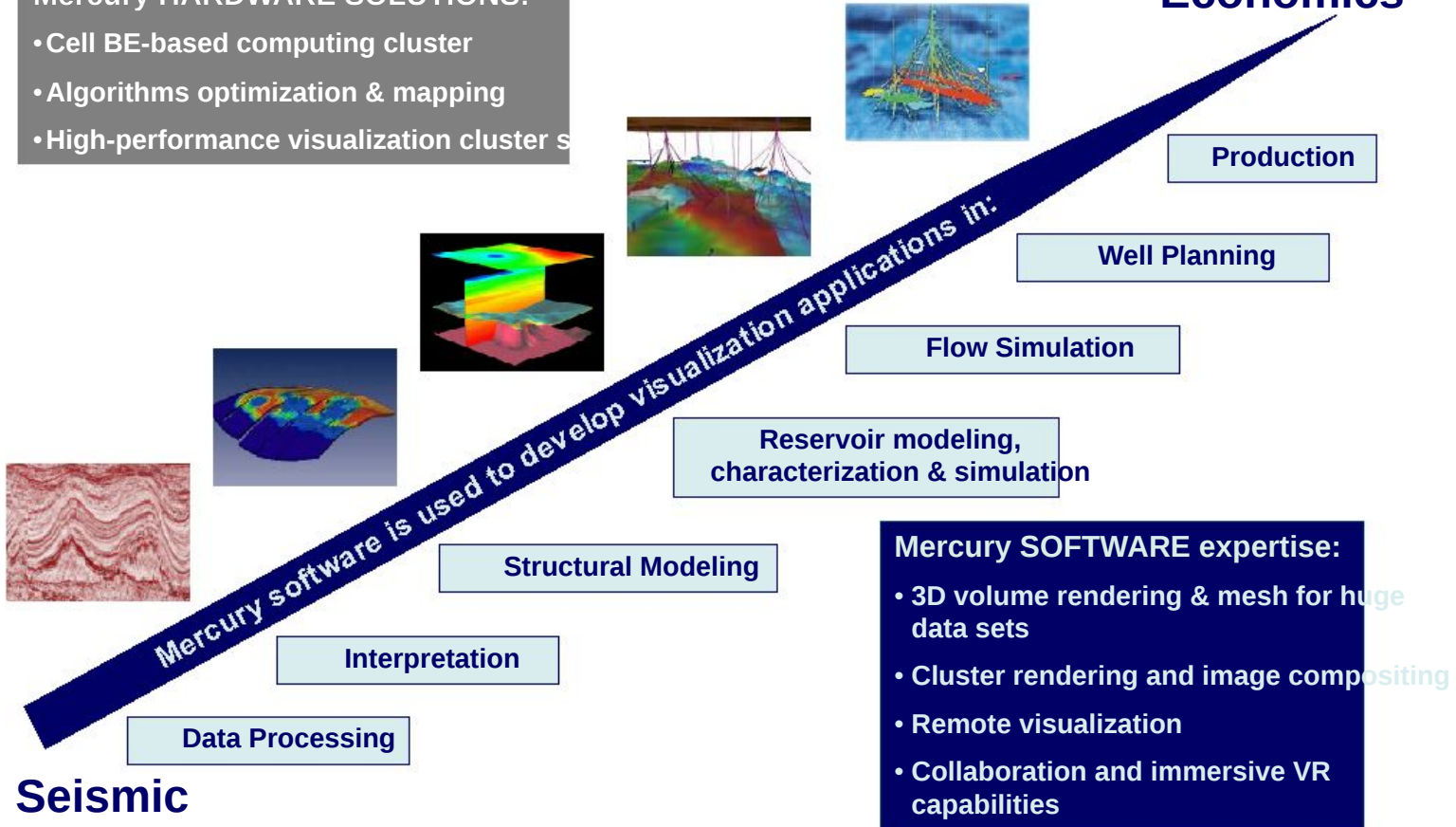


- **Industry**
  - Geosciences, visualization and computation
- **Products & Services**
  - Visualization software toolkits (OIV, amira<sup>®</sup>)
  - High-performance computers
  - Custom engineering services
- **Segments**
  - Oil & gas visualization – Growth > 20%

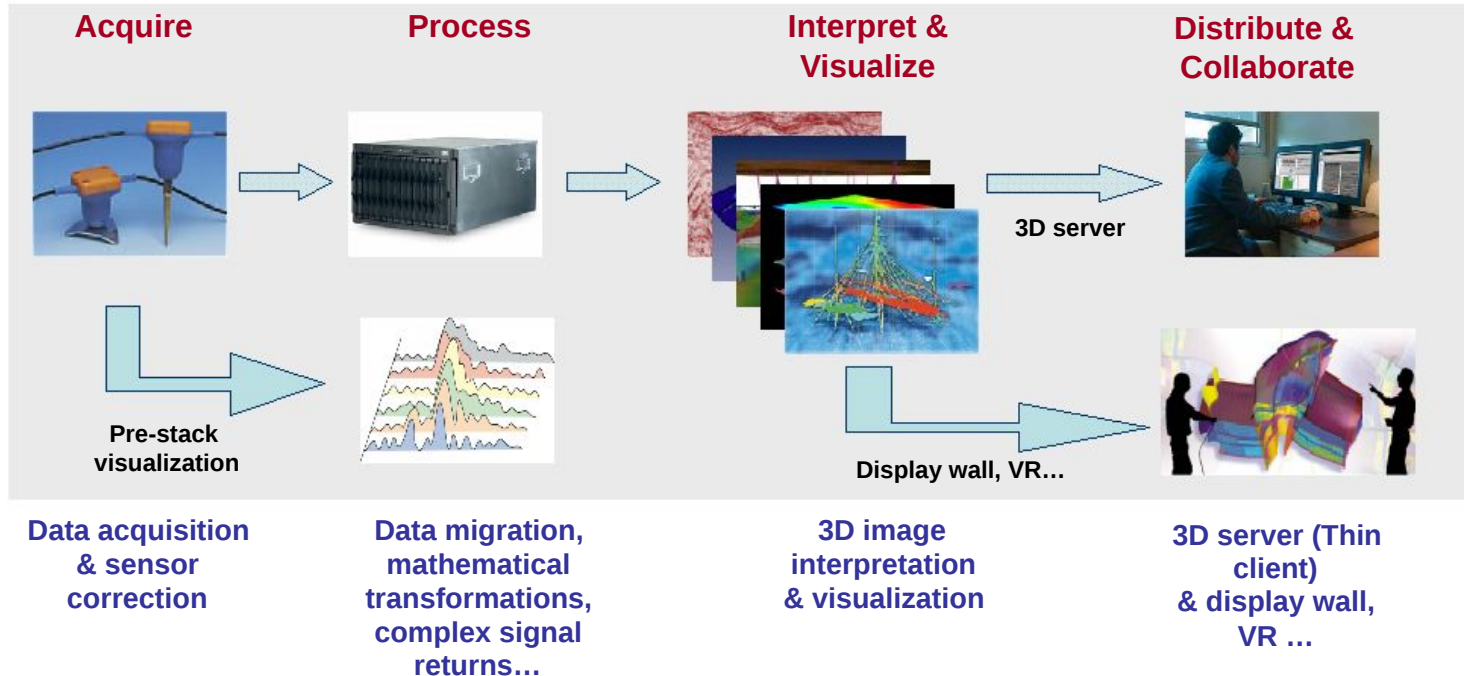
## Mercury HARDWARE SOLUTIONS:

- Cell BE-based computing cluster
- Algorithms optimization & mapping
- High-performance visualization cluster s

## Economics



**Increase data throughput, dramatically accelerating imaging workflow**  
*Main characteristic of this activity:*  
**Need to compute and analyze HUGE datasets (Terabytes)**



MARKET SERVED TODAY

MARKET NOT SERVED TODAY

TARGET MARKET PLANNED

in \$M	2006	2007	2008	2009	2010	2011
Public Sector Research	10	12	15	18	20	25
Oil & gas Visualization	50	60	70	80	90	100
Oil & Gas Seismic DP	100	110	120	140	160	200
Total served	160	182	205	238	270	325

- **VSG's strategy: exploit short-term opportunities like seismic data processing (SDP), and s/w needs for 3D tools to fund entry into larger segments in the oil & gas market**
- **Oil & gas visualization customers' needs are increasing and our OIV V6.0 will provide substantial added value and support for customers to take advantage of large existing or new clusters**
- **SDP for image reconstruction growth is driven by exploration which is at all-time high and expected to remain that way for at least 2-3 years**

- **Mainly small regional companies in the \$10-15M range, such as Coin3D, Hue, etc.**
- **In some segments we compete with our customers: Schlumberger, Landmark, etc.**
- **Competitive advantages:**
  - ScaleViz and LDM (Large Dataset Module) extensions
  - Multi-platform and laptop support
  - Remote client
  - Clustering software
  - amira® for oil & gas applications
  - GPU proprietary compression

- **Products & Services**

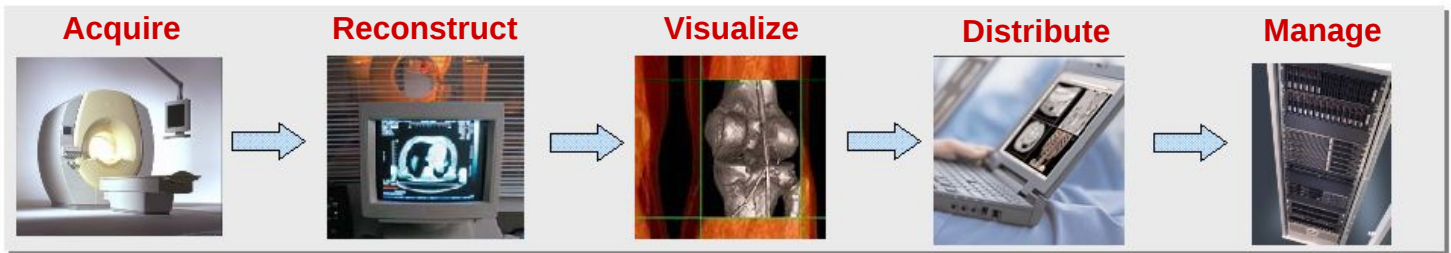
- Life Sciences SCOPE
- OEM products (systems & software)
- Recon, visualization, servers, acquisition
- 19+ years of medical OEM experience.
- Open Innovation expertise:
  - Nvidia GPUs, MGH DBT mammo, Erlangen IMP CT, MCW MRI acq. s/w, Franhofer Inst. Cardiac SW
  - Medical Advisory Board
  - Clinical sites

- **Segments**

- DMI – Diagnostic Medical Imaging modalities
  - Market growth of 3% to 10%
- PACS – Picture Archiving and Communications System
  - Market growth of 12+% and higher growth in 3D
- Microscopy & Biotech Visualization
  - High market growth of 20+%



- Broad end-to-end medical systems OEM solution portfolio
- All steps from scanner output to end user



- Multi-channel MRI Receiver
- CT Gantry Dosage Controllers

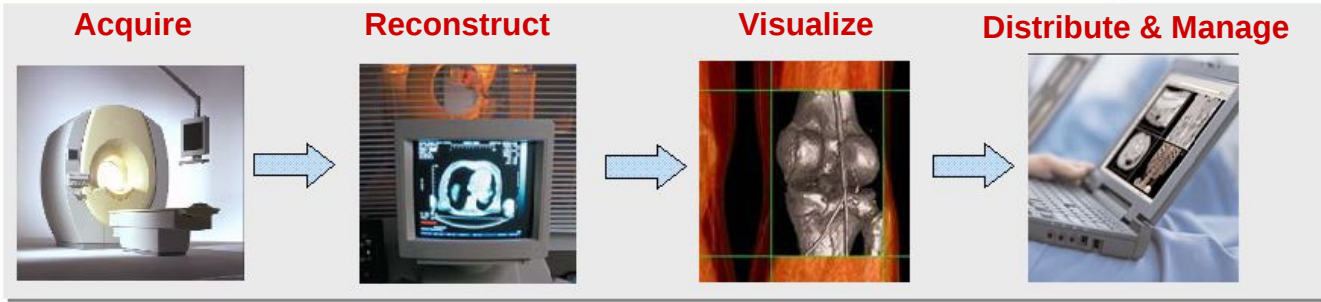
- Visage™ RT Image Reconstruction
- GPU Acceleration
- CELL Technology Acceleration

- Visage VR Volume Rendering
- Visage WS Workstation
- AMIRA research

- Visage PACS
- Visage CS Thin Client/Server

- Visage PACS

- Image reconstruction, processing, and visualization
- Embedded components and integrated solutions
- Professional services & support



- Visage MR
  - WIPS

- CT Gantry Controllers  
**SIEMENS**

- Visage RT Image Reconstruction



- Visage VR Volume Rendering



- Visage WS Workstation



- AMIRA research (over 3000 sites worldwide)



- Visage PACS



- Visage CS Thin Client/Server



## Medical Market Transition

- Aging population → More diagnostic imaging
- PET, CT and Ultrasound high growth, MR and XR flat (except oncology machines like Mammo and LINAC)
- Interventional radiology a reality with more compute power
- Better acquisition sensors → More data → More compute intensive tasks
- Applications and computation moving
  - From gantry side to PACS
  - From diagnostic radiologist on-site to remote or central reading
- PACS growing worldwide
- Reimbursements
  - Down in U.S. and most of Europe for all modalities and PACS
  - Up in US for 3D reading

In late 2005 the US announced an increase for 2006 in 3D reimbursement rates of 30% at hospitals (24% at independent imaging centers), if one diagnoses 3D from an independent workstation or PACS.  
**3D amongst the very few diagnostic reimbursement codes to go up !**

<b>3D CPT Code (Hosp Outpatient)</b>	76375 (05, replaced by ->)	76376 (06, Modality)	76377 (06, Ind. Workstation)
	----	-----	----
Reimbursement (Technical)	97.70	36.52	98.82
Reimbursement (Professional)	8.34	10.99	43.20
	----	-----	----
<b>Total</b>	<b>\$106.04</b>	<b>\$47.51</b>	<b>\$138.02</b>

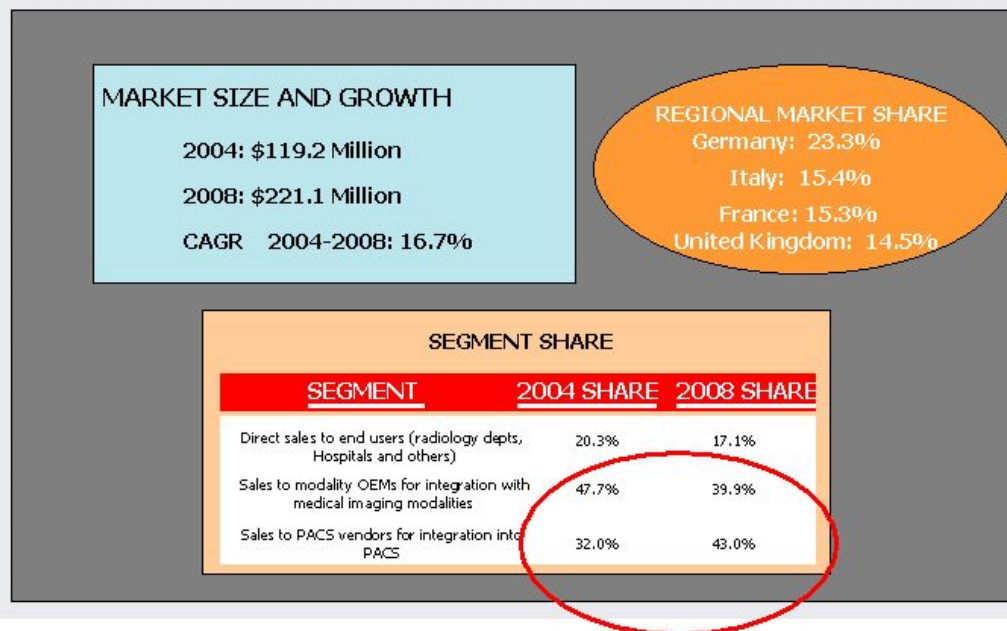
<b>3D CPT Code (Img. Center)</b>	76375 (05, replaced by ->)	76376 (06, Modality)	76377 (06, Ind. Workstation)
	----	-----	----
Reimbursement (Technical)	140.98	133.02	141.74
Reimbursement (Professional)	8.34	10.99	43.20
	----	-----	----
<b>Total</b>	<b>\$149.32</b>	<b>\$144.01</b>	<b>\$184.94</b>

The 'greater than 16-slice' category of CT scanners is the fastest growing and largest segment of CT right now.

About 1,200 64-slice systems have been ordered since mid-2005, and the installed base hovers at a rapidly growing 600.

LSG WW OEM Markets 2007 US\$M					
Systems	DMI	PACS	Interventional	Microscopy	Totals
Acquisition	80	0	0	0	80
Reconstruction	100	0	40	20	160
Workstations	150	200	80	50	480
Visualization SW & Accel	50	50	30	20	150
Data Mgmt SW	80	80	20	10	190
Molecular Img SW	20	0	0	20	40
CAD SW	40	20	0	0	60
Special Algorithms	10	0	0	10	20
Visualization Servers	30	100	0	40	170
Storage	20	150	10	80	260
<b>Totals</b>	<b>500</b>	<b>600</b>	<b>180</b>	<b>250</b>	<b>1610</b>
LSG WW addressable market 700 US\$M					

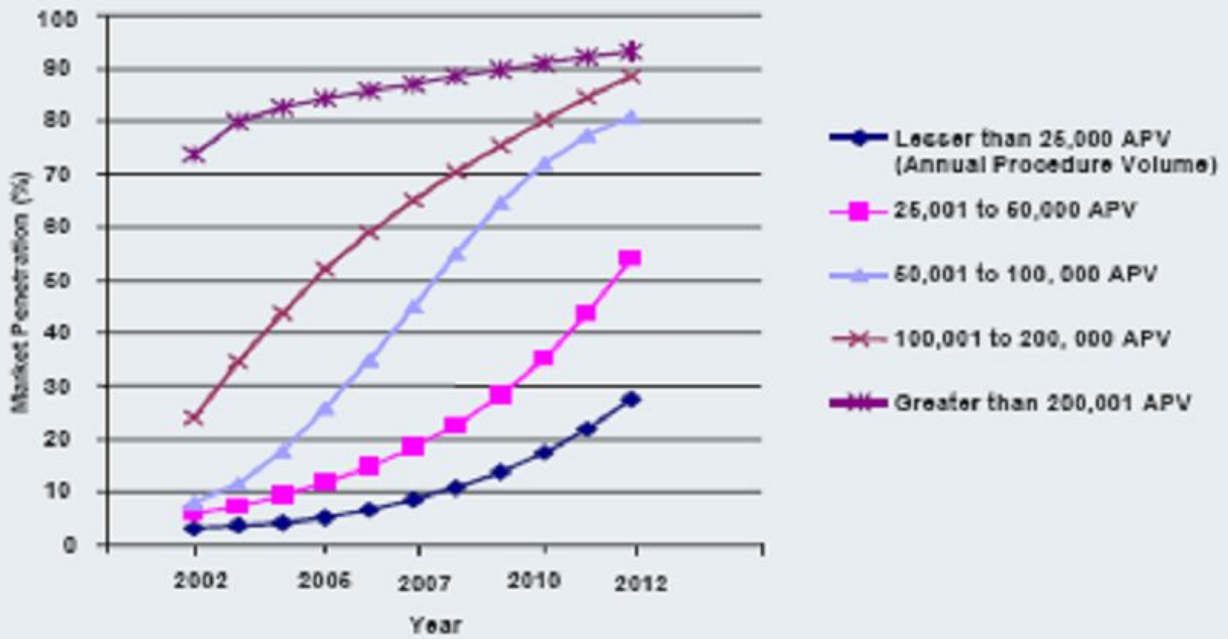
## European 3D and 4D Imaging Systems Market



**EU OEM Market 2008 80% of \$220M = \$160M**  
**US OEM Market estimate 2008 = \$200M**  
**3D alone is a \$360M OEM Market**

FROST & SULLIVAN

## Hospital Market Penetration Forecast

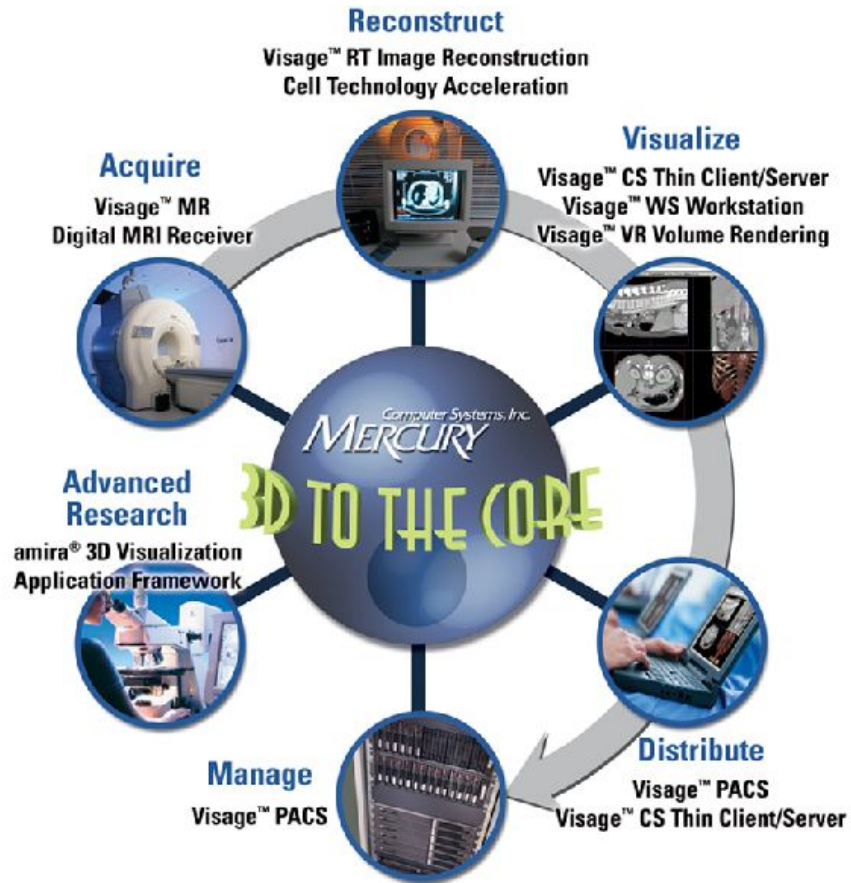


# LSG - 3D DMI & PACS Competitive Summary

	Mercury	Terarecon	Vital Images	Barco Voxar
<b>Company Summary</b>				
Locations	US & EU	US & JP	US & EU	EU & US
Stock Symbol	MRCY	NA	VTAL	BCNAF
Annual Revenues	\$250M	\$50M	\$70M	\$860M
Annual LS Revenues	\$54M	\$50M	\$70M	\$120M
Market Cap	\$290M	NA	\$420M	\$1.1B
Number of Employees WW/LS	850/170	150	260	4,222/250 (est)
<b>Life Sciences Business Model</b>				
OEM Sales	X	X	X	X
Direct Sales		X	X	
<b>Key Products</b>	Visage MR Visage RT Visage VR Visage WS Visage CS Visage PACS	Volume Pro AquariusNet AquariusWS Clinical Packages	Vitreia WS VitalConnect VitreiaAccess Clinical Apps	Displays Voxar 3D (8M)
<b>Focus</b>	GPU and Cell BE-based Recon to Visualization and Distribution Systems Thin Client Server	ASIC based 3D Renderer and Server, Clinical Applications	NVIDIA GPU Rendering, Clinical Applications	3D Software ATI GPU Collaboration
<b>Strengths</b>	Scalable Systems Large Data Sets Image Quality Performance PACS products	Server Performance	Clinical Packages	SW Easy to Integrate to PACS
<b>Weaknesses</b>	Few Clinical Applications	ASIC Platform	Hard for OEM to Integrate	Low perf. and Image Quality Long load time

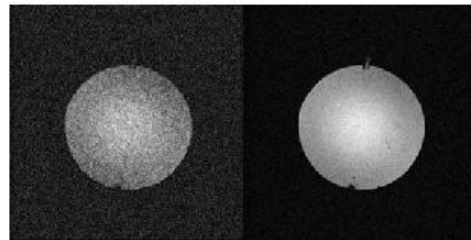


- **ISO 13485 certified and Visage CS and PACS are FDA cleared !**
- **Visage CS**
  - Image quality and SPEED
  - Scalability
  - COTS platform
  - PACS integration, workflow advantages
- **Visage PACS**
  - WEB distribution with failover technology
  - Flexibility and scalability
  - Only integrated 2D/3D image distribution system
- **Visage VR and RT (Cell or GPU)**
  - Ease of integration into any OEM platform
  - Extensive volume libraries and recon algorithms
  - Image quality and ULTIMATE SPEED



## • Visage™ MR

- Powerful drop-in upgrade to existing MRIs
- Breakthrough 16-bit A/D technology
- For high-field systems: Enables useful images during breath hold or cardiac timeframes
- For low-field systems: Provides dramatic image quality and scan-time improvement



*Side-by-side images demonstrate Visage MR's superior signal-to-noise ratio (SNR) and dynamic range.*

WIPS – In clinical validation

- **Visage™ RT – Award-Winning Technology**

- Pioneering GPU and Cell-based reconstruction
- Reduces reconstruction times by 40x to 100x



- **Cell BE-Based Solutions**

- Cell Accelerator Board (CAB) – 180 GFLOPS
- 1U Dual Cell-Based Server – 410 GFLOPS
- Enable advanced algorithms in routine procedures
- Unparalleled throughput and image quality



- **Visage™ WS - Turnkey Medical Workstation for OEMs**

- Full integration with PACS and modalities
- Customization for OEMs and PACS providers
- Enables fast time to market



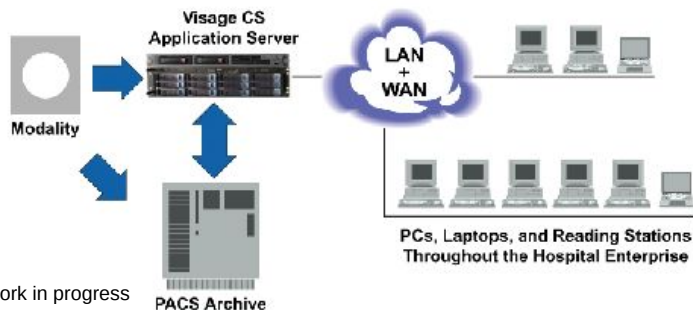
- **Visage™ VR - GPU Accelerated Volume Rendering**

- Multitude of advanced 3D visualization methods
- Unmatched levels of performance and image quality
- Seamless integration through flexible API

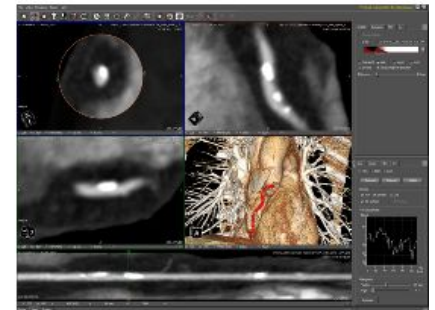


## 2D/3D Anytime, Anywhere

- **Visage™ CS Thin Client/Server**
  - The world's first fully scalable thin client/server
  - Instant interactive viewing for 2D, 3D and 4D studies
  - Optimal use of existing PCs throughout the enterprise
  - Tight integration with PACS and modalities
- **NEW! Visage™ Cardiac Analysis\***
  - Thin client access to cardiac analysis functionality
  - Comprehensive package including LV and coronaries

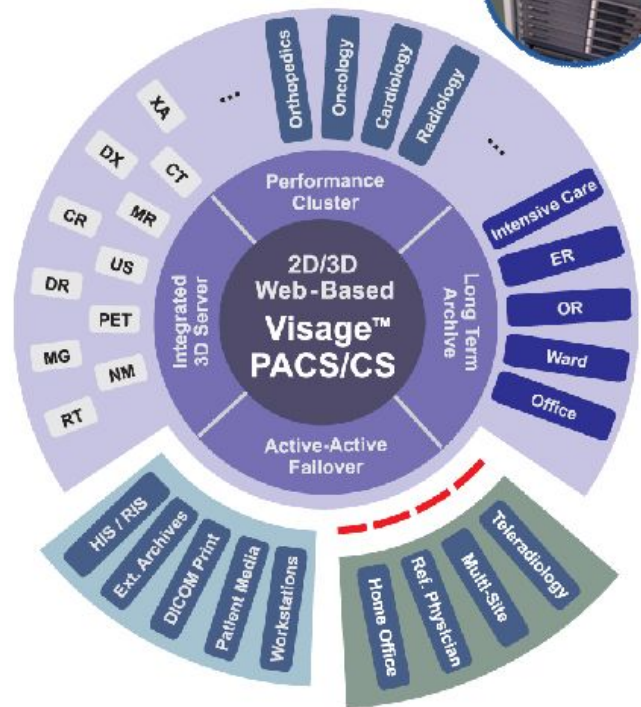


\* PRELIMINARY - work in progress



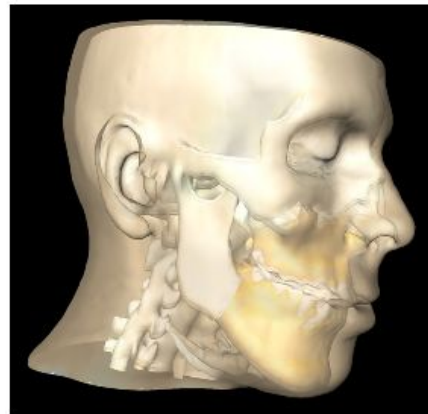
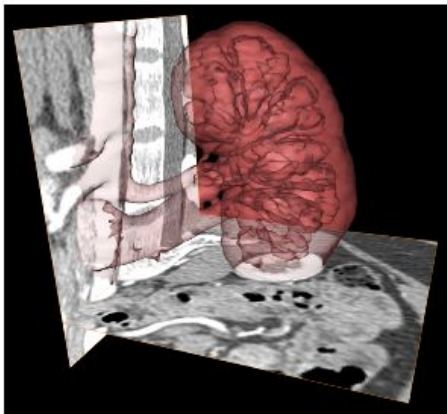
● **Visage™ PACS**

- Instant image access for web and thin clients
- Cluster and failover approach for optimum availability
- Fully scalable solution - small to large sites
- Flexible integration with imaging modalities and RIS/HIS
- Over 1,400 installations worldwide



• **amira® 3D Visualization**

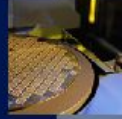
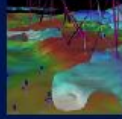
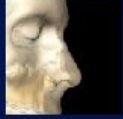
- Powerful framework and toolbox for research
- Unmatched interactive speed and visual quality
- Supports a broad range of data formats
- Develop complex patient models and perform advanced treatment planning
- Create spectacular presentations





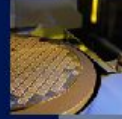
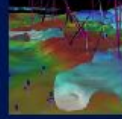
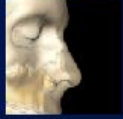
- **Expertise that ensures the customer's competitive advantage**
  - Comprehensive services across the diagnostic workflow
  - Highest quality standards and certified products
- **Professional services for OEMs**
  - Algorithmic optimization
  - Cell/GPU acceleration
  - Customized API and GUI
  - Integration into customer's framework
- **Professional services for dealers and distributors**
  - System integration and support services
  - Custom branding and versioning
  - Consulting and training





**Break**

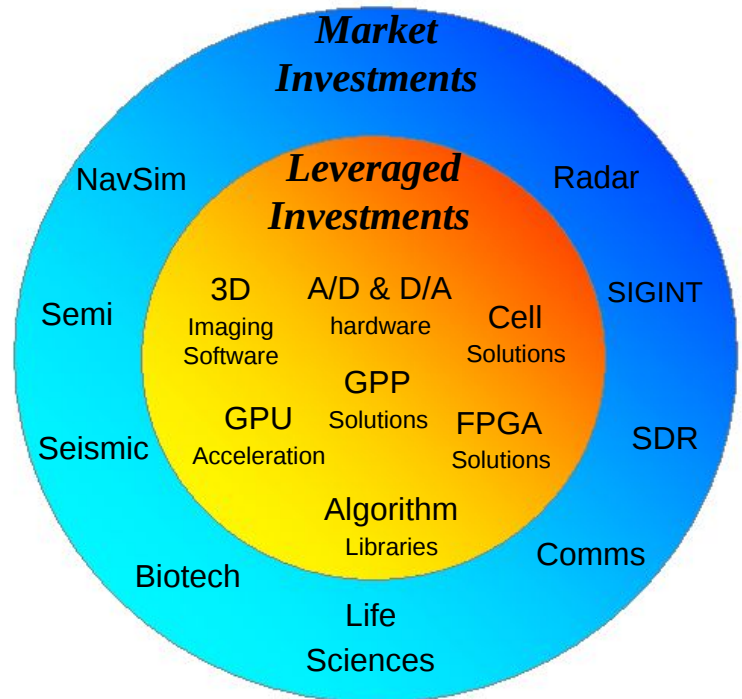
**Next: Mark Skalabrin, VP & General Manager  
Advanced Solutions Business (ASBU)**



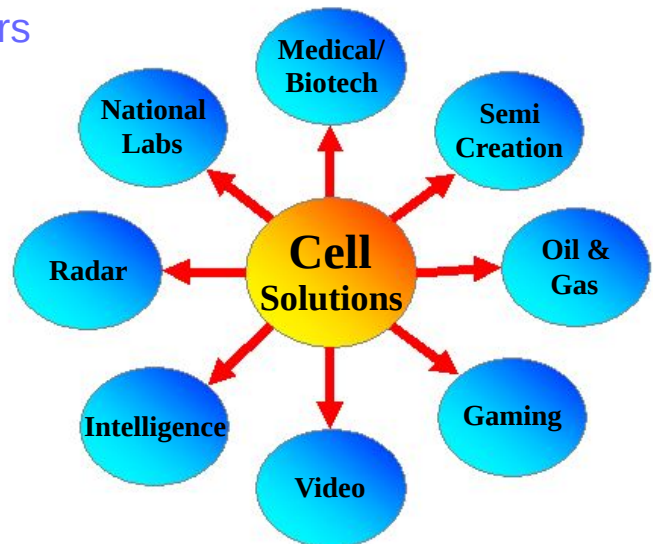
## Leveraged Platform Investments Semiconductor & Communications Markets

**Mark Skalabrin, Vice President & General Manager**

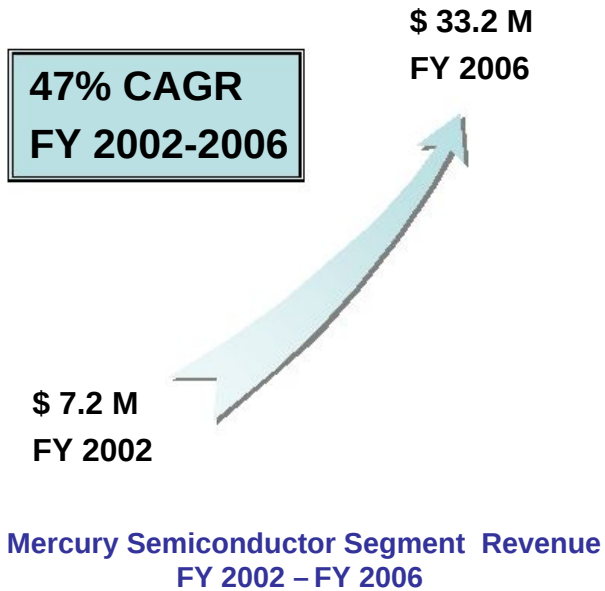
- **Increasing multi-market leverage of R&D investments**
  - Includes both organically developed and acquired technology
  - Significant trend reversal
- **Major competitive advantage**
  - Competitors in any one segment must overcome the leverage advantage
- **Required to enter market niches**
  - Most market segments are too small to support standalone investment



- **5-100x faster than conventional microprocessors**
- **A strong match to Mercury's unique capabilities**
  - Architected to solve problems in the same way Mercury has been solving problems for many years
- **Creating value in every major Mercury market segment**
  - Driving next generation engagements with existing customers
  - Bridging us back to past customers
- **Leading to new market opportunities**
  - Over 2,000 leads
- **Established significant relationship with IBM**



## Strong Organic Growth



- **Supplying application-enabling solutions to leading OEMs**
- **Growth driven by production design wins**
  - Mask generation
  - Wafer inspection
  - Reticle inspection
- **Positioned for the next wave**
  - Mercury Cell BE-based solutions uniquely meet market needs
  - Emerging new applications for Mercury solutions

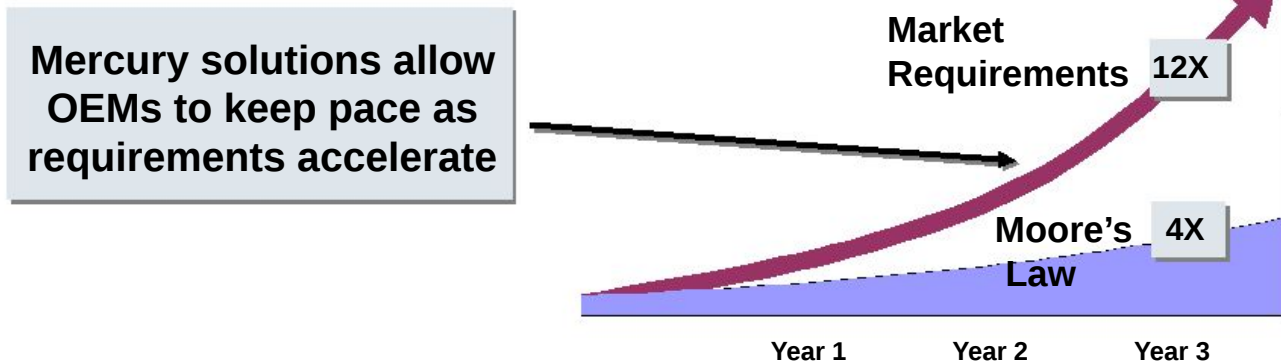
## Consumer electronics driving the market

- Demand for faster, lower cost, lower-power chips
- Product life cycles getting shorter

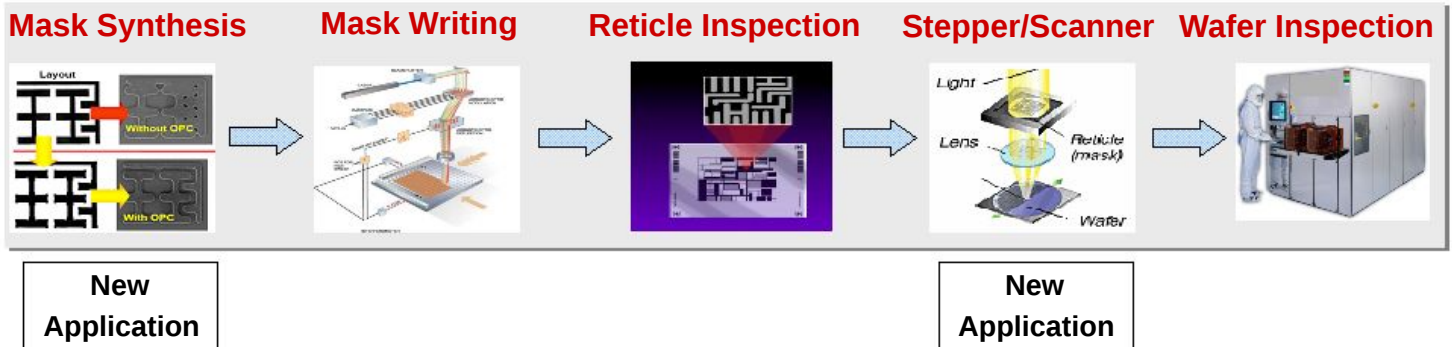
## Chip creation process getting harder

- Increased time-to-market pressure
- More complex physics and higher data rates as line widths shrink

## New algorithms that need massive compute power



Growing through expansion into adjacent applications in the lithography process chain

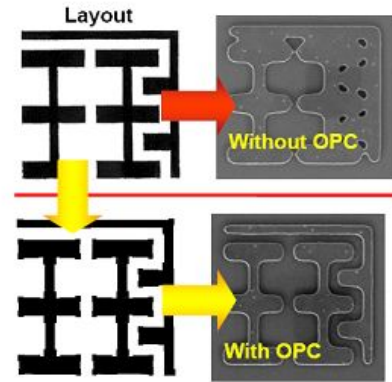


## Competitive Differentiation

- Solutions that solve the most challenging computing problems
- End-to-end integration of application-enabling technology
- Customer-specific solution optimization
- Focus on long-term customer success



- New application for Mercury in Electronic Design Automation (EDA) space
- Complex physics processing to support next generation lithography
  - Resolution Enhancement Technology (RET) including Optical Proximity Correction (OPC)
  - Design For Manufacturing (DFM), replacing experimentation with simulation
- 45nm node has blown through the capability of mainstream processing technology
  - Up against size, power, and cost limits



## Quotes from end users

*"It takes 8 days with 500 nodes to do OPC on a single [65 nm] chip layer ... and we need it to be 10 to 100 times faster"*

*"We have 10,000 blades to do RET"*

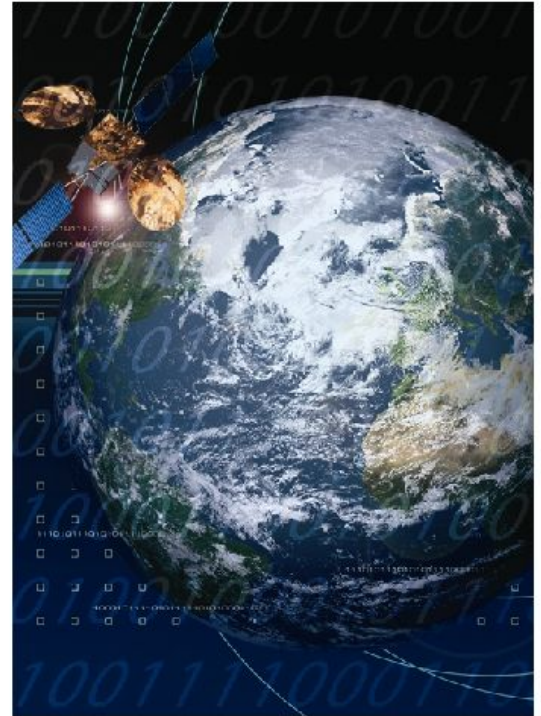
- **Challenge is to turn weeks into days and days into hours**
- **Mercury Cell BE-based solutions ready to meet the market needs**
  - Teraflops to speed application by 10x to 100x
  - Mercury middleware, algorithm, and application expertise
  - Improvements in all three dimensions - size, power, and cost
- **Working with a leading EDA company to deploy a solution by the end of the year**

**Mercury 28 node Cell  
BE-based cluster**



**Goal: Performance  
exceeding 1,000  
mainstream processors**

- **Providing application-specific solutions for wireless infrastructure applications**
  - Primary focus is close to the radio
- **Targeting niche applications where we add significant value**
  - Lower volume, higher value focus
- **Growth opportunity**
  - Advanced TCA DSP and FPGA compute solutions



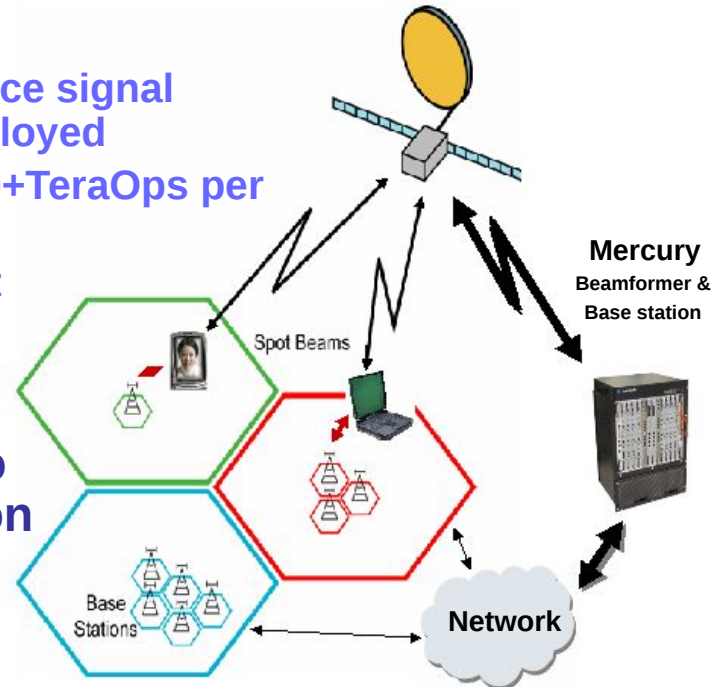
## OEMs are looking outside for innovation

- **Data and multimedia driving *broadband everywhere* - needs new network infrastructure solutions**
- **OEMs emerging from a downturn with scaled-down development staff**
- **Strong time-to-market demands for new solutions**
- **New technology solutions required with limited in-house expertise**

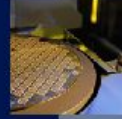
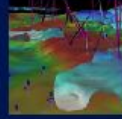
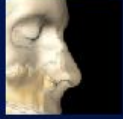


- **Deployed in the labs of top tier Telecom OEMs**
  - **Advanced base station and radio network prototypes**
- **Satellite beamformer design win**
- **Multi-market leverage emerging**
  - **Leverage in and leverage out**
- **Significant year over year platform revenue increase**
  - **3.7x increase FY06 to FY07**

- **Ground-based communications system to support Ancillary Terrestrial Component (ATC)**
  - ATC allows satellites to work together with terrestrial communications systems to support spectrum sharing
- **Very hard problem**
  - One of the highest performance signal processing systems ever deployed
  - Over 100 FPGAs providing 20+TeraOps per chassis
  - High availability management
- **Mercury is uniquely positioned with the technology and expertise to provide the required solution**



- **Renewed strength in multi-market leverage**
  - **Strong leverage of both organic and acquired products, technology and capabilities**
- **Well-positioned for next wave in the semiconductor creation segment**
  - **Strong opportunities in existing and new applications segments**
- **Focusing communications investments to provide high value**
  - **Delivering superior architected solutions to solve hard problems**

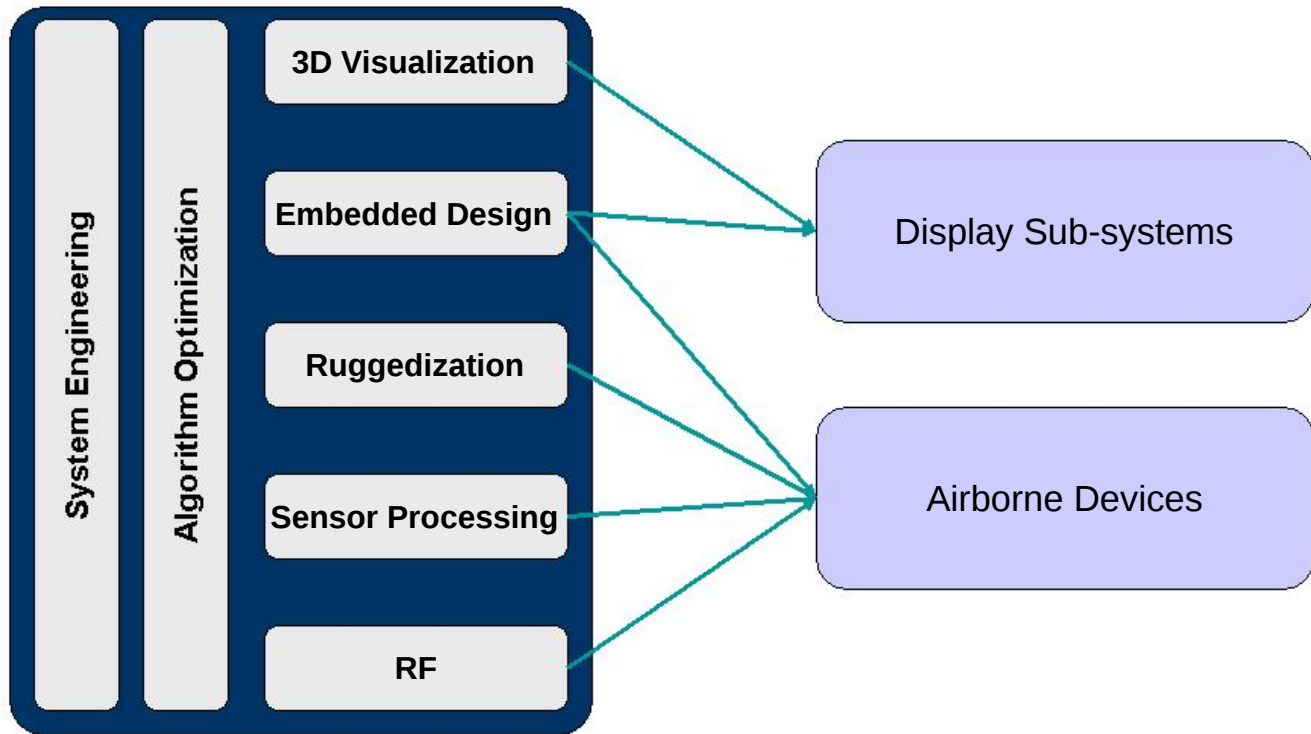


# Unmanned Systems Market

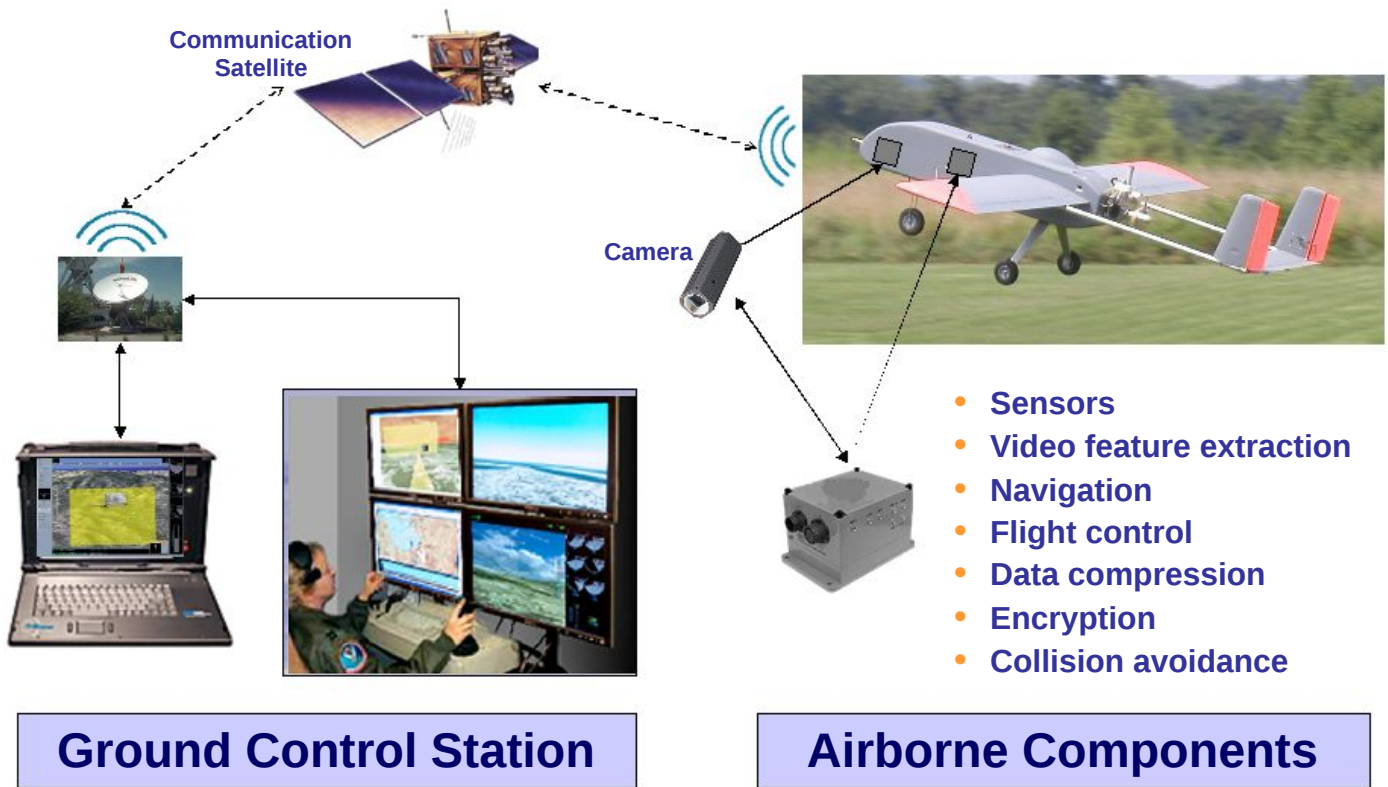
**Philippe M. Roy, Director & General Manager  
Navigation & Simulation Systems Group**



## Aeronautical Applications & Systems Knowledge

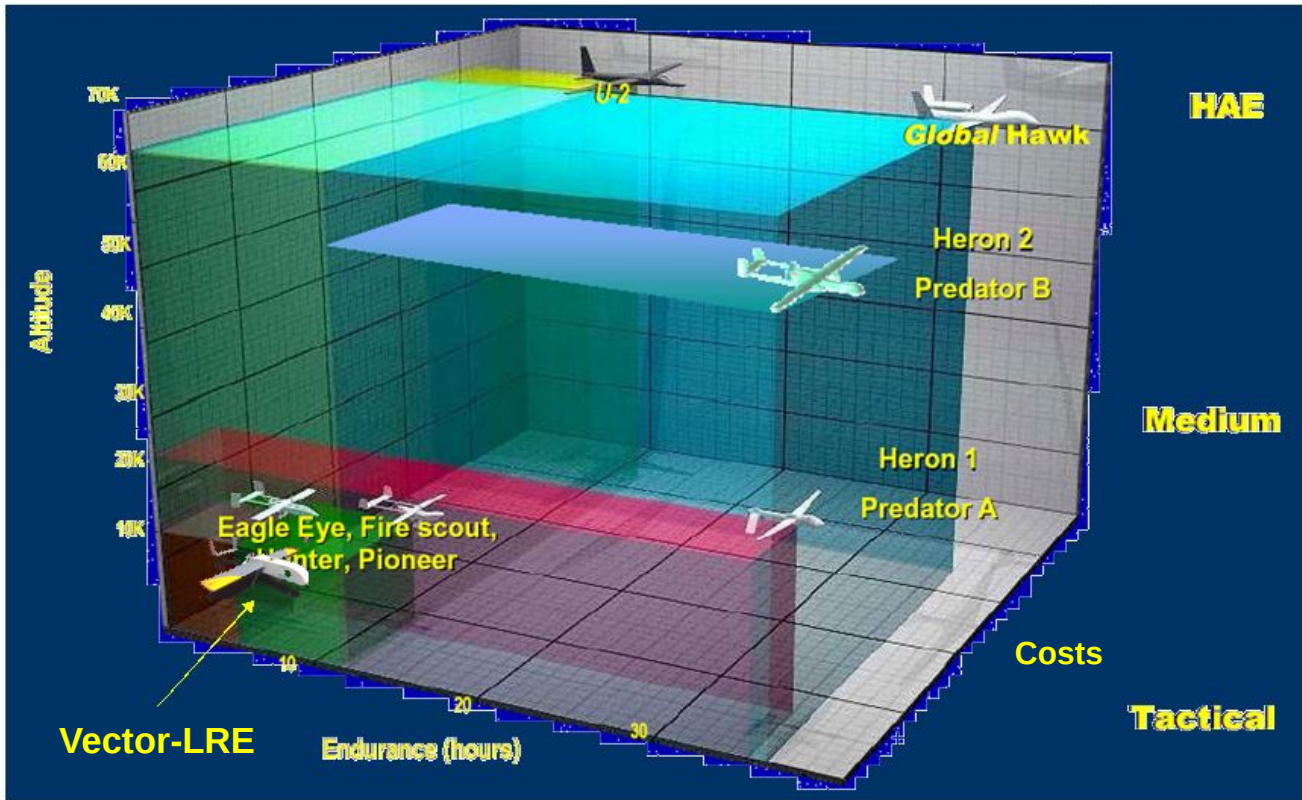


## Smart Surveillance & Reconnaissance Systems



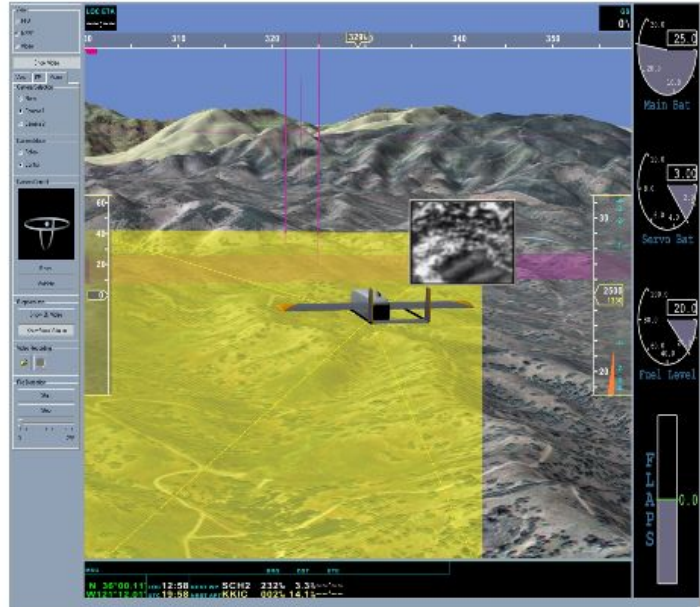
**Ground Control Station**

**Airborne Components**



Partnership with innovative airframe designers

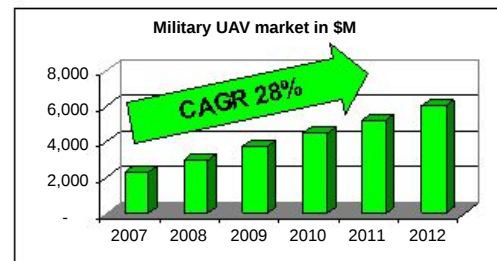
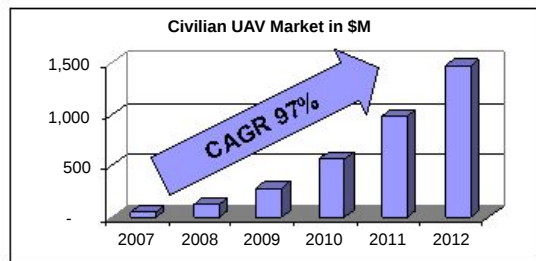
- **Increased situational awareness**
- **Flexible software integration platform**
  - Payload (video, IR, radar)
  - Navigation
  - Mission control
- **Scalable**
  - Portable ground station
  - Trailer multi-system
  - Multi-screen control center
- **3D real-time data dissemination**



**Vastly Improved Operational Capabilities**

## High-growth Market Opportunities

- Forest fire detection and monitoring
- Oil and gas pipeline monitoring
- Power line monitoring
- Precision agriculture
- Border surveillance
- Surveillance and reconnaissance



Data sources include: Teal Group, Frost & Sullivan & Forecast International (2004-2006)

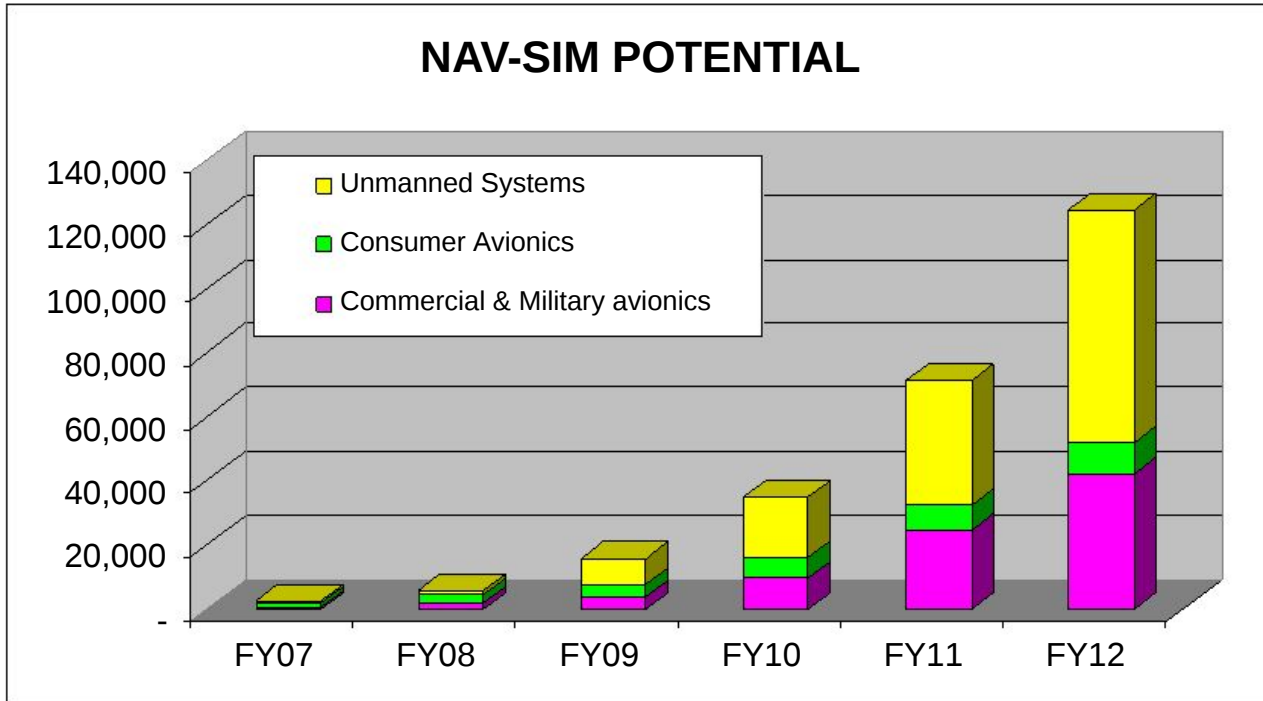
Image duplicated with permission from Harbor Wing Technologies

- **Autonomous hydrofoil-multi-hull surface vessel**
- **Ultra long endurance**
- **High payload capacity for on-board rugged electronics**
- **Remote surveillance & security in open waters**
- **Military & commercial applications**



**VistaNav controlled unmanned system**

<i>in Thousand USD</i>	FY07	FY08	FY09	FY10	FY11	FY12
<i>Commercial &amp; Military avionics</i>	550	1,750	4,000	9,500	24,500	42,000
<i>Consumer Avionics</i>	1,300	2,500	4,000	6,500	8,000	10,000
<i>Unmanned Systems</i>	450	1,750	7,850	19,000	39,000	72,500
<b>TOTAL AVIONICS</b>	<b>2,300</b>	<b>6,000</b>	<b>15,850</b>	<b>35,000</b>	<b>71,500</b>	<b>124,500</b>



**ULTIMATE SITUATION AWARENESS**

**INNOVATIVE UNMANNED VEHICLES**

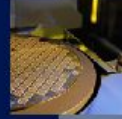
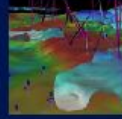
**ACTIVE COLLISION AVOIDANCE SYSTEM**

**UNIQUE MINIATURIZED AIRBORNE INTEGRATION**

**SUPERIOR DATA EXPLOITATION & DISSEMINATION**

**AFFORDABLE YET HIGHLY CAPABLE SYSTEMS**





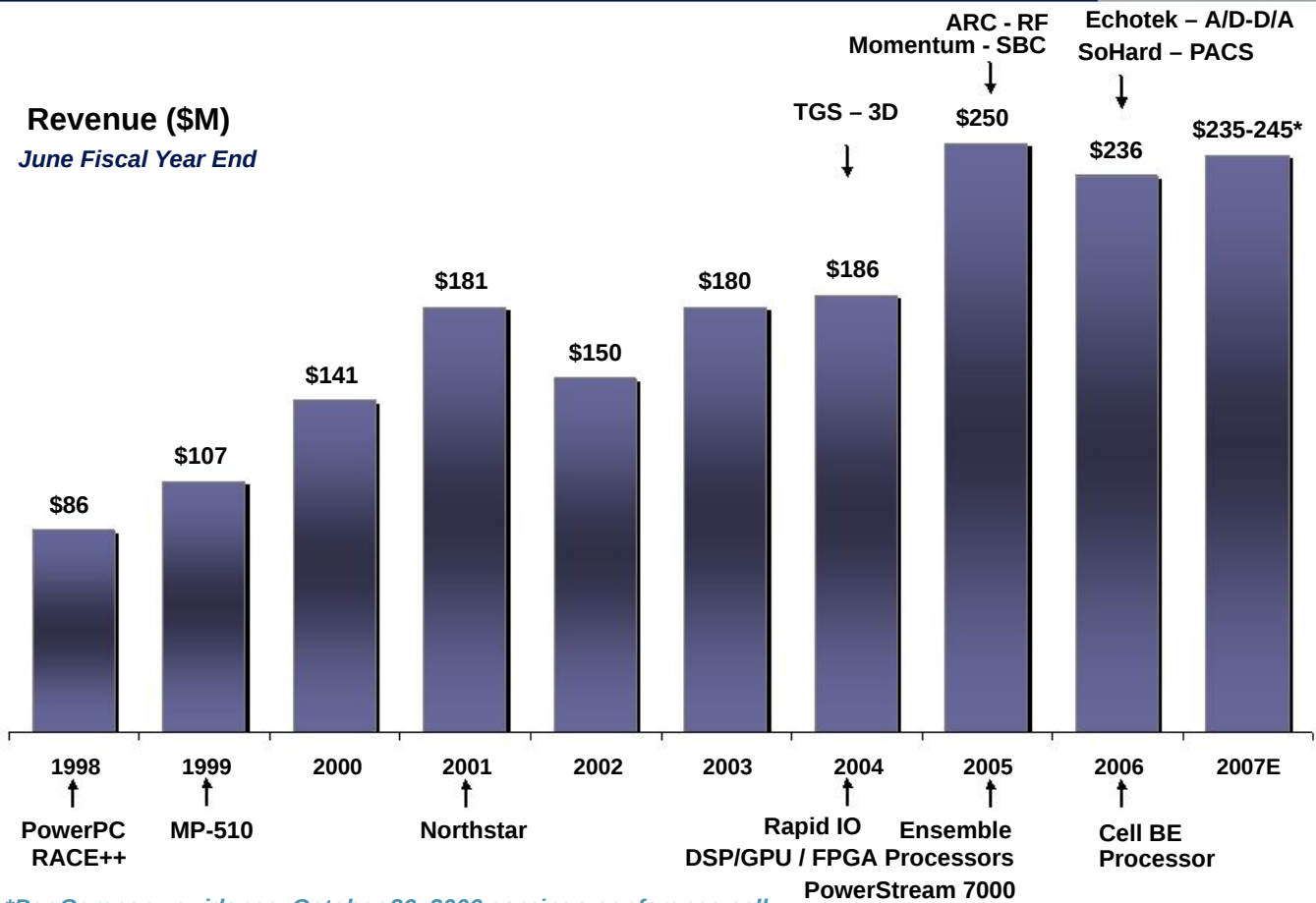
# Financial Overview

**Bob Hult, SVP, Chief Financial Officer**

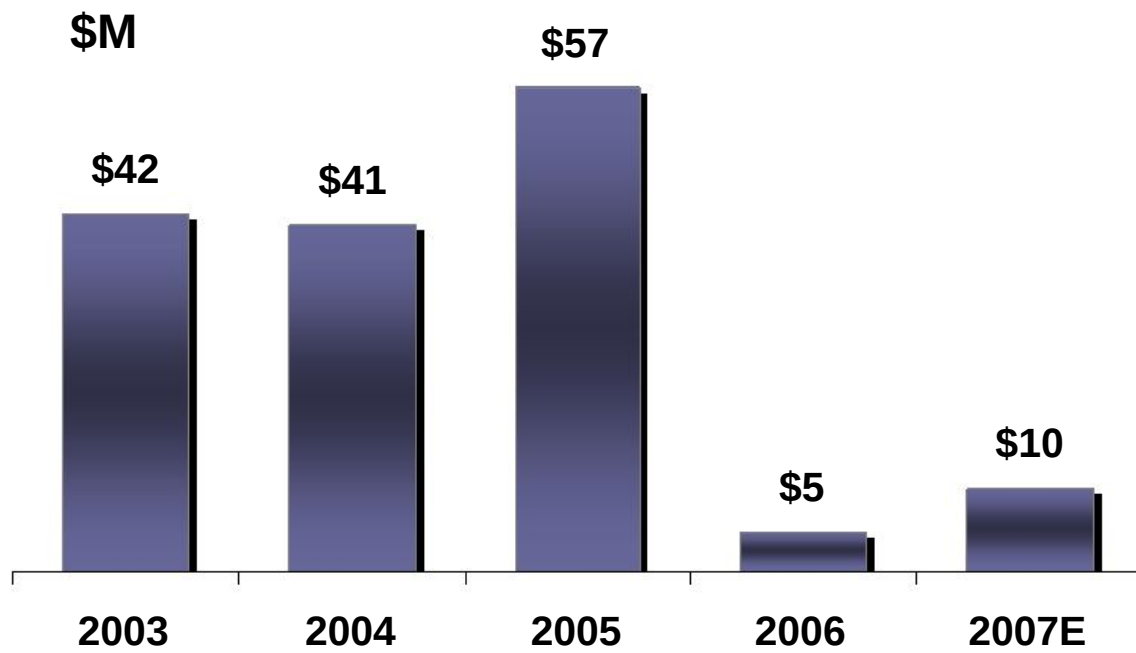
- **Well-positioned in attractive and growing markets**
- **Niche market strategy**
- **Leverage technology investments across markets**
- **Commitment to customer success**
- **Solid operating model**



# As Revenue Follows Technology Cycles



# EBITDA Follows Revenue

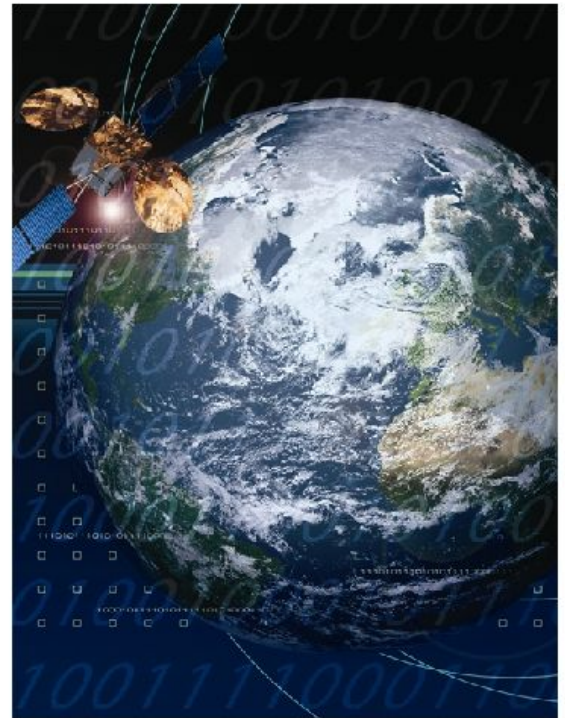


*\*Per Company guidance, October 26, 2006 earnings conference call*

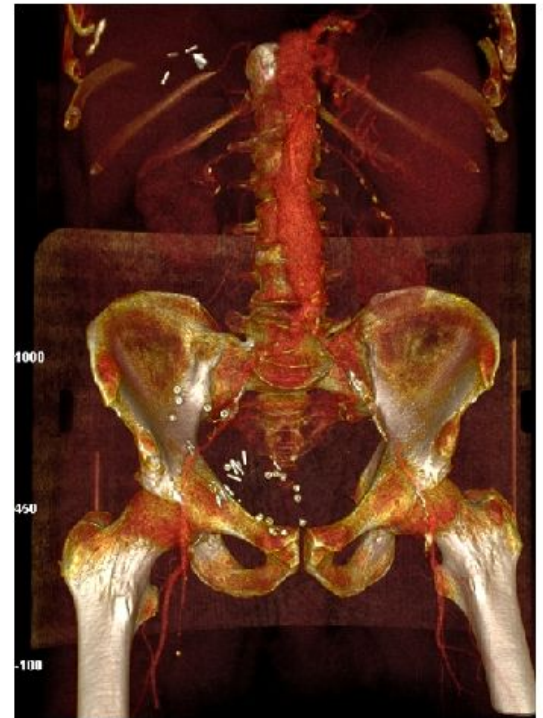
- Collaborative COTS
- Radar – strong base
- Battlefield communications
- Unmanned systems
- DOD spending outlook



- **Communications/Satellites (ATC)**
- **Semiconductor Equipment**
  - Wafer & reticle inspection
  - Mask writing systems
  - Stepper/scanner control
  - Electronic design automation (EDA)



- **Forefront of socio-economic issues**
- **Expanding product portfolio across life sciences imaging workflow**
- **Transformation of the diagnostic workflow to 3D**
- **Oil & Gas exploration – huge datasets**



	Fiscal Year Ending June 30, 2007	
<b>Revenues (\$M)</b>	<b>\$235-245</b>	
	<b>GAAP</b>	<b>Non-GAAP</b>
<b>Gross Margin</b>		<b>57%</b>
<b>EPS</b>	<b>\$(0.50)</b>	<b>\$0.29</b>

- Impact of equity-based compensation costs related to FAS 123(R) of approximately \$9.8M excluded from non-GAAP
- Acquisition-related amortization of approximately \$7M, Q1 in-process R&D charge of \$3.1M, and Q1 restructuring impairment charge of \$800K excluded from non-GAAP

*Notes:*

- 1) *Figures in millions, except percent and per share data which includes adjustment for contingent convertibles, in accordance with GAAP*
- 2) *Company guidance, October 26, 2006 earnings conference call*



	Quarter Ending December 31, 2006	
<b>Revenues (\$M)</b>	<b>\$52-54</b>	
	<b>GAAP</b>	<b>Non-GAAP</b>
<b>Gross Margin</b>		<b>55%</b>
<b>EPS</b>	<b>\$(0.48)-(0.43)</b>	<b>\$(0.23)-(0.19)</b>

- Impact of equity-based compensation costs related to FAS 123(R) of approximately \$2.6M excluded from non-GAAP
- Acquisition-related amortization of approximately \$1.7 M excluded from non-GAAP

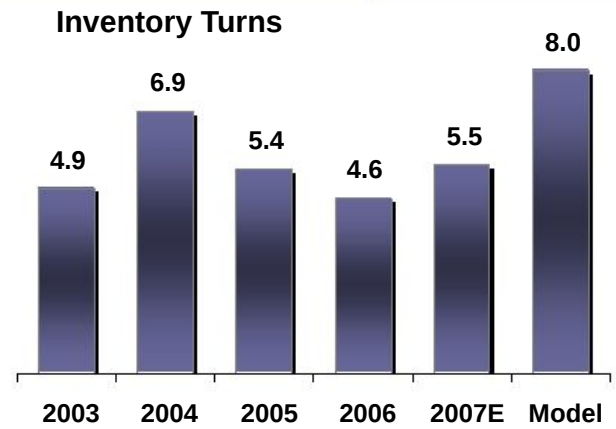
*Notes:*

- 1) *Figures in millions, except percent and per share data which includes adjustment for contingent convertibles, in accordance with GAAP*
- 2) *Company guidance, October 26, 2006 earnings conference call*

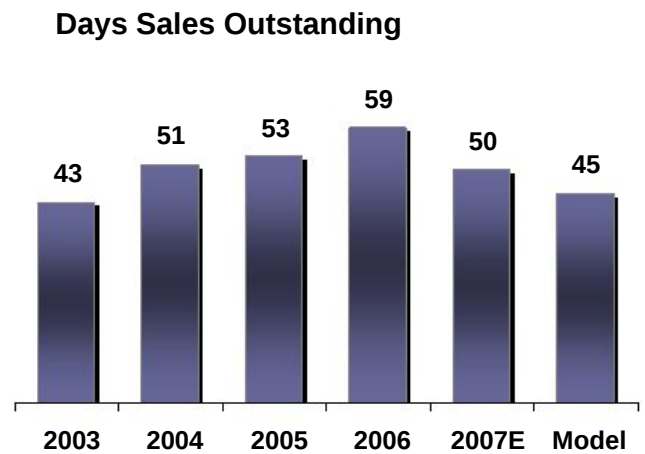
<b>Non-GAAP</b>	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>	<b>Guidance FY07*</b>	<b>Emerging Timeless Business Model</b>
<b>Revenue</b>	100%	100%	100%	100%	<b>100%</b>
<b>Gross Margin</b>	67%	66%	62%	57%	<b>60+%</b>
<b>SG&amp;A</b>	30%	29%	34%		
<b>R&amp;D</b>	21%	20%	25%		
<b>Income from Operations</b>	17%	17%	3%	3%	<b>16-18%</b>

*\*Per Company guidance, October 26, 2006 earnings conference call*

- **Supply chain transformation**
  - **Competitive advantage for Mercury and customers**



- **Quality**
  - **Customer satisfaction**



**Historically strong  
balance sheet**

**Net cash positive**

**Cash generation  
focus**

*Quarter ended September 30, 2006 \**

Cash and Equivalents	\$142
Total Current Assets	\$172
Total Assets	\$368
Total Debt **	\$125
Total Liabilities	\$184
Stockholders' Equity	\$184

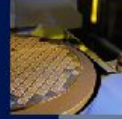
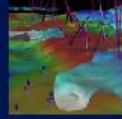
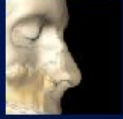
*\* Adjusted for October 19 mortgage payoff*

*\*\* Convertible senior notes offering*

- **Return to growth**
- **Value-add drives operating margin**
- **Working capital efficiencies**
- **EBIDTA potential**
- **Strong balance sheet**



- **Strong competitive position in attractive and growing markets**
- **Large growth opportunities in 3D medical imaging, semiconductor applications, defense communications, and synthetic vision**
- **Leverage technology investments across multiple applications in diverse markets**
- **Open innovation strategy through partnerships and acquisitions**
- **Strong financial position supports continued investments in technology and new market development**



## Closing Remarks

**Jay Bertelli, President, CEO & Chairman**

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