



empower with light™

## **Emcore Corporation Business Update**

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November 21, 2011

**Hong Hou, Chief Executive Officer**

**Mark Weinswig, Chief Financial Officer**

# “Safe Harbor” Statement

Statements in this presentation which are not historical facts, and the assumptions underlying such statements, constitute "forward-looking statements" and assumptions underlying "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 including, but not limited to statements regarding, (a) future product introductions and performance metrics, (b) 2010 and future financial performance, and (c) future development and growth in the Company's markets. Actual results may differ materially from those projected in the forward-looking statements. Readers should carefully review the risk factors set forth in EMCORE's latest Annual Report on Form 10-K, and other reports filed with the SEC from time to time, for a list of factors that could cause our business prospects, financial condition, operating results and cash flows to be materially adversely affected.

This presentation includes non-GAAP financial measures where indicated. These non-GAAP financial measures complement the Company's consolidated financial statements presented in accordance with GAAP. However, these non-GAAP financial measures are not intended to supersede or replace the Company's US GAAP results. A detailed reconciliation of historical GAAP results to the historical non-GAAP results is provided in the "Non-GAAP Condensed Consolidated Statement of Operations" schedule to our news release announcing the financial results of the fourth quarter of fiscal 2010. A discussion of the GAAP measures excluded from the forward-looking non-GAAP measures is provided in the "Business Outlook" paragraph of the news release. The news release is located in the News & Events section of our web site at [www.emcore.com/news\\_events/](http://www.emcore.com/news_events/).

## Global Communications and Power at the Speed of Light

Fiber Optic Components & Systems  
for Broadband, 10G Ethernet,  
Datacom & Telecom

Space and Terrestrial  
Solar Power Based on  
Multi-Junction Solar Cells

### Fiber Optics Broadband



CATV / FTTx  
Satellite Com Tx/Rx  
Fiber Optic Gyro  
Video Transport

### Fiber Optics Data & Telecom



10 Gb/s Optical  
Tx/Rx's  
Tunable XFPs  
40, 100Gb/s iTLAs  
Active Optical  
Cables  
VCSEL, PIN, DFB,

### Photovoltaics Space Power



Space Solar Cells  
Space Solar Panels

### Concentrator Solar Power



CPV Solar Cells  
Solar Power  
Systems



CATV / FTTx

- CATV Transmitters / Receivers
- Analog CATV Lasers
- Photodiodes / Analog Receivers
- EDFA Fiber Amplifiers
- FTTx PON Components & Tx/Rx
- RFoG - Radio Freq over Fiber
- Video Transport Equipment



Satellite Communications & Photonic Systems

- RF Satellite Links
- Tx/Rx Microwave Delay Lines
- Terahertz Wave Detection
- Fiber Optic Gyros

## ■ Cable TV: Leading Provider of Broadband Components and Systems

- Full end-to-end product offering for hybrid-fiber-coaxial (HFC) network.
- Annualized revenue is ~\$75-85M
- 10% year over year growth rate expected for next couple years
- Gross margin: ~30-35%
- Operating margin: ~5-10%

## ■ CATV Market Drivers

- Challenged by Telecom FTTX, MSOs are upgrading their HFC network to 1GHz to offer more value-added premium services
- Build-out of new networks to businesses offering commercial services
- Strong overseas market demands in Eastern Europe, Russia, India, China

## ■ Broadband Business Growth Driver

- Video Transport equipment for the Headend & Specialty Photonic product

## Immediate Growth Opportunities



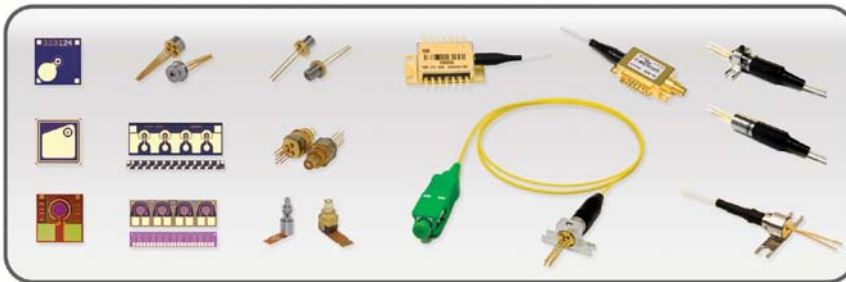
- Tunable lasers, ITLAs &  $\mu$ -ITLAs for 40 and 100 Gb/s coherent transponders
- **\*NEW\*** Tunable TOSA & XFPs

## Growth Opportunities Starting 2012



- 2.5-14 Gb/s Parallel optical Tx/Rx
- SNAP 12, CXP & FDR
- 10/20/40 Gbps active optical cables
- **\*NEW\*** 150 Gbps active optical cable

## Incremental Opportunities and Legacy



- 10-25 Gb/s VCSELs & Photodiodes
- 10 Gb/s DFB & Photodiodes
- 1-14 Gb/s TOSAs/ROSAs

## ■ Poised for Improved Financial Performance

- Current losses are tied primarily to significant investments in growth opportunities
  - Legacy products – expected phase-out completed by Sept 2011
  - High fixed Fab costs will be absorbed as volume ramps
  - Investment in new Telecom products with low revenues to come
- New products will drive revenue growth and profitability improvement

## ■ Product Portfolio Upgrade

- New products today represent >60% revenue for this division
  - 40/100 Gb/s iTLA (Integrated Tunable Laser Assembly)
  - Full Band Tunable XFP transceivers
  - Parallel-optic modules and cables
- Gross margins and profitability are expected to improve as volume ramps

## ■ Applications and Business Opportunities

- Market opportunity driven by \$40 billion upgrade cycle in metro and long haul, including the migration to 40 and 100 Gb/s
- Strong momentum towards **coherent** modulation design
- EMCORE's ITLA is the “laser of choice” for coherent systems

## ■ Market Leader

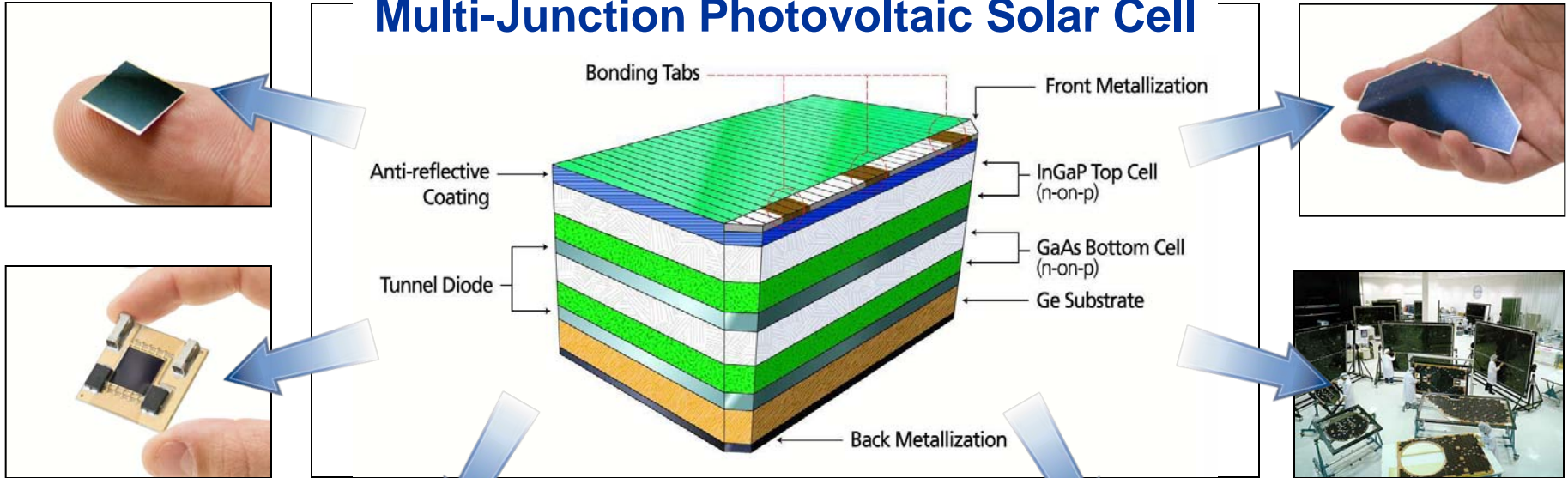
- High barrier to entry due to our external-cavity laser design platform
- Believe to have more than 50% market share for coherent systems
  - Qualified with a number of key OEM customers
  - Revenue doubled in 2010
  - Expect revenue growth of 100% in 2011



- **Applications and Business Opportunities**
  - To replace 300-pin transponders with TAM of \$300 - \$350M/yr
  - To replace DWDM XFP with TAM of \$100 - \$150M/yr
  - Potential to expand market due to smaller form factor
  
- **Competitive Landscape Expected to Be More Favorable Due to Challenging Specifications**
  
- **EMCORE's Status and Ramp Plan**
  - Primary target application: to replace 300-pin transponders
  - Finished full product qualification to the Telcordia standard
  - Engaged with >10 customers for qualification, including all the Tier-1s
  - Total capacity ramps to 10,000 units/q by the end of 2011

## CORE TECHNOLOGY:

### Multi-Junction Photovoltaic Solar Cell



**40.0%**  
CPV EFFICIENCY

SPACE EFFICIENCY  
**29.5%**



## ■ Space Solar: Stable, Growing business

- Annualized revenue is ~\$60 - \$70M
- ~5-10% year over year growth rate
- Gross margin: ~30-35%
- Operating margin: ~5-15%
- Great visibility with >\$80M orders/backlog

## ■ Space Solar Market Drivers

- Expand government business with Trusted Supplier program

## ■ Competitive Position

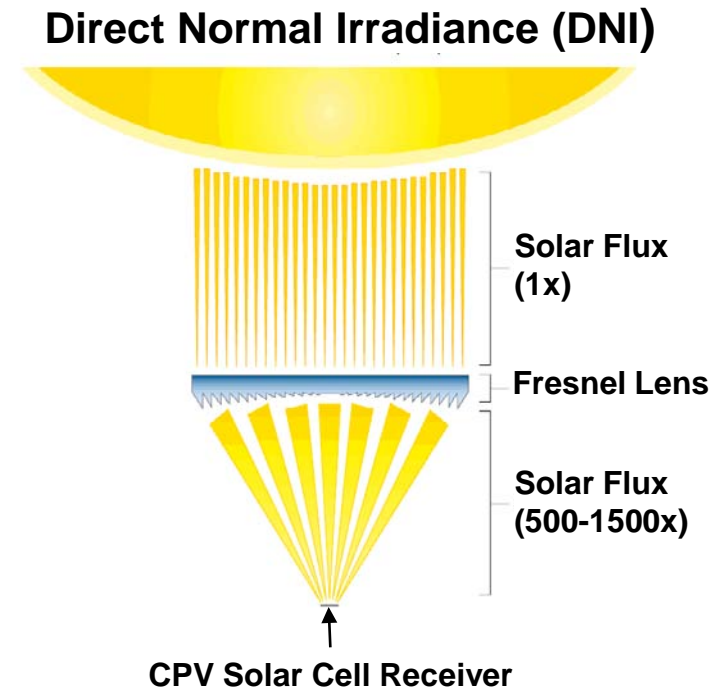
- Greater than 50% market share for commercial satellite
- Strong customer relationships
- Technology leadership

# Concentrator Photovoltaics (CPV)

- Dual-axis tracking CPV modules of high-efficiency multi-junction solar cells under a 1,000x concentration of DNI sunlight
- Advantages:
  - Low CapEx for production ramp up
  - Attractive Levelized Cost of Energy (LCOE) in regions with high DNI
  - Advanced cell technology to further reduce cost



Maui, Hawaii – Gen3 CPV Installation

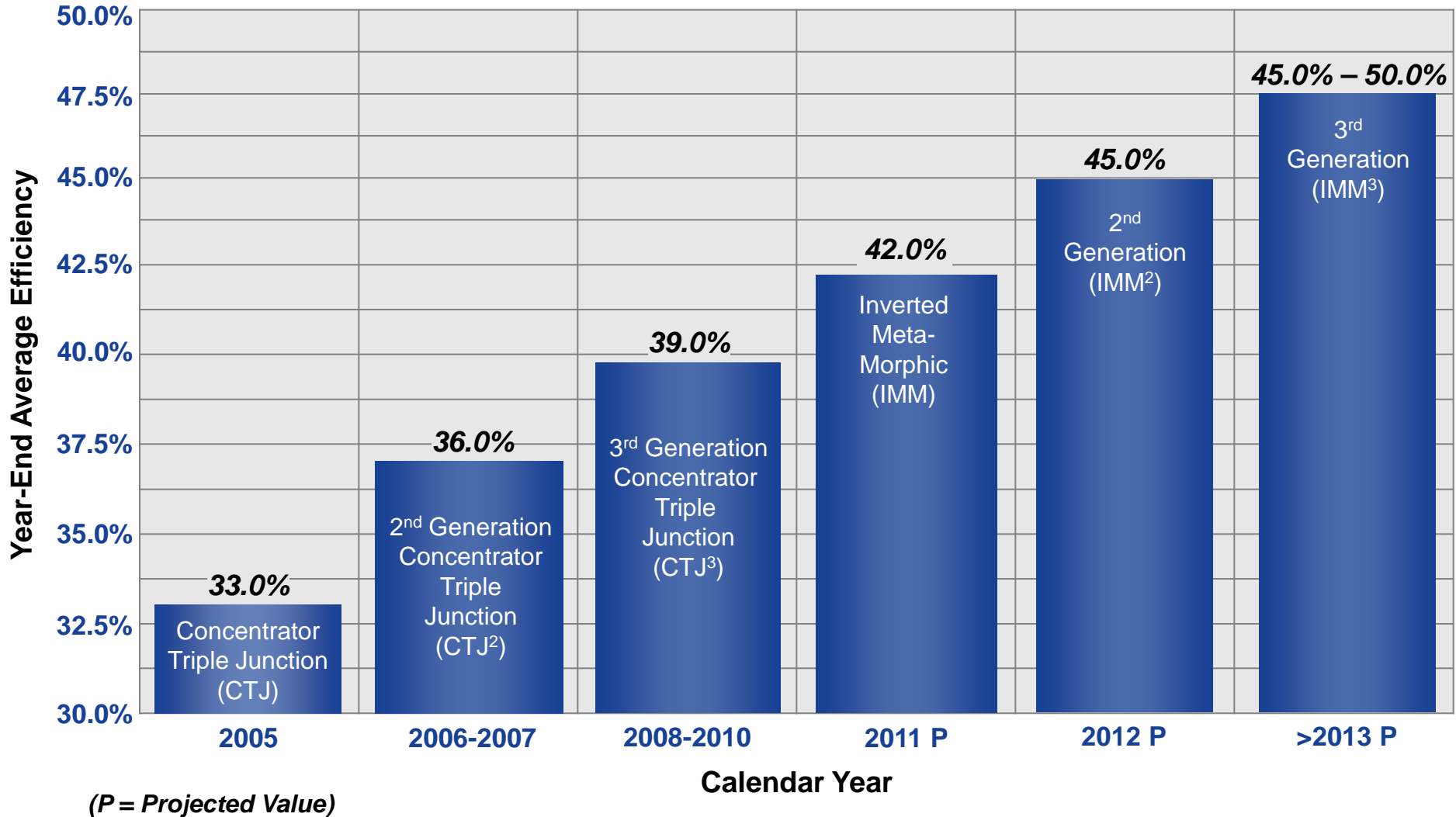


- **CPV Joint Venture Supported by Chinese Government Grants**
  - \$75M cash grant for CapEx for CPV component and system manufacturing lines
  - 263 acre land grant – valued at ~\$40M
  - Sales rebate for products produced: ~15%
  - Other incentives and subsidies will further improve our cost position
  
- **Business scope**
  - Manufacture EMCORE-designed CPV components and systems in high-volume to supply EMCORE and its own business needs
  - Develop solar power business in China.
  
- **Ownership and management**
  - EMCORE owns 40% and San'an Optoelectronics Co, Ltd owns 60% of Suncore
  - EMCORE has completed the \$12M (40% of the total registered capital) contribution to the JV, and we do not expect further capital contribution in the near future.

# CPV Solar Cell Technology Roadmap



## Year-End Average Cell Efficiency



# Financial Recap of Recent Quarters



## ■ June Quarter Performance Summary:

- Revenue of \$49.5M, a 6% sequential increase and in the guided range of \$48-50M
- Gross margin deteriorated due to a non-recurring yield hit in Space Solar business

	<u>6/30/2010</u>	<u>3/31/2011</u>	<u>6/30/2011</u>
Revenue	\$ 46,606	\$ 47,218	\$ 49,480
COGS	33,797	36,638	40,010
<b>Gross Profit</b>	12,809	10,580	9,470
<b>Gross Margin</b>	<b>27.5%</b>	<b>22.4%</b>	<b>19.1%</b>
SG&A	14,004	9,380	9,657
R&D	7,147	7,984	9,549
Litigation settlement	-	(2,590)	1,465
Total Operating Expense	21,151	14,774	20,671
<b>Operating Loss</b>	<b>(8,342)</b>	<b>(4,194)</b>	<b>(11,201)</b>
Total other expense (income)	872	1,011	(122)
<b>Net Loss</b>	<b>\$ (9,214)</b>	<b>\$ (5,205)</b>	<b>\$ (11,079)</b>

## The Company Is Poised to Grow and Deliver Improved Profitability

### Fiber Optics Broadband



CATV / FTTx  
Satellite Com Tx/Rx  
Fiber Optic Gyro  
Video Transport

- Profitable
- Predictable
- Market leader

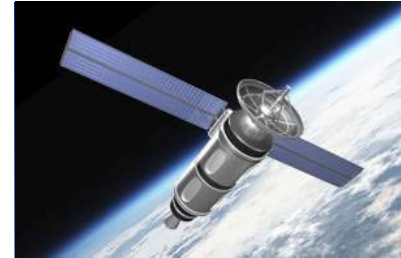
### Fiber Optics Data & Telecom



10 Gb/s Optical Tx/Rx  
Tunable XFPs  
40/100Gb/s iTLAs  
Active Optical Cables  
VCSEL, PIN/APD, DFB

- Expected high rev growth
- Disruptive products to upgrade portfolio
- **Key to profitability**

### Photovoltaics Space Power



Space Solar Cells  
Space Solar Panels

- Profitable
- Great visibility
- Market leader

### Concentrator Solar Power



CPV Solar Cells Solar  
Power Systems

- Long-term growth potential
- JV to pave the way
- \$1M - \$1.5M/qtr of investments





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## EMCORE Corporation Contact Information

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# Reconciliation of Adjusted EBITDA



	<u>6/30/2010</u>	<u>9/30/2010</u>	<u>12/31/2010</u>	<u>3/31/2011</u>	<u>6/30/2011</u>
<b>NET LOSS</b>	<b>\$ (9,214)</b>	<b>\$ (885)</b>	<b>\$ (3,645)</b>	<b>\$ (5,205)</b>	<b>\$ (11,079)</b>
<b>ADJUSTED EBITDA:</b>					
DEPRECIATION	\$ 2,303	\$ 2,286	\$ 2,323	\$ 2,312	\$ 2,285
AMORTIZATION	728	736	684	651	648
INTEREST EXPENSE	111	109	258	130	132
FAS123(R) STOCK-BASED COMPENSATION	2,095	1,427	817	1,207	2,643
COMPENSATORY STOCK ISSUANCES	356	205	305	282	318
LITIGATION SETTLEMENT	-	-	-	(2,590)	1,465
LOSS FROM EQUITY METHOD INVESTMENT	-	-	-	587	259
CORPORATE LEGAL EXPENSE	348	(154)	101	295	137
SPECIFIC A/R RESERVE ADJUSTMENTS - ESP	2,400	-	-	-	-
JV TERMINATION FEE	2,775	-	-	-	-
	<u>\$ 11,116</u>	<u>\$ 4,609</u>	<u>\$ 4,488</u>	<u>\$ 2,874</u>	<u>\$ 7,887</u>
<b>ADJUSTED EBITDA</b>	<b>\$ 1,902</b>	<b>\$ 3,724</b>	<b>\$ 843</b>	<b>\$ (2,331)</b>	<b>\$ (3,192)</b>