TECH DRIVEN PRODUCTS:

*power conversion efficiency*

*clean energy generation*

*automation improvement*
As with most presentations, the following discussion contains forward-looking statements, and our actual results may differ materially from those discussed here. Additional information concerning factors that could cause such a difference can be found in the Company’s Annual Report on Form 10-K, as amended, for the year ended March 31, 2015.
COMPANY HIGHLIGHTS

INNOVATIVE AND GROWING

- POWER SEMICONDUCTORS: Pioneer in high power MOSFET, IGBT and Bipolar Technologies
- ANALOG, MIXED SIGNAL SPECIALIZED ICs, HVICs, MCUs
- RF POWER & SYSTEMS
- “REAL CASH” profitability, lower operating costs and shareholder equity growth
- Multi-disciplined technology with more than 350 patents
- Founded in Silicon Valley (1983), with 14 divisions worldwide and nearly 1,000 employees
- More than 3,500 customers across sectors ranging from telecom, transportation, industrial, medical, consumer, aerospace and renewable energy companies
## OUR TECHNOLOGY

### PRODUCT LINE

<table>
<thead>
<tr>
<th><strong>Power Semiconductors</strong></th>
<th>(64.8% of total FY15 revenues)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrated Circuits/Mixed Signals ICs/MCU</strong>s</td>
<td>(28.2% of total FY15 revenues)</td>
</tr>
<tr>
<td><strong>RF Power &amp; Systems</strong></td>
<td>(7.0% of total FY15 revenues)</td>
</tr>
</tbody>
</table>

### END MARKETS

- Industrial
- Medical
- Telecom
- Transportation
- Renewable Energy

- Industrial
- Telecom
- Military/Aerospace
- Transportation

- Medical
- Military/Aerospace
- Telecom
ELEMENTS OF POWER CONVERSION

INPUT

CONTROL

SWITCHING

OUTPUT

High Voltage
Raw Electricity

ALTERNATIVE ENERGY

Low Voltage
Refined Electricity

IXYS’ FULL SPECTRUM OF POWER CONVERSION PRODUCTS

Diodes
Rectifiers
Thyristors
Modules
MCUs
PFC

Control ICs
Opto Feedback
MCUs
Digital Control

IGBTs
Power MOSFETs
BiMOSFETs
Thyristors
Modules

Schottky &
Fast Diodes
Modules
Opto
MCUs
Sync Rectifier
BUSINESS MODEL

- Asset Rich: Cash Invested Internally

- Product Base Spans Entire Power Spectrum

- Long Life Cycle of Products (10-20 Years)
  - Maximizes Revenues per R&D
  - Builds lasting customer relationships

- Use of Non-Leading Edge Wafer Foundries
  - Favorable Cost & Availability
  - Low Cap-Ex Requirements

- Balanced Sales Strategy
  - 52% of revenue from direct sales; 48% of revenue from distributors

- Strong Customer Relationships Worldwide
  - Over 3,500 customers, extensive design wins, sole source relationships
GLOBAL FOOTPRINT

SERVING CUSTOMERS WORLDWIDE

Products cover entire power spectrum
Focused direct sales force
Broad sales representative and distributor relationships
CUSTOMER BASE

[Logos of various companies]
MARKET DYNAMICS FOR GROWTH

- Electrical Energy Costs Increase
- Electricity Demand Grows Faster Than Supply
- High Demand For Clean, Uninterruptible Power
- Voltage Gap Between Supply & Demand
- Demand For Higher Power Density & Efficiency
- Demand For Mass Transit, HEV & EVs
- Demand For LED Lighting
PORTFOLIO: INDUSTRIAL

- Industrial semiconductor market revenues to grow from $32.4B in 2011 to $55.2B in 2017*

- Cumulative industrial semiconductor demand for 2011-2017 is projected at $300B*

- Semiconductor market for process control projected at $7.1B in worldwide sales (2013)*

- In 2013, overall industrial market trend will see highest OEM semi spend for analog ICs, optical semis and discrete products. Overall OEM semi industrial spending will amount to $22.9B in 2013, or 7.5% growth over last year.*

**IXYS Power Semiconductors**

Control to energy generators, power line, motor drives, automation & robotics, factory conveyor belts, process control, RF heating, machine tools and welding

**IXYS Integrated Circuits/MCU**s

Motor controls, power switch, power supplies, electric utility meters, elevator/escalator controls, factory automation, industrial & lighting controls

MCUs for: Motor control/power control, security systems, robotics & sensors, power metering

PORTFOLIO: COMMUNICATIONS

- IXYS’ chips regulate the high voltage electricity required for cell phone base stations, Internet server farms and storage area networks. Products aimed at the critical last inch of the last mile of the global telecom network: VoIP, WiMAX, WiFi.

- Communications IC market is forecast to reach $99.4B in 2013. In 2012, the total wireless communications IC market increased 3% to approximately $70.1B. Wired communications IC market reached $18.2B in 2012.*

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**IXYS Power Semiconductors**

Wireless base stations, Internet host facilities & storage area networks

Ruggedized high power MOSFETs for telecom power stations

**IXYS Integrated Circuits/MCUs**

Mixed signal/advanced high voltage ICs for VoIP gateway and FIOS

Optically isolated solid state relays for high voltage switching/ power isolation. In integrated telecom & linear opto-couplers.

MCUS for: Modems, routers, VoIP, FIOS, data on powerline, server farms

**IXYS RF Power & Systems**

High Linearity Power Amplifiers for 802.11 WiFi and 802.16 WiMAX base station apps.

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*Sources: Update to IC Market Drivers 2013: A Study of Emerging and Major End-Use Applications Fueling Demand for ICs, IC Insights 6/13; Trends and Revenue Aspect of Semiconductors in Communications, Frost and Sullivan 2/13.*
CONTROL OF HIGH VOLTAGE POWER FOR DEFIBRILLATORS (PORTABLE/HOSPITALS)

MRI, X-RAY, CT SCANNERS, SURGICAL LASERS, MEDICAL SENSORS

IXYS: Recognized worldwide with FDA approval for MOS power and bipolar power in defibrillators

IXYS Power Semiconductors
Control of high voltage power for defibrillators (portable/hospitals)
MRI, X-Ray, CT Scanners, Surgical Lasers, Medical Sensors

IXYS Integrated Circuits/MCUs
Ultrasound Imaging
Diagnostics, MCUs: Low power digital controls

IXYS RF Power & Systems
MRI systems
Increasing electronic content
Better image resolution

Global Medical Semiconductor Market*

*Source: 2013 Medical Semiconductors, Databeans 6/12
PORTFOLIO: TRANSPORTATION

- IXYS has 20-year history in electrified transit – key chip supplier to GM’s first electric roadster, EV1
- Global market for auto semis to grow from $24.3B in 2012 to just over $38B in 2018.*
- Avg. semi content per light vehicle will grow from $300 in 2011 to $400 in 2018. BRIC country growth will drive global light vehicle production volumes to 90M in 2013 and to 110M units in 2018.*
- Fastest growing segments of automotive semis: optoelectronics, sensors, logic and processors

IXYS Power Semiconductors

IXYS’ chips in hybrid transportation market (electrified locomotives) in Asia, Africa, Europe, Middle East and Americas. IXYS’ products for hybrid car market include:

- **ISOPlus™ Direct Copper Bond (DCB)**
- **IGBT power modules for applications in inverters for traction drive systems and converters for high power voltage conversion**

IXYS Integrated Circuits/MCUs

Auto apps among largest market for power ICs; Application-specific devices account for 75% of WW revenue for analog ICs in auto apps

MCUS for: Auto controls, LED lamps, battery power management, HEVs and EVs, electric trains and substations

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*Sources: Worldwide Semiconductor Revenue Forecast by Market Segment, Databeans 1/13; Automotive Market For Semiconductors – 2012 Edition, Semicast Research 1/12*
PORTFOLIO: CONSUMER

- IXYS is making inroads in plasma display panel televisions and variable speed motors for home appliances, while continuing focus on LED/display driver ICs for portable consumer electronics.

- The worldwide semiconductor market in 2013 is forecast to grow 6.8%, compared with 2012, to reach $320.2B. *Consumer electronics will contribute $43.7B of that revenue and will deliver $1.2B of the overall growth.*

- Overall, semiconductor revenues for the consumer segment will record year-over-year growth of 9.8% in 2013 and a 2011-2016 CAGR of 6.0%.

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**IXYS MCUs**

- Portable Electronics
- White Goods
- LCD/LED Backlights

**IXYS LED & Display Driver ICs**

- LED Backlighting
- Flexible displays
- For small/portable: digital cameras, PDAs, cell phones
- For medium: GPS, Net PCs & laptops, E-books
- For large: Screens (computer & television)

*Sources: Forecast Analysis: Consumer Electronics Semiconductor Revenue and Unit Production Worldwide 2Q13 Update, Gartner 6/13; Update to Semiconductor Applications Forecaster, IDC 12/12*
The global LED lighting market will be worth US$25.4B in 2013, representing 54% growth on the 2012 figure of US$16.5B, while the LED lighting penetration rate will also rise to 18.6%.*

Global revenue for LED drivers used in general lighting applications will triple from 2012-2015. Market governing LED driver ICs for lighting will surge to $666M in 2015, up from $214M in 2012; revenue expected to grow to $810M in 2018.*

Worldwide total consumption value of HB-LED Driver ICs reached $1.79B in 2012. During the 2012-2019 timeline, the consumption value will grow at an average annual rate of 27% to $9.59B in 2019.*

Global LED lighting market for buildings will rise from $9.5B in 2013 to a total of $25.4B by 2017, with a CAGR in the overall market of 22% over the five year period.*

**IXYS LED Driver ICs**

Niche lighting: signage/architectural, outdoor/street, warehouse and traffic signals

Backlighting

Flat Panel Display RGB lighting

High Intensity Discharge Lamps

Multi-media projectors

**IXYS MCUs**

MCUs for: Digital controllers for LED lighting, motion light activation, large LED displays

*Sources: Global HB-LED Market Forecast, Digitimes Research 3/13; LED Driver ICs – World 2013, IMS Research 5/13; HB LED Driver ICs Global Market Forecast and Analysis, ElectroniCast 2/13; Business of LED Lighting in Buildings 2013 to 2017, Memoori Business Intelligence Ltd, 6/13*
PORTFOLIO: POWER MANAGEMENT

✓ Global power management semi market to grow at a CAGR of 11.5% from 2010-2014. Increasing adoption of power management semis by the consumer, electronic and automobile segments.*

✓ Revenue for power management chips is forecast to reach $7.1B in the first quarter of 2013. The year is expected to close at a gain of 5% percent from last year’s $29.6B.*

✓ Necessity of power management ensures steady growth rate of 6% percent for the next five years (thru 2018). Discretes expected to reach nearly $15B in 2013; analog power devices account for $9B of total power management sales, however it is estimated to grow at average 9% through 2018.*

IXYS Power Semiconductors
Power Transistors
Rectifiers
Thyristors

IXYS Integrated Circuits/MCUs
High Voltage Analog Switches
Linear Voltage Regulators
Step-Up DC/DC Voltage Control/Convert
Step-Down DC/DC Voltage Control/Convert
Voltage Detectors
Microcontrollers (Z8 Encore, ZNEO, eZ80)

PORTFOLIO: GREEN ENERGY

- **SOLAR**: Global revenues from solar cells /modules totaled nearly $38.7B in 2011. Total revenues expected to reach $78.1B in 2017 after increasing at a five-year CAGR of 22.3%.*
- **SOLAR**: By 2014, PV inverter revenues are predicted to rebound strongly and increase by 11% to reach $7.3B*
- **WIND**: Sustained wind turbine investment, with equipment purchases to double by 2025. Investment from $30B in 2010 to more than $68B in 2025. Corresponds with worldwide installed wind capacity from 188 GW to 940 GW during forecast period.*

Wind Products & Applications

- IXYS’ WESPACK SCRs: Phase control devices used in thyristor AC regulators to connect the output of wind generator to grid; frequency synchronization between wind/fixed grid frequency
- IXYS’ Press Pack IGBTs: Mast head converter/inverter or ground-based synchronization element; unrivalled reliability when compared to IGBT plastic module competitors

Solar Products/MCUs & Applications

- Ensuring DC-AC voltage conversion (to elec. grid) is controlled without power surges/outages. High voltages require extensive IXYS power semiconductors.
- IXYS MCUS for: Solar inverters, chargers/energy-harvesting, optimization of PV power

**Portable/Consumer Electronics**
- Solar Battery Chargers
- Off-Grid Installation
- Remote Sensor Installation
- Battery-Operated Equip.
- Flame Detection
- Solar panel “on a chip”

ADDITIONAL GROWTH OPPORTUNITIES

- VoIP & Internet Communications
- Renewable Energy
- Clean Tech Products (water/food/gas/waste treatment)
- Power Management ICs – HVICs, MCUs
- Flat Displays: Flexible, PDP, LCD & Signs
- RF Power & MMICs: WiMAX
- Automotive Electric Power, HEV, EVs
- LED-Based Lighting: Driver ICs
FINANCIAL UPDATE
ANNUAL REVENUES

In millions

Fiscal year ended March 31,

$250.0 $250.0 $300.0 $325.0 $250.0 $250.0 $350.0 $375.0 $300.0 $325.0 $350.0
QUARTERLY REVENUES

In millions

$0.0  $20.0  $40.0  $60.0  $80.0  $100.0  $120.0

1Q11  2Q11  3Q11  4Q11  1Q12  2Q12  3Q12  4Q12  1Q13  2Q13  3Q13  4Q13  1Q14  2Q14  3Q14  4Q14  1Q15  2Q15  3Q15  4Q15  1Q16
REVENUE BY PRODUCT/GEOGRAPHY: Q1 FY16

RF POWER & SYSTEMS – 5.6%

ICs 27.4%

POWER SEMIS 67.0%

NORTH AMERICA 25.0%

EUROPE 26.8%

ASIA/ROW 48.2%
REVENUE BY MARKET: Q1 FY16

TRANSPORTATION 3.2%
OTHER 14.7%
CONSUMER 15.2%
MEDICAL 9.3%
TELECOM 13.6%
INDUSTRIAL (including alt energy) 44.0%
IXYS is a differentiated semiconductor company, focused on power semis and specialty ICs

- Cash Generating Operations
- Asset Rich: Cash, Real Estate & Patents
- Upside In Traditional & Developing Markets
- Diverse Applications, Customers & Products
- Undervalued Stock Price
- Think High Energy, Think IXYS