



Corporate Presentation H1 2008

August 2008



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A World Leader

Virtually every electronic device in the world is produced using Orbotech systems

- A world leader in yield-enhancing and production solutions for the electronics industry
- A leading provider of specialized application products for nuclear medical imaging
- A leading provider of recognition solutions for check processing and business process outsourcing



The Industries We Serve



Bare PCB Production

5500 systems installed



PCB Assembly

1600 systems installed



FPD Manufacturing

600 systems installed



Recognition



Medical Imaging



AUO



SANMINA-SCI



SHARP



NOKIA

SIEMENS

SONY

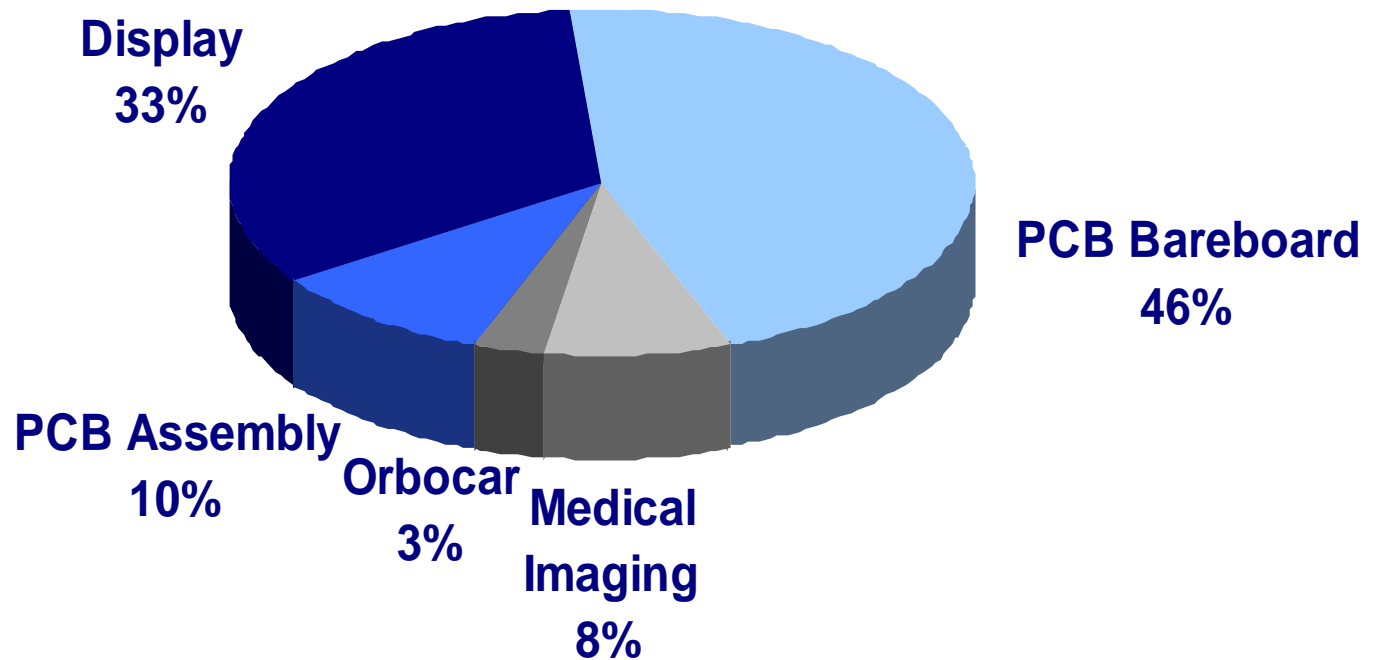
HITACHI

tyco

SAMSUNG

Sales Distribution H1 2008

By Product Lines



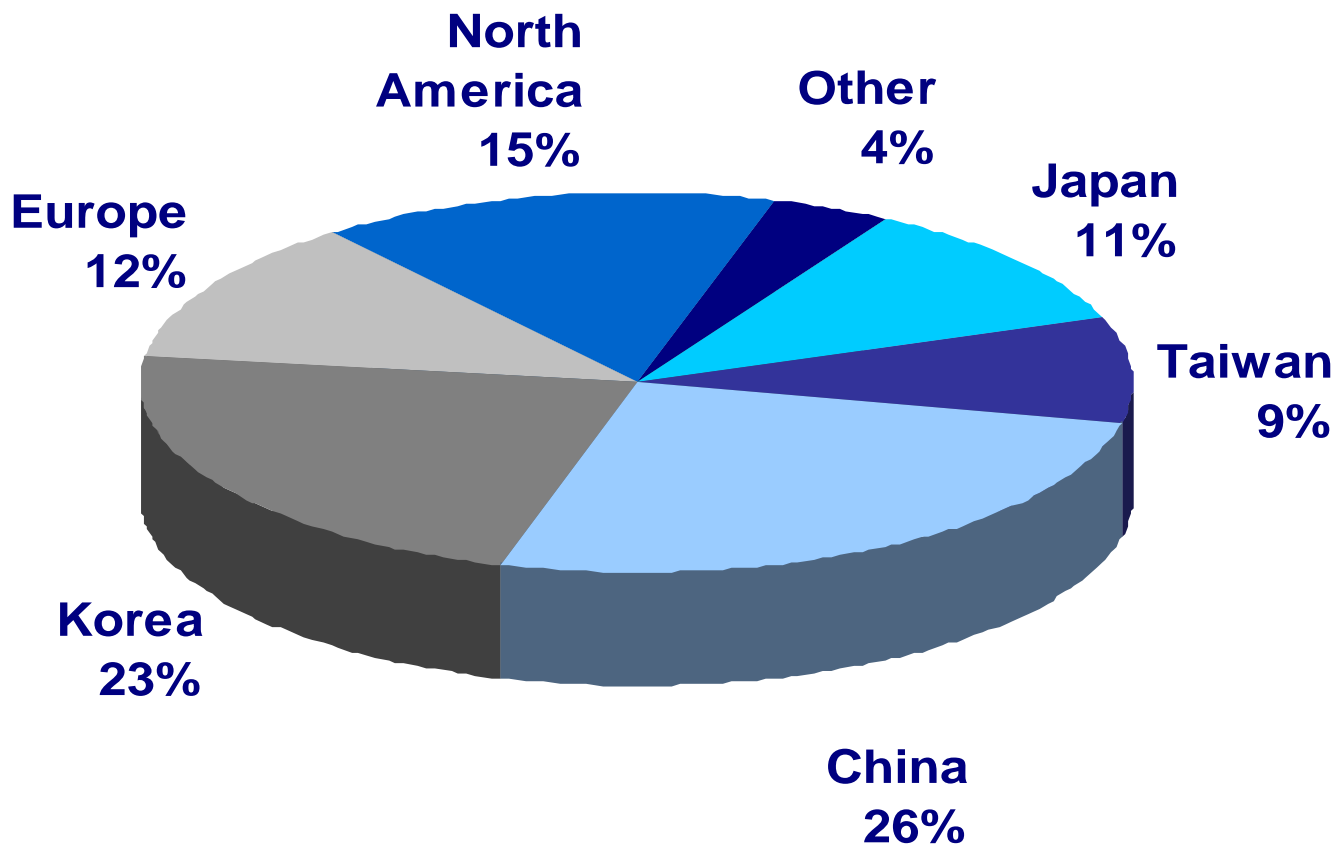
Global Infrastructure

Over 1600 Employees in over 30 Offices



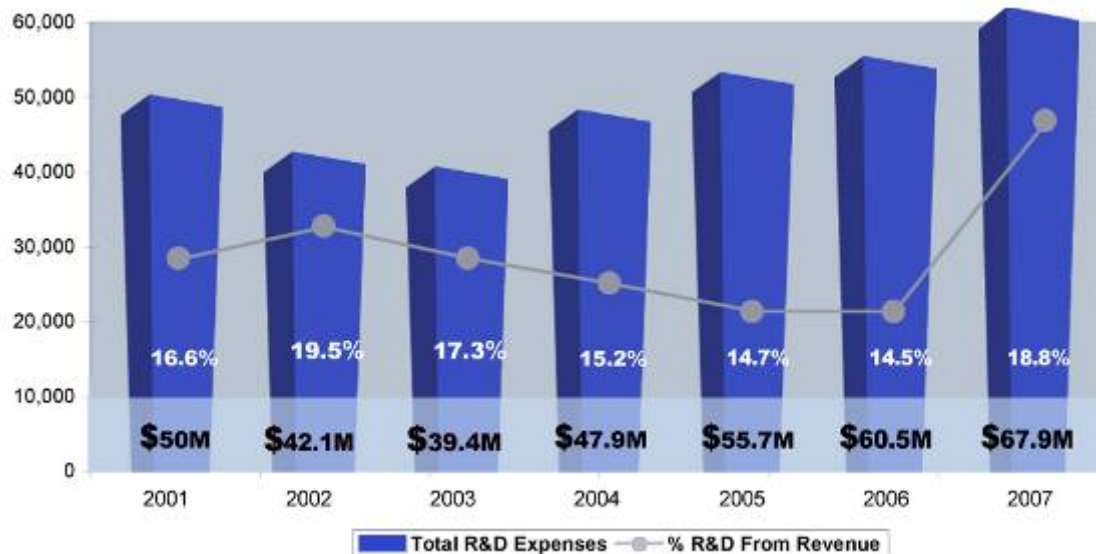
Sales Distribution H1 2008

By Region



R&D Investment

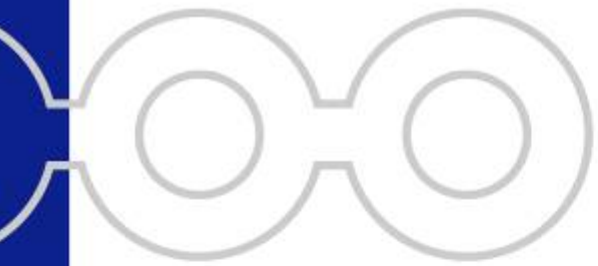
- Significant product sales are from products introduced over the last 24 months
- Over 400 Scientists and Engineers
- Over \$65M annual R&D budget



Growth Strategy

New Technologies for Core Markets





Bare PCB Production

Bare PCB Production

Orbotech is the world leader in

- Automated Optical Inspection (AOI)
- Automated Optical Repair (AOR)
- Laser Direct Imaging (LDI)
- Laser Plotting
- Inkjet for Legend
- CAM & Engineering



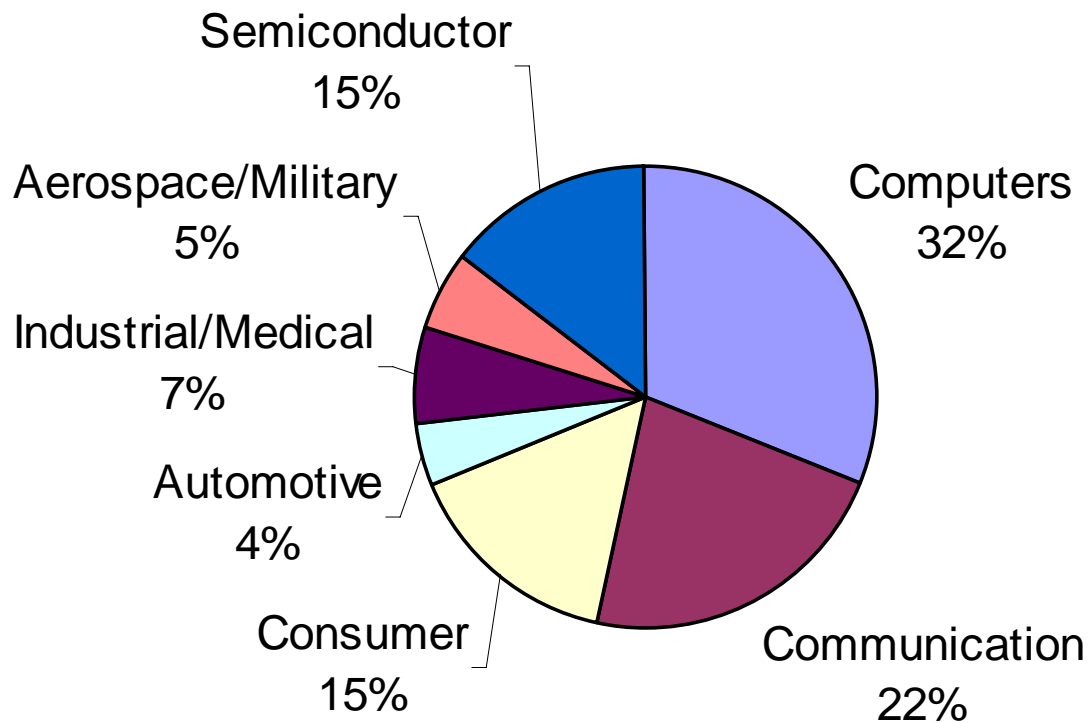
Bare PCB Market Summary

- Expected 5-7% growth in next few years
- Over 80% of the market in the Far East
 - China is world's largest PCB producer
- Cell phones and PC driving the industry
 - Over 1BN phones in 2007
- Fast growing segments: microvia, IC substrates, flex



Computers and Communication are the largest PCB end applications

2007 PCB Production Value by End Application



PCB market growth drivers

- PCB growth is driven by the major end applications: computers, telecom, consumer and semiconductors
- Growth drivers for end applications:
 - End application demand in emerging markets
 - Mobility & Miniaturization
 - Increase in data amounts – digitization
 - Advanced semiconductor packaging
 - New applications
- These drive all PCB segments, but especially the high end, advanced technology segments

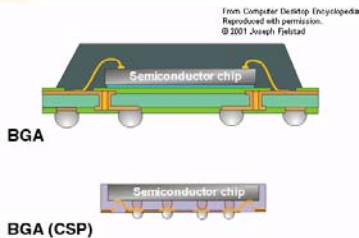
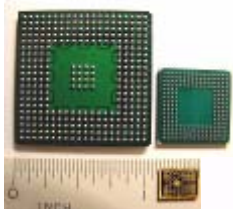
iPhone Example

Two Main PCBs, Several Flex, Many IC Substrates

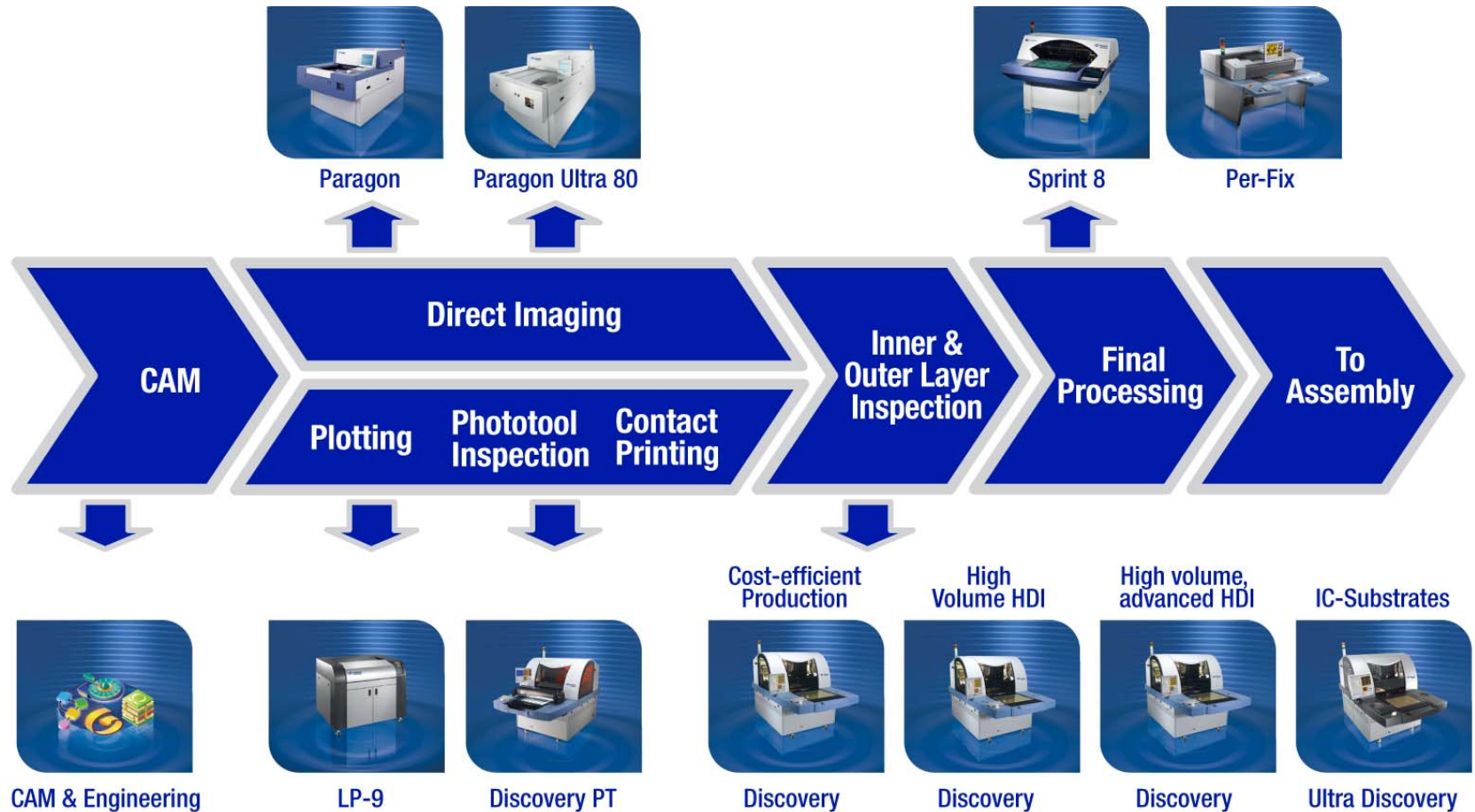
Wireless board

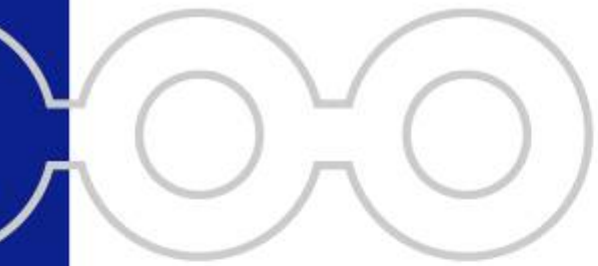


Application board



Products & Solutions





PCB Assembly

PCB Assembly

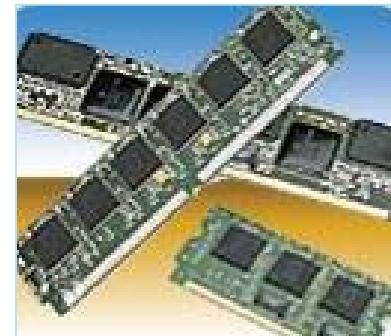
Orbotech is a leading provider of:

- Automated Optical Inspection (AOI)
- Process Control Software



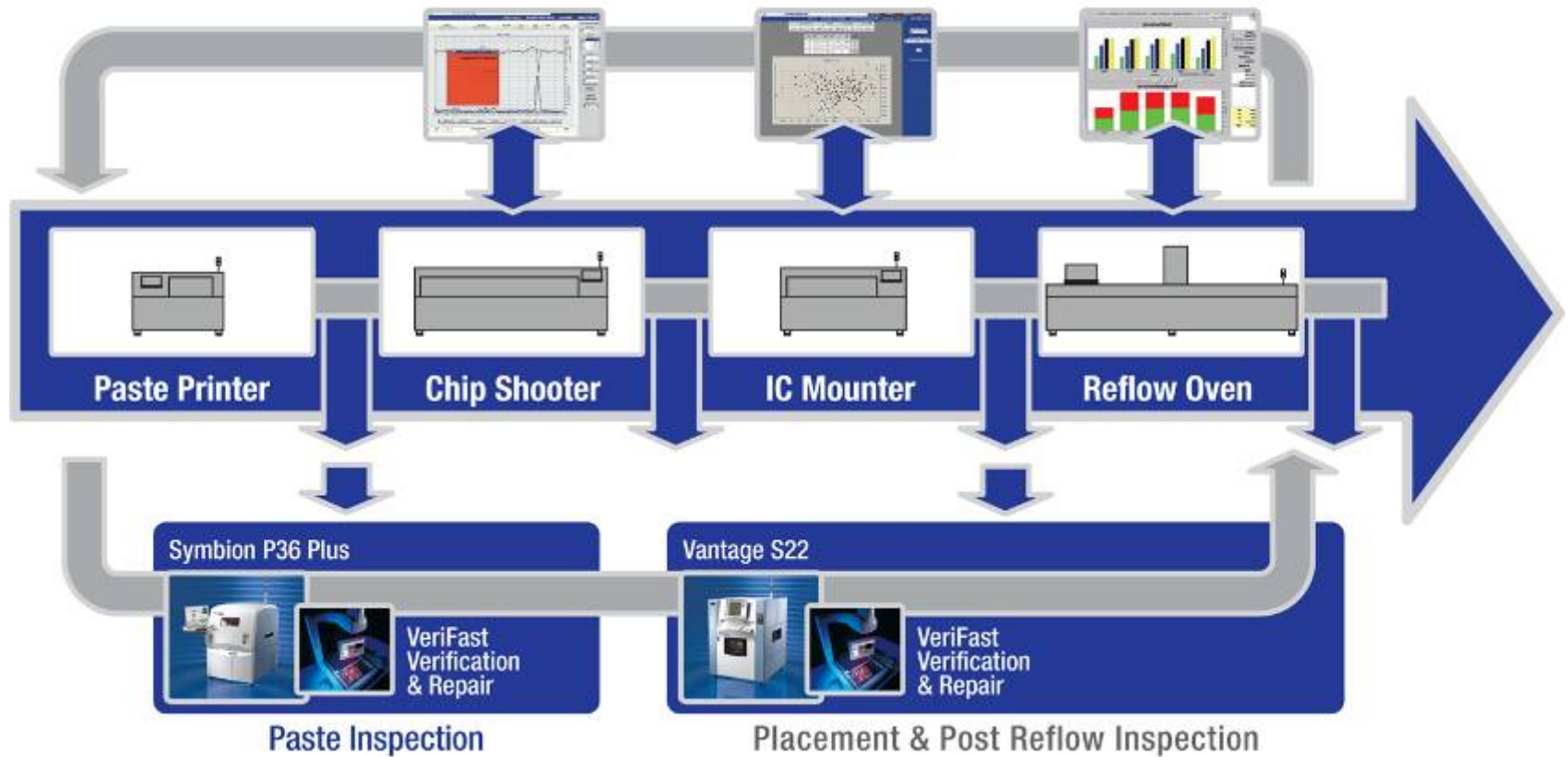
Assembly AOI Drivers

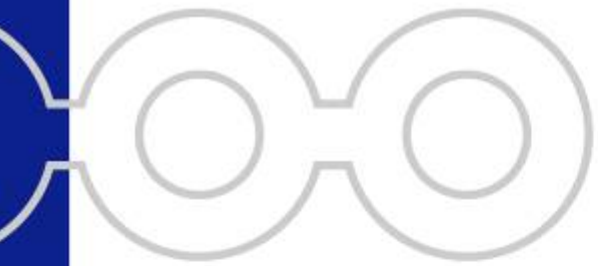
- Smaller components, finer pitch
 - Impossible to control by visual inspection
 - Multiple stage inspection is required
- Limited access for electrical test
- Traceability
 - Component version and warranties control
 - Production information and process control
- Outsourcing trend (safety margin when not manufactured by OEM)



Products & Solutions

ADVISOR - Process Control Tools





Flat Panel Display Manufacturing



FPD Manufacturing

Orbotech is the world's leading provider of:

- Yield management
- AOI



Orbotech Presence

- Presence at all LCD fabs
- Proven solutions for all generations
- Future-proof technology: OLED, plastic-based & other specialties



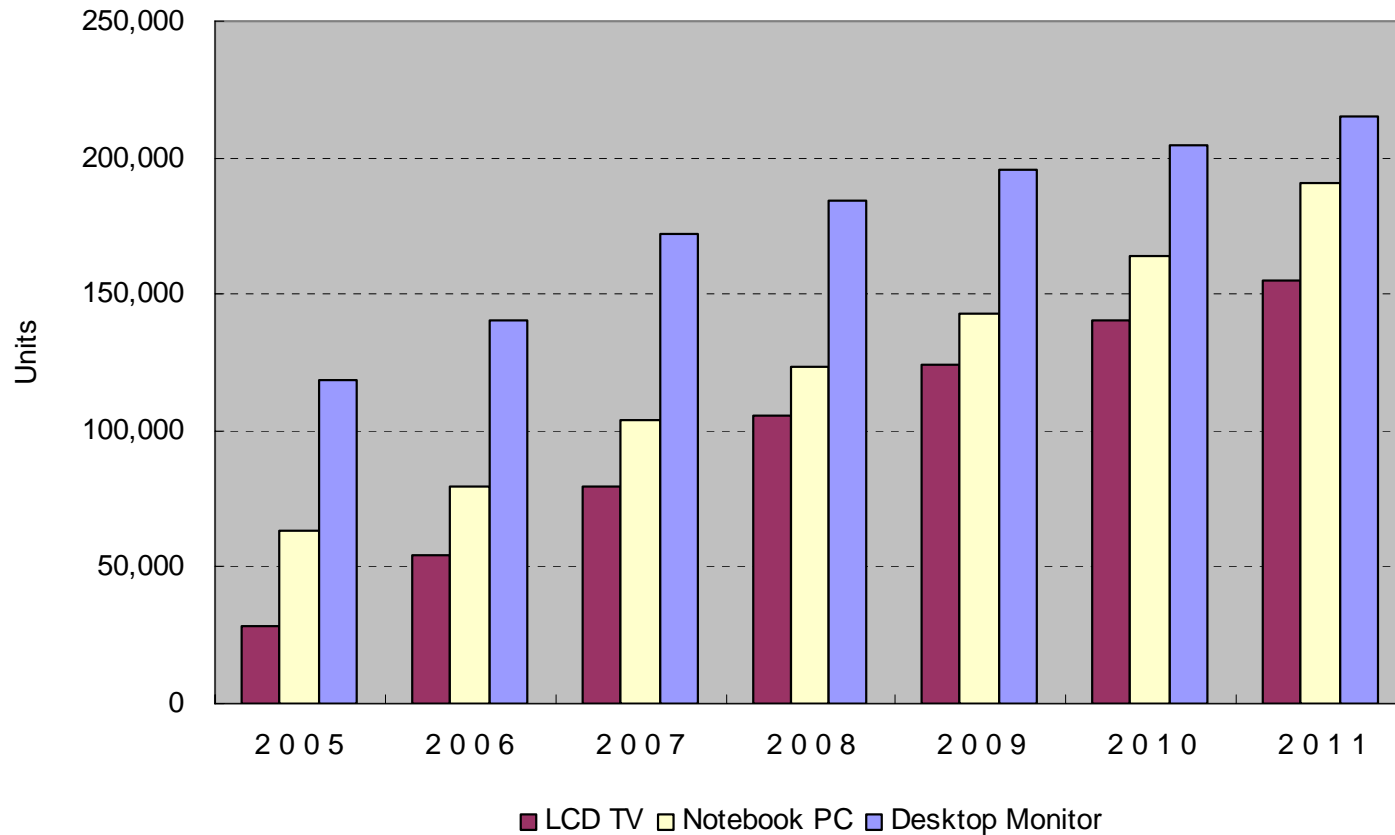
Display Industry Outlook

- Demand for LCD panels continue growing at rates of 5-10% for monitors and 15-20% for TVs and notebook PCs
 - LCD-TV expanded by 2015 to 200M units
- Panel maker are increasing capacity in both existing and new fabs
- Total spending in 2008-2010 is expected to match the levels of '04-'06 (~\$36Bn)
- At least 3 panel makers showed official plans to skip G9 and go to G10 – Sharp, SEC and AUO. We assume LG and CMO are to follow this trend.
- There are very few investments in PDP. For the next 3 years the estimate is only ~\$2.5Bn.
- Long term – New manufacturing technologies
 - Researched for and implemented for:
 - Improving panel quality
 - Cost reduction purposes



TFT LCD Large Area Applications (Units)

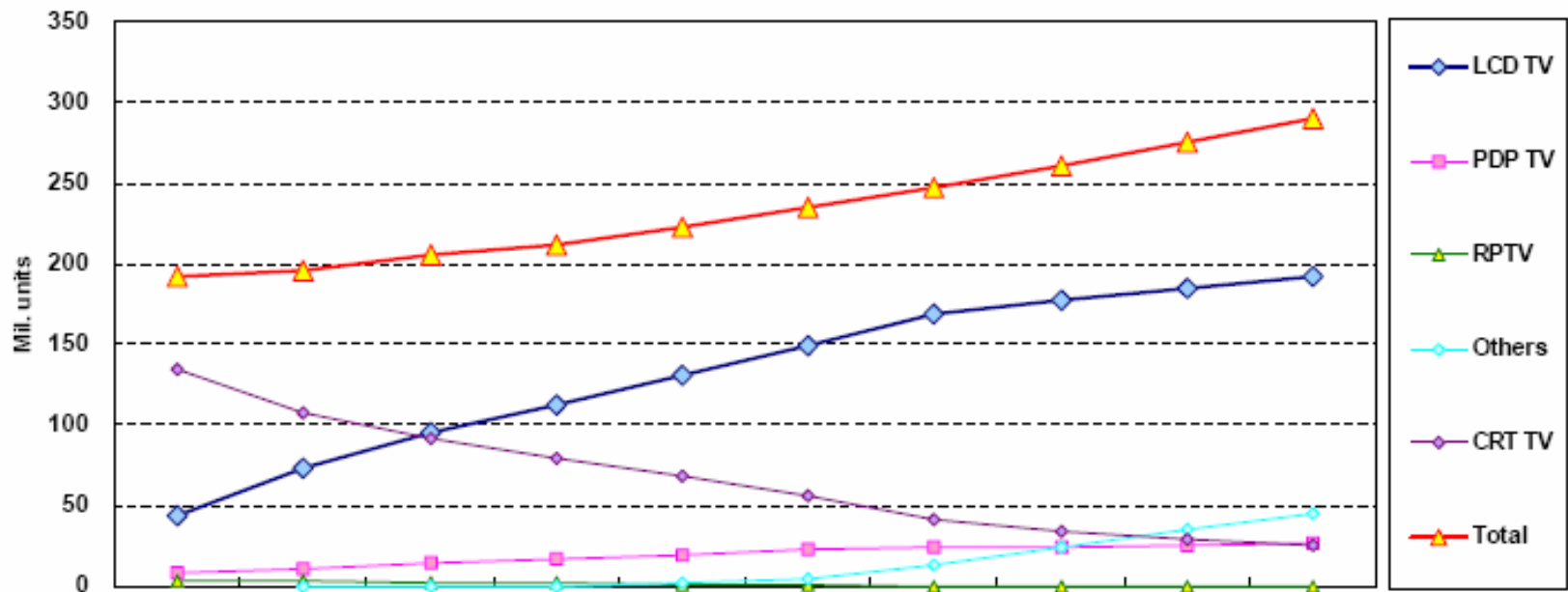
TVs grow 32% CAGR from 28.5M in 2005 to 155.2M in 2011
Notebook CAGR = 20%, Desktop Monitor CAGR = 11%



Source: DisplaySearch Q3'07 Quarterly Worldwide FPD Forecast Report



TV Demand Forecast by Technology



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	CAGR('07~'15)
LCD TV	44	74	96	112	131	150	169	177	185	192	13%
PDP TV	9	11	14	17	20	23	24	25	26	27	12%
RPTV	4	3	3	2	2	1	0	0	0	0	-100%
Others		0	0	0	2	5	14	25	35	45	166%
CRT TV	134	108	92	80	68	57	41	34	29	26	-16%
Total	192	196	205	211	223	235	248	261	275	290	5%

(Source : Global TV Result and Outlook,Q4'07, Displaybank)



Sharp 108" LCD TV: How far LCD manufacturing technology has come



The world's largest 108-inch LCD TV

SHARP

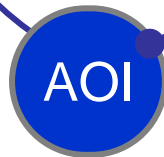


Orbotech Connects It All

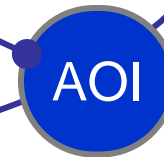
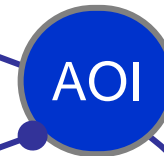


**Defect
Location**

**Classify
Defects**



EYES 2020™



**CD
Measurement**

**Layer
Comparison**



Current Product Line



InVision™ In-Line AOI



SuperVision™ Off-Line AOI



FPI6XXX



FPI7XXX



FPD Academy

Orbotech to Acquire Photon Dynamics

- Orbotech and Photon Dynamic Inc. (PDI) have agreed that PDI is to be acquired by Orbotech in an all-cash transaction
- \$15.60 per share for all of the issued and outstanding shares of Photon Dynamics common stock
- Aggregate merger consideration value of the transaction is approximately \$290 million
- Financed through a combination of internally-generated funds and external-source financing
- Acquisition to close in H2 '08



Acquisition Objectives

Flat Panel Display Business

- Provide our customers with added value in our yield management product line
- Establish a strong foundation to fully capitalize on current and emerging FPD opportunities



Who is Photon Dynamics to the FPD market?

The world leader in:

- Array Test
- Array Repair



Photon Dynamics, Inc.

NASDAQ: PHTN

- Established in 1986
- Headquarters in San Jose, CA
- First half 08 - \$91m revenues
- 339 employees worldwide



Business Areas



Design
Develop
Manufacture

Test & Repair
Systems



Flat Panel Display
Manufacturing



Industries

High Performance
Digital Cameras



Defense, Surveillance,
Industrial Inspection & Medical



Combined Company

A Global Leader in FPD Yield Management

- AOI
- Test
- Repair
- Potential for expansion into other areas

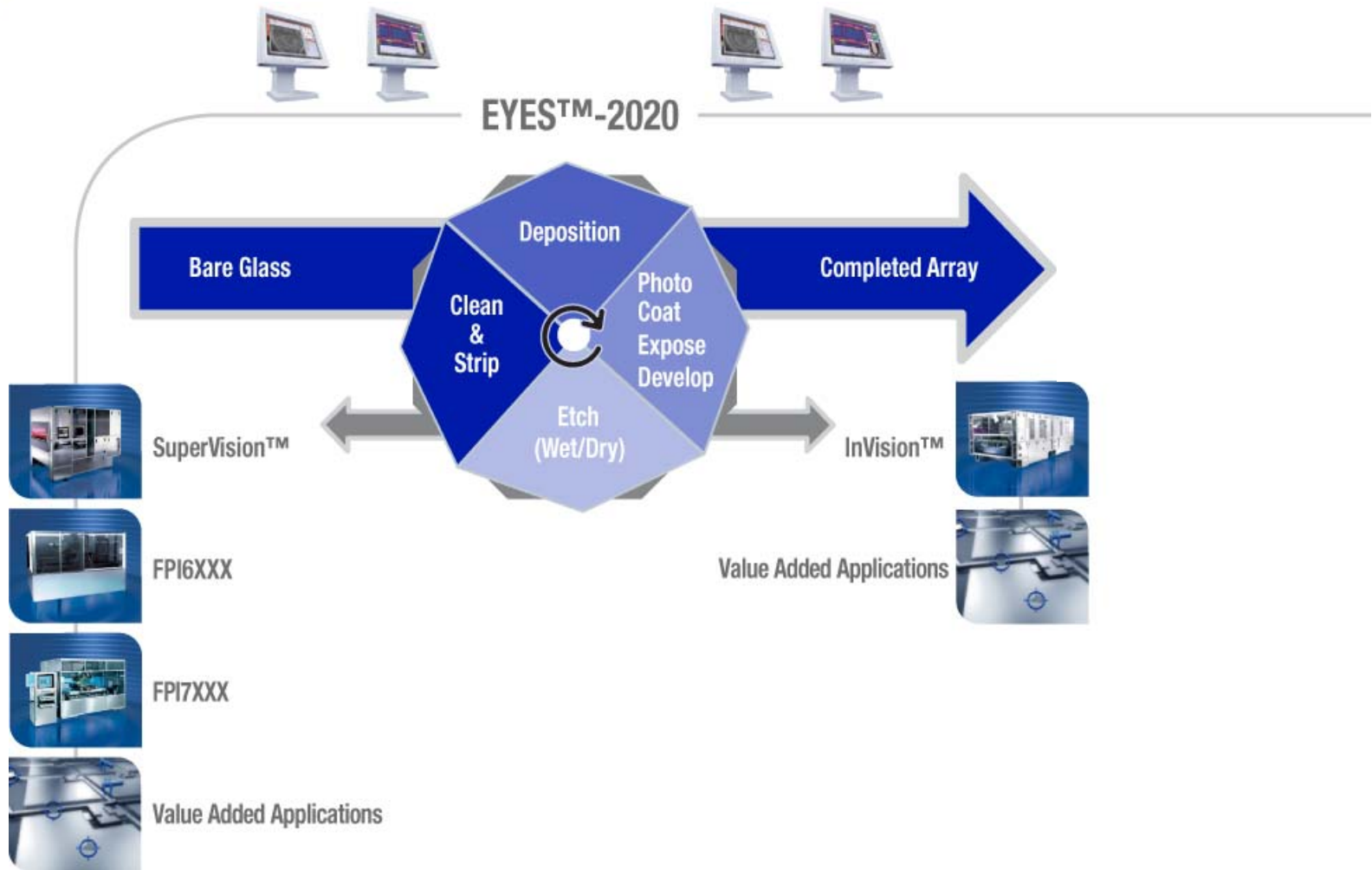


Plans: Looking Ahead

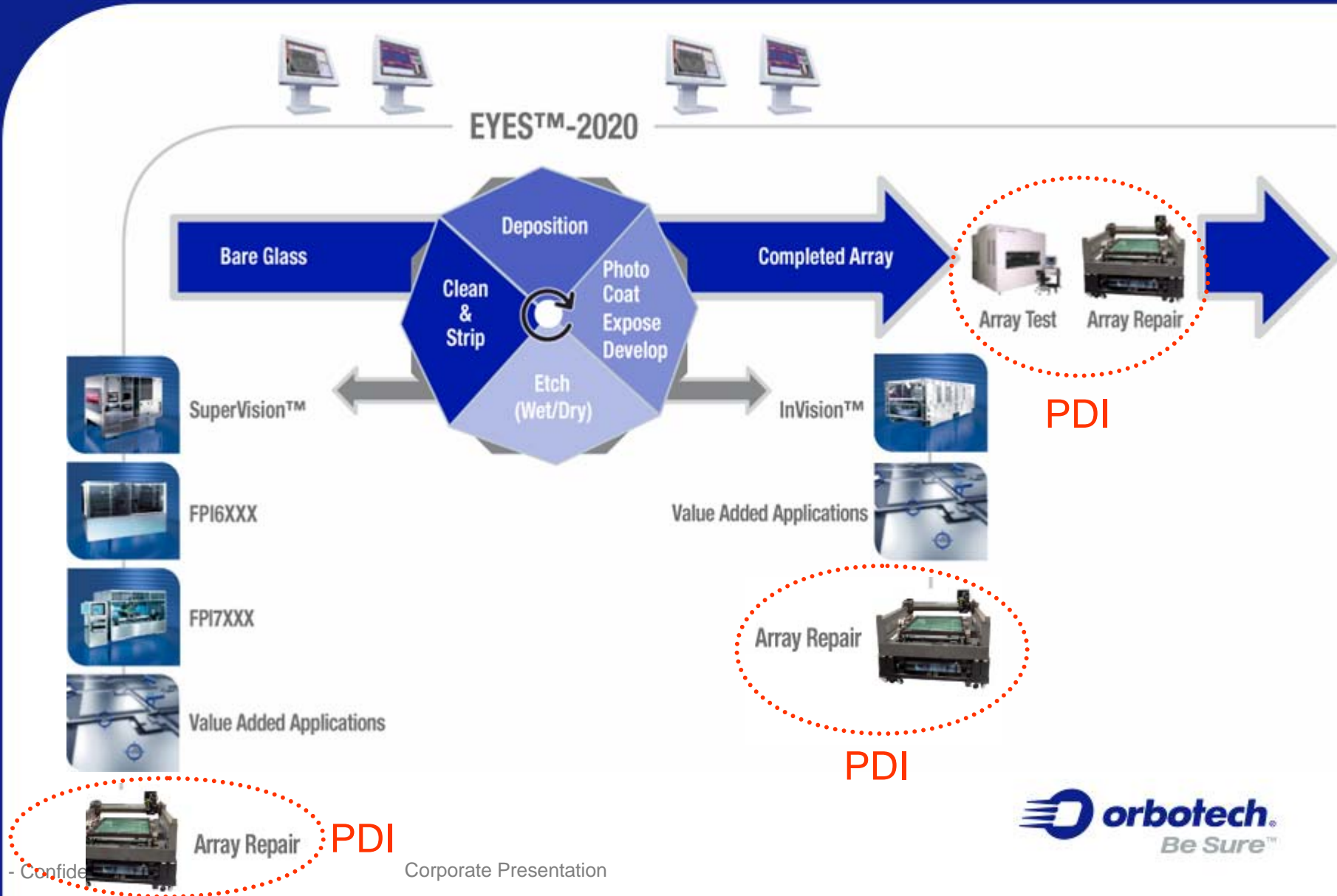
- Leverage:
 - Customer presence
 - Sales force and infrastructure (including operational capability) synergies
 - Complementary product capabilities
- Increase customer value by enhancing existing products
- Introduce new products to:
 - Improve panel manufacturing yields
 - Improve our competitive advantage



Current Yield Management Suite



Future Yield Management Suite





Medical Imaging



Orbotech Diversification Strategy Through Medical Imaging

Our vision

To become a leading global developer and manufacturer of **innovative medical imaging solutions**

Objectives

- To be the leading **OEM supplier** of imaging systems, based on disruptive technology, for the industry's leading vendors (e.g. GE, Siemens, Philips, Toshiba)
- To constitute **10% to 15% of Orbotech's revenues** within five years

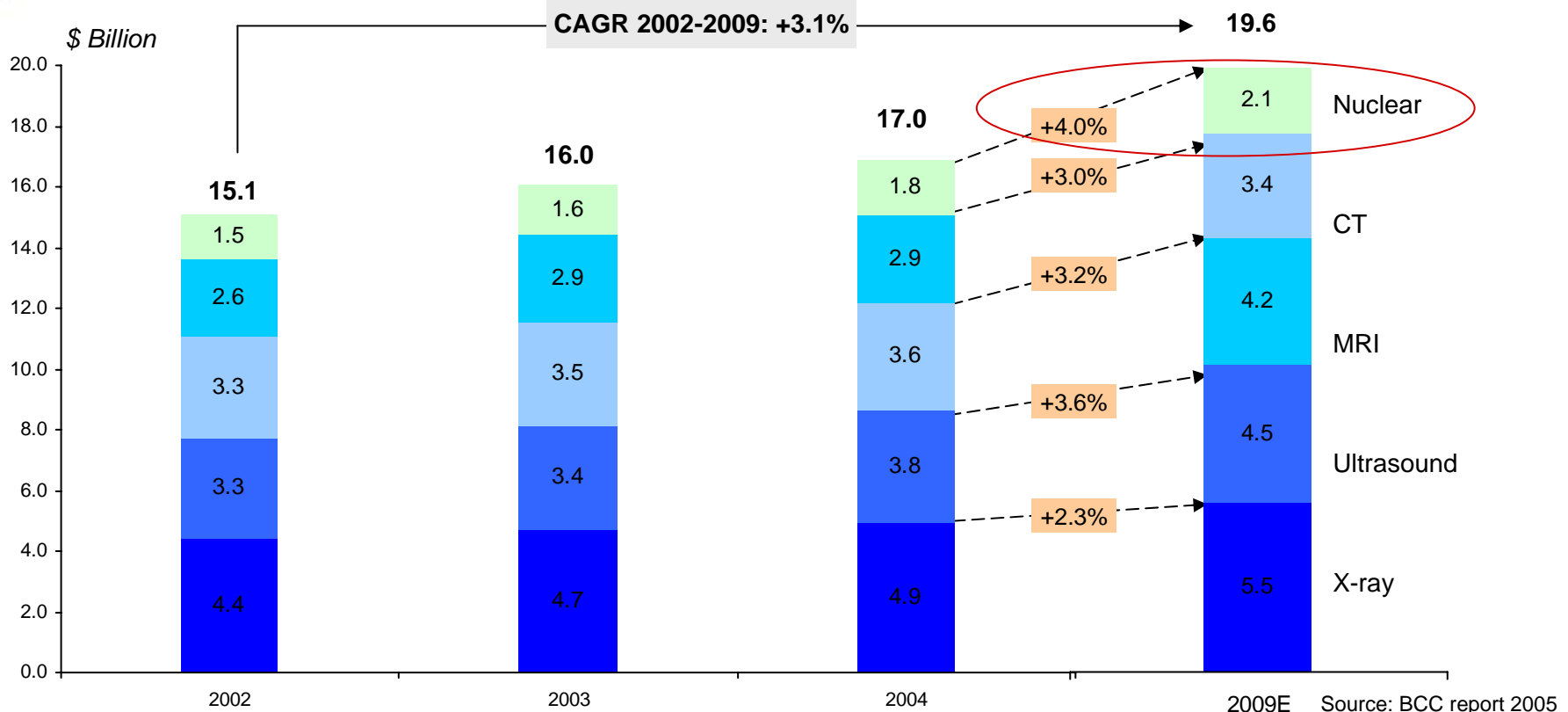
Short Term Objectives

1. To be a leading supplier of **nuclear imaging cardiac systems** for the industry's leading vendors
2. To set the **platform for future growth** development in medical imaging



Worldwide Medical Imaging Industry

Global sales of medical imaging equipment (2009)



➤ **Worldwide nuclear medical imaging equipment sales are expected to reach \$2.1B by 2009**



Nuclear Medical Imaging

Leveraging our Core Expertise

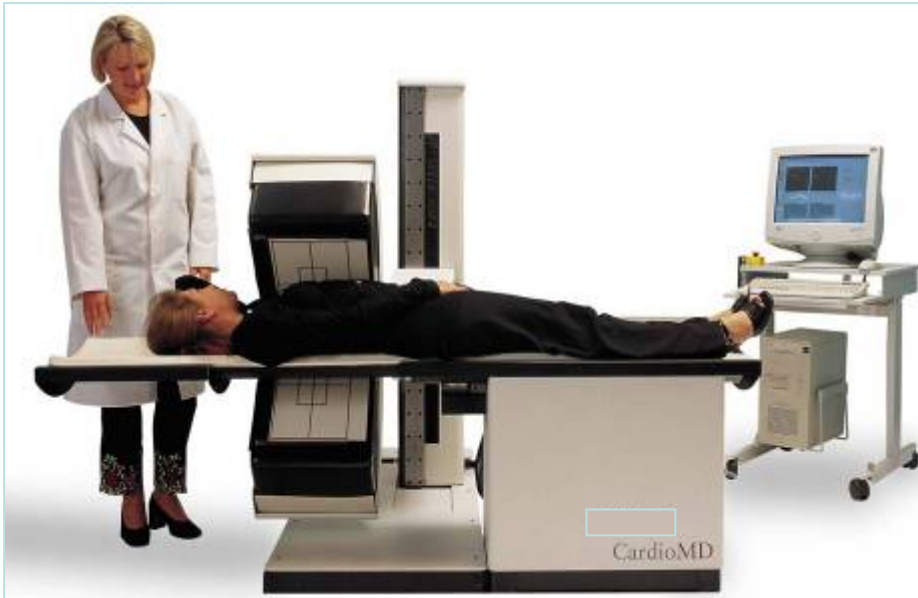
- Specialized products for nuclear medical imaging industry
- Recently acquisition of Danish company, DDD
- A world leader in single and dual detector gamma cameras mainly dedicated to cardiac applications



Orbotech Medical Denmark A/S is the leading manufacturer of dedicated imaging equipment for the Nuclear Cardiology segment



Orbotech Medical Denmark's Main Products



- Philips CardioMD



- Siemens c-cam

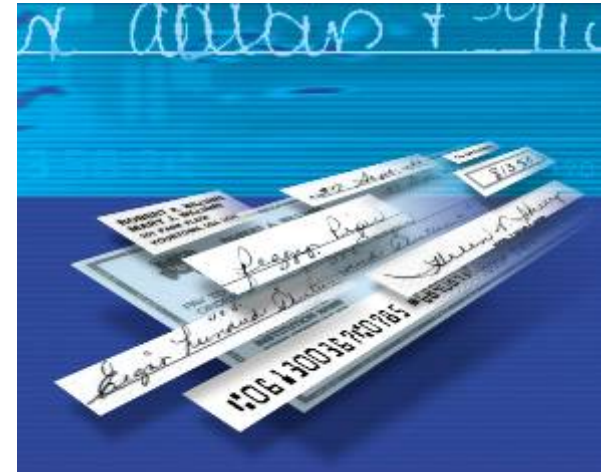


Orbograph

Recognition Solutions

Orbograph Ltd.

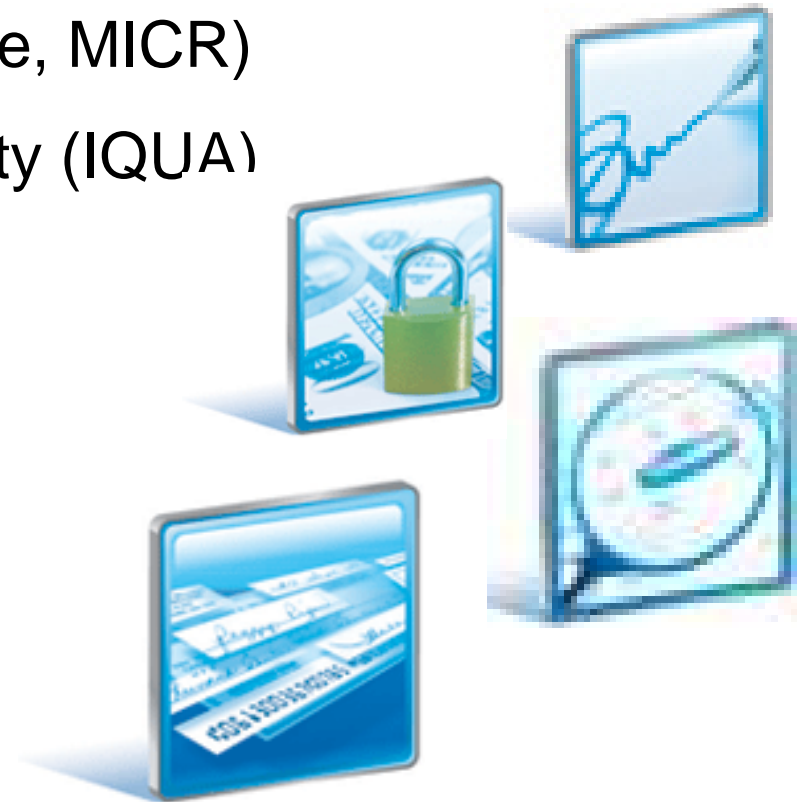
- Leading developer of recognition solutions for U.S. check processing and business process outsourcing markets
- Processing millions of documents each day
- Reduces costs, improves operational efficiencies with rapid ROI



Recognition Software Product Line

- Amount recognition for checks (Orbocar)
- Field recognition (payer, payee, MICR)
- Image quality and field usability (IQUA)
- Image-based fraud detection
 - PNV
 - Forgery
 - Counterfeit
- Data mining for marketing

Orbograph



orbotech
Be Sure™

Outsourcing Solutions

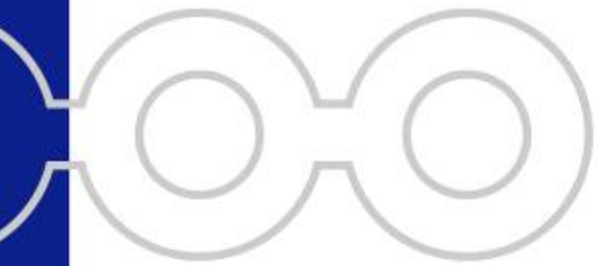
Patented Key-Pay Technology

- Secure, scalable platform enabling “on-demand” access to certified data completion resources
- Web-based application delivers true anytime, anywhere functionality

Orbograph



orbotech.
Be Sure™



Customer Support

Customer Support

- Strategic & necessary for customer relationships
- Differentiating factor vs. our competition
- Source of recurring revenue
- Consistent contributor to profitability
- On-going presence at customer sites



Customer Support Infrastructure

- Over 500 employees in 35 countries
- Supporting over 7700 AOI systems (PCB, ASM, FPD), 650 Plotters, 300 LDI and 4000 CAM stations
- 5 response centers, 5 customer training centers

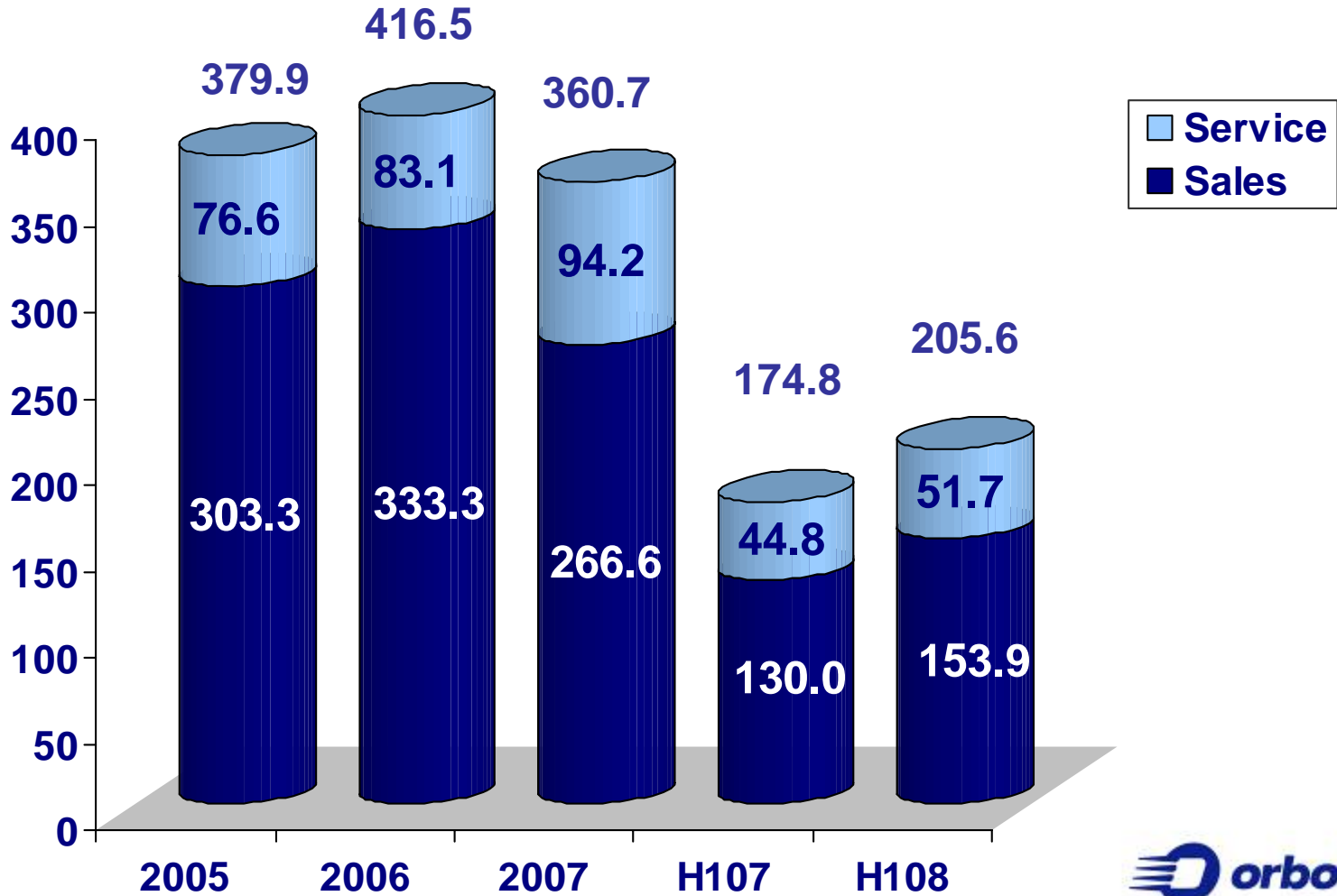




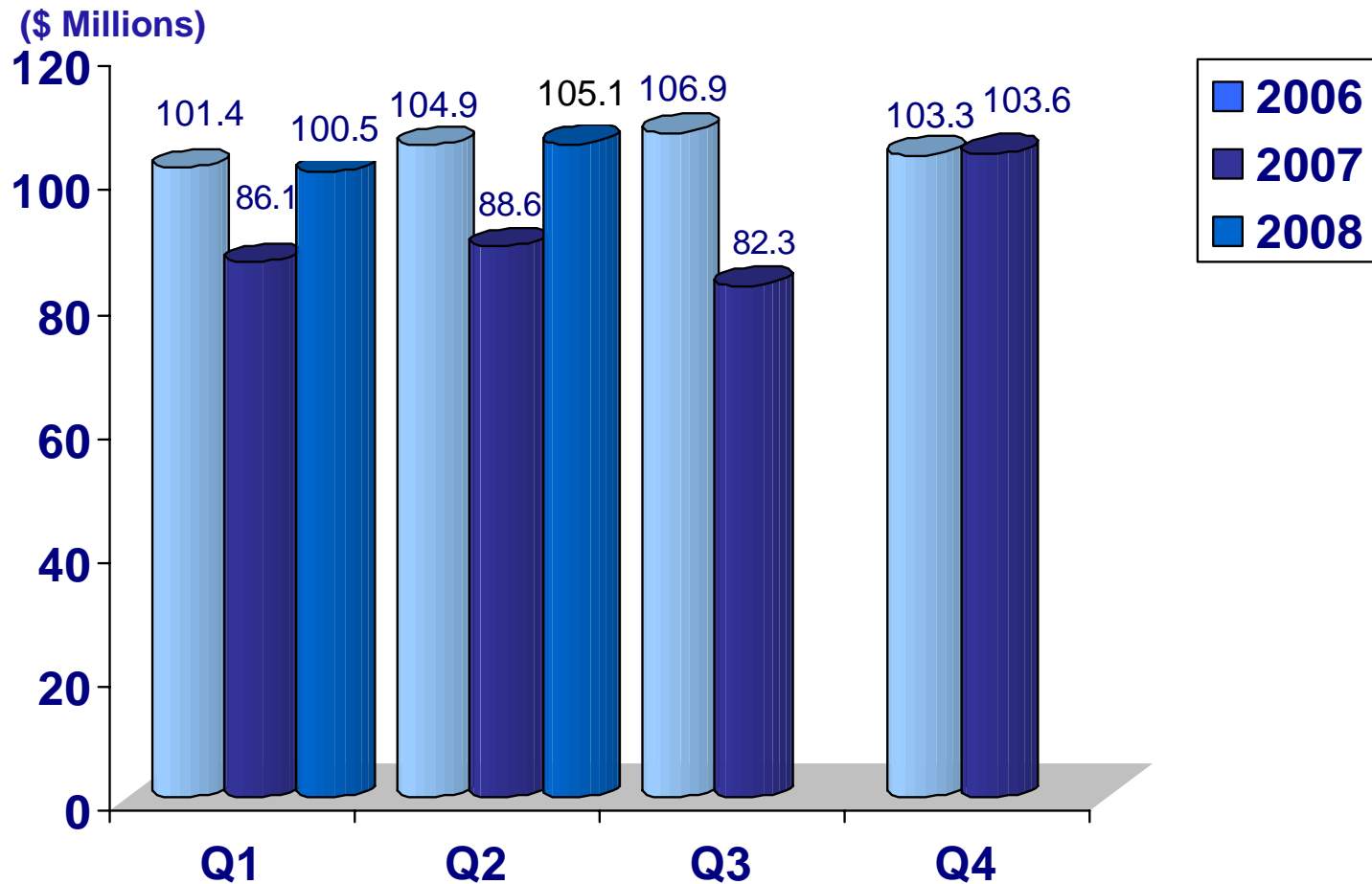
Financials

Revenues

(\$ Millions)

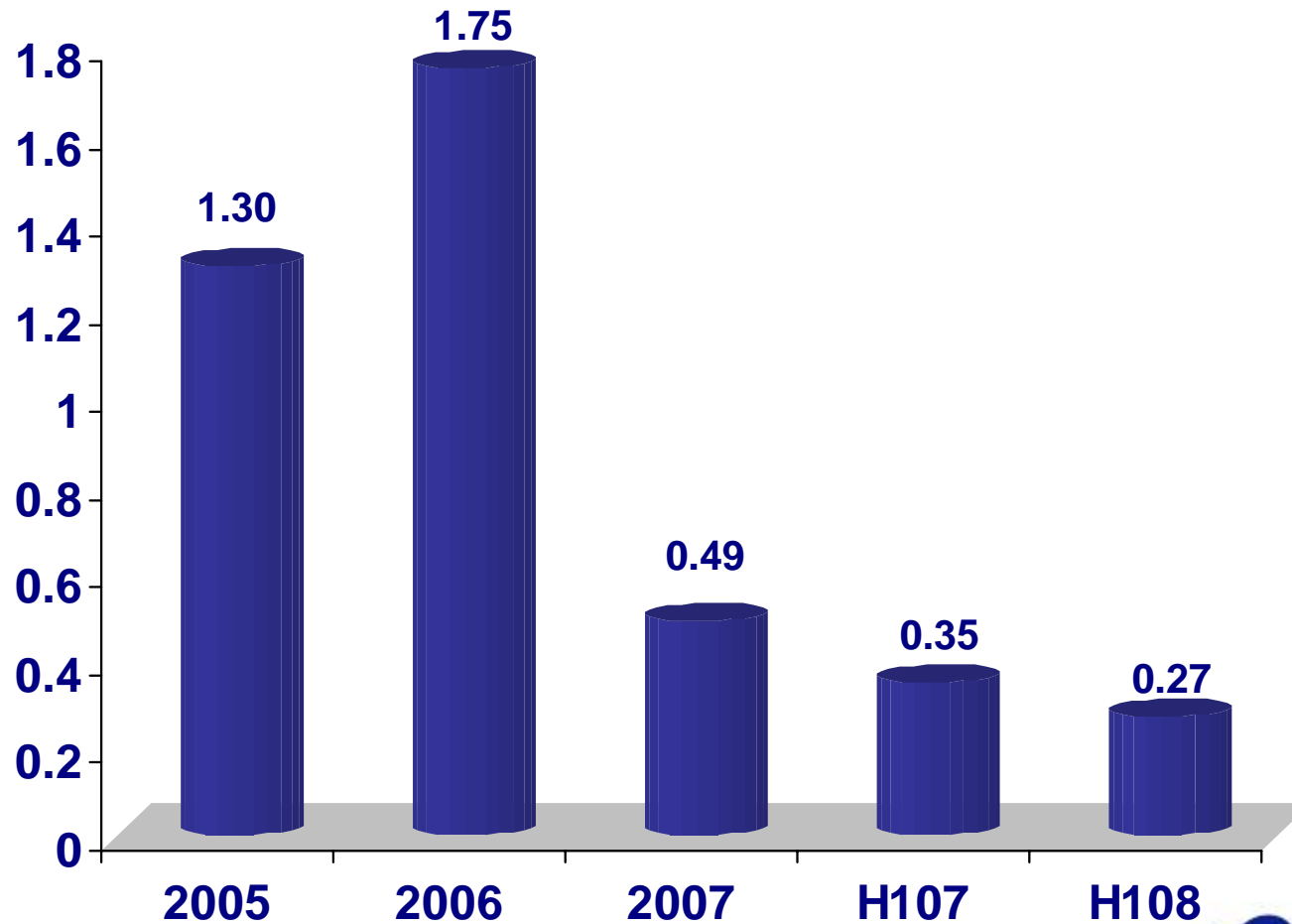


Revenues By Quarter



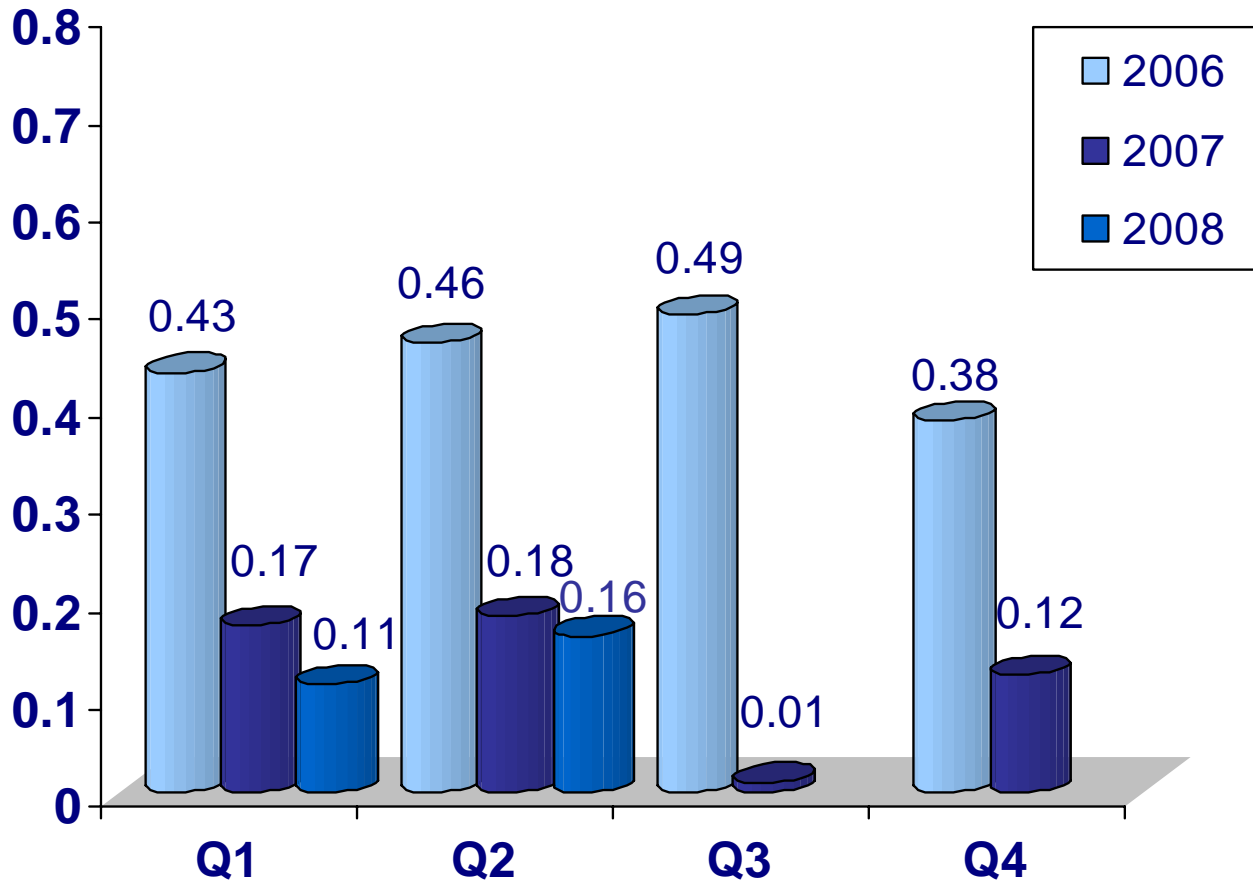
Net Income

(\$ per share) from ongoing operations



Net Income By Quarter

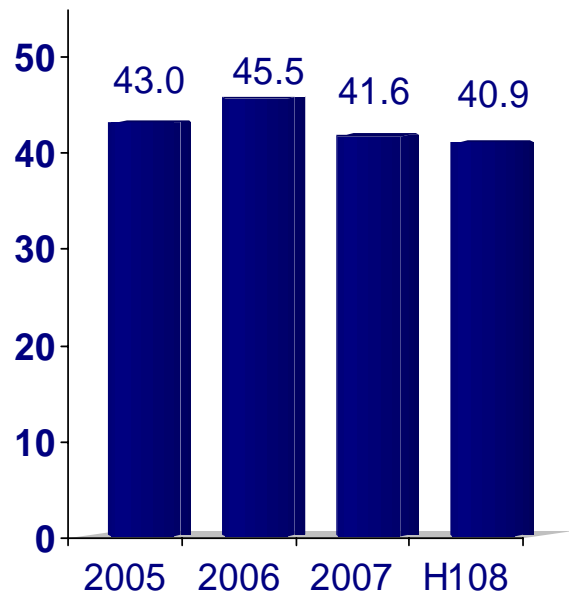
(\$ per share) from ongoing operations



Margin Analysis

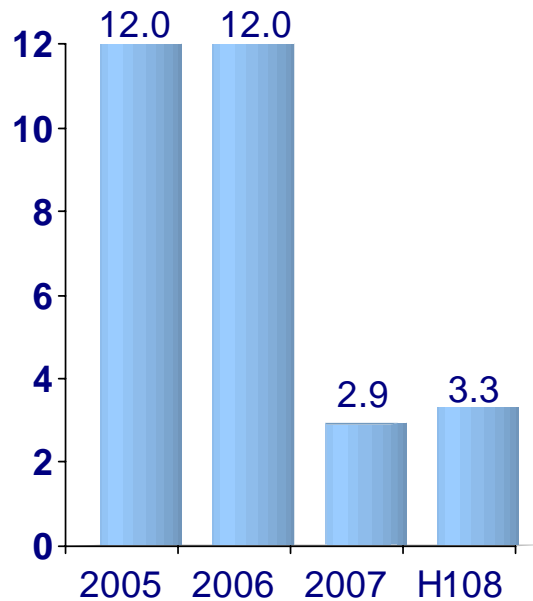
Gross Margin

(On-going Operations)



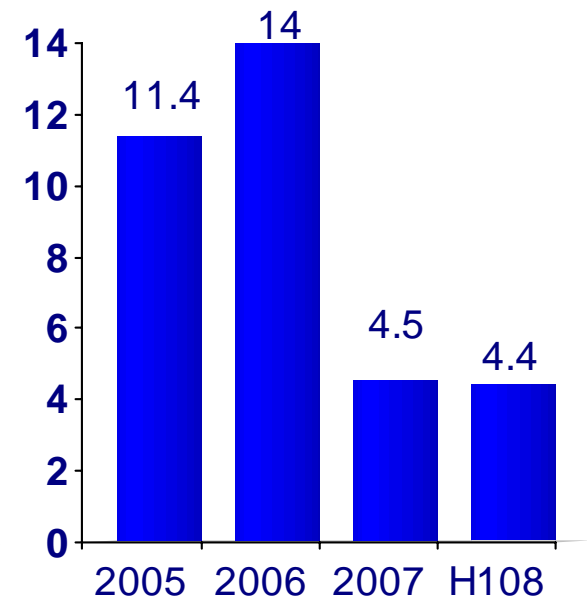
Operating Income

(On-going Operations)



Net Income

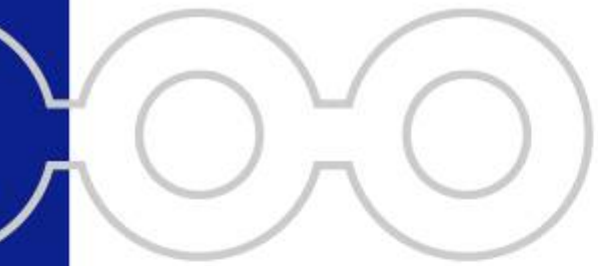
(On-going Operations)



Financial Ratios

	6/30 2008	12/31 2007	12/31 2006	12/31 2005
Current Ratio	5.3	4.9	4.6	4.2
Day's Sales Outstanding	133	133	126	120
Equity/Assets (%)	78	77	77	75
Gross Profit (%)	40.9	41.6	45.5	43.0
Net Profit to Revenues (% ongoing operations)	4.4	4.5	14.0	11.4





Thank You!

