

## Market Analysis & Forecasts



### Industrial/Medical Semiconductor Service — 2016 Edition

Market Analysis and Forecasts to 2021  
July 2016 | 146 Pages

\$9,995 for Enterprise License (includes PDF and Excel deliverables)

\$7,995 for 5 User License (includes PDF and Excel deliverables)

\$5,995 for 1 User License (includes PDF only)

Semicast Research Ltd.  
204 London Road, Waterlooville  
PO7 7AN, UK  
Tel: +44 117-973-1110  
Fax (US): +1 (408) 351-9400



## **Abstract**

The industrial and medical market remains the most challenging sector for semiconductor manufacturers to serve and the supply chain is both complicated and fragmented. In practice industrial is a collection of markets within a market, while medical applications range from high reliability medical imaging and implantable electronics, to consumer wearables such as health & fitness monitors. Owing to this complexity, the sector has historically been overlooked by many semiconductor vendors, who have elected instead to focus their marketing efforts on higher value and less complicated verticals.

Accounting for about twelve percent of the semiconductor TAM, the industrial and medical sector is small compared with the compute, mobile, digital home and communications sectors, but revenues have now exceeded those in automotive for over five years. Accordingly, many semiconductor suppliers have been actively advancing their understanding of this diverse and growing market, particularly as medium term growth prospects have begun to slow in other end-use sectors, such as mobile and PCs, and interest has risen in Industrial IoT.

To support this need, Semicast has developed this research to focus on the strategic needs of semiconductor suppliers looking to identify the key equipment types driving semiconductor revenues in the industrial and medical sector and which market segments are forecast to have highest revenue growth. First published in 2006, the 2016 edition of the research builds on the work of the previous studies, using 2015 as base year with forecasts provided to 2021.

This study has been developed to be used as a companion to the Semicast study [\*\*Tactical Analysis of the World Industrial/Medical Electronics Market & Supply Chain\*\*](#), which provides analysis of tactical issues for semiconductor suppliers in the industrial and medical sector. Used together, the two studies provide a comprehensive tactical and strategic analysis of the industrial and medical sector.

## **Overview & Key Features**

- Analysis of 130 industrial/medical equipment types (full list provided on pages 3&4).
- Estimate and forecast for worldwide production volumes for each equipment type (2015-2021).
- Estimate and forecast for semiconductor value in each equipment type (2015-2021).
- Estimate and forecast for semiconductor TAM for each equipment type (2015-2021).
- Market analysis segmented into 17 semiconductor product types.
- Identification and ranking of top 25 highest semiconductor revenue applications (2015-2021).
- Supplier market share estimates for industrial/medical semiconductors in 2015.
- Highly quantitative analysis, with discussion summarized in short, easy to read bullet points.
- Analyst support time to answer all reasonable questions relating to forecasts and conclusions.

## New for 2016 Edition

- Analysis of semiconductor unit shipments in the industrial/medical sector for each device type.
- Analysis of the market for 32-bit microcontrollers segmented from 32/64-bit microprocessors.
- Additional segmentation provided for ARM microcontrollers, ARM microprocessors, TriCore microcontrollers and V850/RH850 microcontrollers.
- Segmentation of the market for memory ICs into: DRAM/SRAM and PROM/EPROM/Other.

## Industrial/Medical Market Segments & Sub-segments

The study segments the market for industrial/medical electronics systems into ten segments as follows:

### Segment

- Factory Automation & Control
- Motor Drives
- Lighting, Building Automation , HVAC & Refrigeration
- EPOS, EFT & ID
- Test & Measurement
- Consumer Medical
- Medical Imaging & Diagnostics
- Power & Energy
- Industrial Transport
- Other Industrial Applications

### Additional sub-segmentation

- Control & Compute, Process Measurement & Field Instruments, Switchgear, Misc. Automation
- Lighting, Building Automation, HVAC & Refrigeration
- Application Specific Test & Measurement, General Purpose Test & Measurement, Instrumentation & Other Equipment
- Medical Imaging, Diagnostics/Therapy & Monitoring

## Industrial/Medical Equipment Coverage

The equipment types analyzed in the study are as follows:

**Factory Automation & Control:** **Control & Compute** [Industrial Ethernet Infrastructure, Computer Numerical Control, Industrial PCs, Embedded Computer Boards & Modules, HMIs & Operator Panels, Machine Vision Inspection Systems, PLCs & PACs, Distributed & Remote I/O Modules] ; **Process Measurement & Field Instruments** [Process Analytical Instruments, Flow Measurement, Level Measurement, Pressure Measurement, Temperature Measurement, Process Variable Transmitters, Telemetry / RTUs, Process/Temperature Controllers, Position Sensing] ; **Switchgear** [Circuit Breakers,

Contactors, Protection Relays, Solid State Relays] ; **Miscellaneous Automation** [Pumps, Robotics, Semiconductor Manufacturing & Test Equipment, Welding].

**Motor Drives:** AC Drives, DC Drives, Servo Drives, Stepper Drives, Soft Starters/Brakes.

**Lighting, Building Automation, HVAC & Refrigeration: Lighting** [Electronic Ballasts/Lamps & Modules, Lighting Controls, Street Lights/Traffic Lights & Control] ; **Building Automation** [Fire Detection, Fire Alarm Control Panels & Annunciators, Fire Alarm Notification, Intruder Alarm Control Panels, Intruder Detection & Notification, CCTV/Video Surveillance Cameras, CCTV/Video Surveillance Equipment, Electronic Access Control, Elevators & Escalators] ; **HVAC & Refrigeration** [Boilers & Warm Air Furnaces, Circulator Pumps, Compressors, Electronic Room Thermostats & Controls, Humidifiers/Dehumidifiers, Unitary Air Conditioners, Commercial Refrigeration].

**EPOS, EFT & ID:** ATMs, Handheld EFT Transaction Terminals, POS Authentication Pads, EPOS/ECR/Cash Drawer, Handheld Data Terminals, Fuel Dispensers, Vending/Payment/Change Machines, Card Readers, Coin Acceptors & Currency Validators, Printers, Scanners, Smart Cards.

**Test & Measurement: Application Specific T&M** [Automotive Test Equipment, Broadband Test Equipment, Fiber Optic Test Equipment, Wireless Test Equipment, Other Test Equipment] ; **General Purpose T&M** [Counters & Timers, Logic Analyzers, Digital Multimeters, Network Analyzers, Digital Oscilloscopes, PC-based Test Equipment, RF Power Meters, PXI/VXI-based Test Equipment, Signal/Function Generators, Spectrum Analyzers, Other General Purpose T&M] ; **Instrumentation & Other Equipment** [Calibration Instruments, pH/ORP Instruments, Chart Recorders & Data Acquisition, Laboratory Instrumentation, Scales & Weighing Equipment, Non-Destructive Test Equipment].

**Consumer Medical:** Blood Glucose Meters, Blood Pressure Monitors, Telehealth Gateways, Fitness Monitors, Electronic Thermometers, Pregnancy Testers/Fertility Monitors.

**Medical Imaging & Diagnostics: Medical Imaging** [CT, Ultrasound, MRI, PET/PET-CT, CR/DR, Picture Archiving & Communications] ; **Diagnostics, Therapy & Monitoring** [ECG, Dialysis Machines, Medical Ventilators, Point-of-care Testing, Pulse Oximetry Monitoring, Multiparameter Patient Monitors, Medical Lasers, Medical Endoscopes, Infusion Pumps, Pacemakers, Implantable Cardioverter Defibrillators, Cardiac Resynchronization Therapy, Pain Management Devices, External Defibrillators, Digital Hearing Aids, Sleep Diagnostics, Therapy & Interfaces, Fitness Machines, Electronic Beds, Electronic Wheelchairs, Powered Scooters].

**Power & Energy:** AC/DC Power Supplies, DC/DC Converters, DC/AC Power Inverters, Industrial Battery Chargers, UPS, Generators, Smart Utility Meters, Electric Vehicle Charging Stations & Infrastructure, Distribution & Substation Automation, Renewable Energy.

**Industrial Transport:** Construction, Lifting & Mining, Agricultural Equipment, Materials Handling Vehicles, Refrigerated Trailers, Electric Motorized Vehicles, Rolling Stock, Signaling & Systems.

**Other Industrial Applications:** Airport Security, Arcade/Casino/Gambling Machines, Broadcast Equipment, Commercial Drones, Digital Signage, Industrial Catering Equipment, Industrial Printers & 3D Printing, Janitorial & Laundry Equipment, Professional Audio Equipment, Professional Power Tools, Unassigned Industrial.

## Semiconductor Market Segmentation

The study provides analysis of the market for industrial/medical semiconductors into 17 product types:

- Actuators & Sensors
- Application Specific Analog ICs
- General Purpose Analog ICs
- Power Discretes & Modules
- Other Discretes
- Gate Arrays & Standard Cells
- PLDs/FPGAs
- Other Logic
- 4/8-bit MCU
- 16-bit MCU
- 32-bit MCU
- 32/64-bit MPU
- DSP
- DRAM/SRAM
- PROM/EPROM/Flash/Other
- LEDs ; Other Optoelectronics

Further segmentation of the 32&64-bit MCU/MPU categories is also provided by architecture:

- ARM MCU
- ARM MPU
- MIPS
- Power Architecture
- 68K/Coldfire
- x86
- SuperH
- TriCore
- V850/RH850
- Other 32/64-bit

## Example Tables

Global Equipment Production Estimates and Forecasts in the Factory Automation & Control Sector

Units (KU)	2013	2014	2015	2016	2017	2018	2019	CAGR (13/19)	DIFF (13-19)	SUM (13>19)
<b>Control &amp; Compute</b>										
Industrial Ethernet Infrastructure										
Computer Numerical Control (CNC)										
Industrial PCs										
Embedded Computer Boards & Modules										
HMI's & Operator Panels										
Machine Vision Inspection Systems										
PLCs & PACs										
Distributed & Remote I/O Modules										
<b>Process Measurement &amp; Field Instruments</b>										
Process Analytical Instruments										
Flow Measurement										
Level Measurement										
Pressure Measurement										
Temperature Measurement										
Process Variable Transmitters										
Telemetry / RTUs										
Process/Temperature Controllers										
Position Sensing										
<b>Switchgear</b>										
Circuit Breakers										
Contactors										
Protection Relays										
Solid State Relays										
<b>Miscellaneous Automation</b>										
Pumps										
Robotics										
Semiconductor Manufacturing & Test Equipment										
Welding										
<b>Sector Total</b>										
<b>Annual Growth Rate</b>										

# Industrial/Medical Semiconductor Service — 2016 Edition

## Market Analysis and Forecasts to 2021 | July 2016

### Global Market for Semiconductors in the Factory Automation & Control Sector by Equipment Type

Revenues (US\$ Millions)	2015	2016	2017	2018	2019	2020	2021	CAGR (15/21)	DIFF (15-21)	SUM (15>21)
<b>Control &amp; Compute</b>										
Industrial Ethernet Infrastructure										
Computer Numerical Control (CNC)										
Industrial PCs										
Embedded Computer Boards & Modules										
HMI's & Operator Panels										
Machine Vision Inspection Systems										
PLCs & PACs										
Distributed & Remote I/O Modules										
<b>Process Measurement &amp; Field Instruments</b>										
Process Analytical Instruments										
Flow Measurement										
Level Measurement										
Pressure Measurement										
Temperature Measurement										
Process Variable Transmitters										
Telemetry / RTUs										
Process/Temperature Controllers										
Position Sensing										
<b>Switchgear</b>										
Circuit Breakers										
Contactors										
Protection Relays										
Solid State Relays										
<b>Miscellaneous Automation</b>										
Pumps										
Robotics										
Semiconductor Manufacturing & Test Equipment										
Welding										
<b>Other Factory Automation &amp; Control</b>										
<b>Sector Total</b>										
Annual Growth Rate										

### Global Market for Semiconductors in the Factory Automation & Control Sector by Product

Revenues (US\$ Millions)	2015	2016	2017	2018	2019	2020	2021	CAGR (15/21)	DIFF (15-21)	SUM (15>21)
<b>Actuators &amp; Sensors</b>										
<b>Analog ICs</b>										
Application Specific Analog										
General Purpose Analog										
<b>Discretes &amp; Modules</b>										
Power Discretes & Modules										
Other Discretes										
<b>Logic ICs</b>										
Gate Arrays & Standard Cells										
PLD/FPGA										
Other Logic										
<b>MCU/MPU/DSP</b>										
4/8-bit MCU										
16-bit MCU										
32-bit MCU										
32/64-bit MPU										
-ARM MCU sub-total										
-ARM MPU sub-total										
-MIPS sub-total										
-Power Architecture sub-total										
-68K/Coldfire sub-total										
-x86 sub-total										
-SuperH sub-total										
-TriCore sub-total										
-V850/RH850 sub-total										
-Other 32/64-bit sub-total										
DSP										
<b>Memory ICs</b>										
DRAM/SRAM										
PROM/EPROM/Flash/Other										
<b>Optoelectronics</b>										
LEDs										
Other Optoelectronics										
<b>Total</b>										
Annual Growth Rate										

## Table of Contents

### **Section 1** – Executive Overview

Key Point Conclusions

Economic Uncertainties

### **Section 2** – Scope, Method &

Limitations

2.1 Scope

2.2 Research Sources

2.3 Limitations to Method

2.4 Industrial/Medical Electronics & Semiconductors Service

### **Section 3** – Semiconductor TAM Analysis

### **Section 4** – Factory Automation & Control

### **Section 5** – Motor Drives

### **Section 6** – Lighting, Building Automation, HVAC & Refrigeration

### **Section 7** – EPOS, EFT & ID

### **Section 8** – Test & Measurement

Section 9– Consumer Medical

### **Section 10** – Medical Imaging & Diagnostics

### **Section 11** – Power & Energy

### **Section 12** – Industrial Transport

### **Section 13** – Other Industrial Applications

### **Section 14** – Product Tables by Sub-sector

### **Appendix 1** – Previous Market Forecasts

## List of Tables

Table 1.1 Global Market for Semiconductors in the Industrial/Medical Sector by Product - Revenue Forecast

Table 1.2 Global Market for Semiconductors in the Industrial/Medical Sector by Product - Unit Forecast

Table 1.3 Ranking of Top 25 Industrial/Medical Applications by Cumulative Revenues (SUM) from 2015-2021

Table 1.4 Market Share Estimates for Semiconductor Suppliers to the Industrial/Medical Sector in 2015

Table 1.5 Global Market for Semiconductors in the Industrial/Medical Sector by Sub-sector

Table 1.6 Summary of Changes to Industrial/Medical Semiconductor Market Forecast by Sector

Table 1.7 Global Equipment Production Estimates and Forecasts in the Industrial/Medical Sector

Table 1.8 Average Semiconductor Value Estimates and Forecasts in the Industrial/Medical Sector

Table 1.9 Global Market for Semiconductors in the Industrial/Medical Sector by Region

Table 3.1 Analysis of the World Market for Semiconductors in the Industrial/Medical Sector in 2015

Table 4.1 Key Changes to the Factory Automation & Control Sector

Table 4.2 Definition of Equipment Types in the Factory Automation & Control Sector

Table 4.3 Global Equipment Production Estimates and Forecasts in the Factory Automation & Control Sector

Table 4.4 Average Semiconductor Value Estimates and Forecasts in the Factory Automation & Control Sector

Table 4.5 Global Market for Semiconductors in the Factory Automation & Control Sector by Equipment Type

Table 4.6 Global Market for Semiconductors in the Factory Automation & Control Sector by Product

Table 4.7 Global Market for Semiconductors in the Factory Automation & Control Sector by Region

Table 5.1 Key Changes to the Motor Drives Sector

Table 5.2 Definition of Equipment Types in the Motor Drives Sector

Table 5.3 Global Equipment Production Estimates and Forecasts in the Motor Drives Sector

Table 5.4 Average Semiconductor Value Estimates and Forecasts in the Motor Drives Sector

Table 5.5 Global Market for Semiconductors in the Motor Drives Sector by Equipment Type

Table 5.6 Global Market for Semiconductors in the Motor Drives Sector by Product

Table 5.7 Global Market for Semiconductors in the Motor Drives Sector by Region

Table 6.1 Key Changes to the Lighting, Building Automation, HVAC&R Sector

Table 6.2 Definition of Equipment Types in the Lighting, Building Automation, HVAC&R Sector

Table 6.3 Global Equipment Production Estimates and Forecasts in the Lighting, Building Automation, HVAC&R Sector

Table 6.4 Average Semiconductor Value Estimates and Forecasts in the Lighting, Building Automation, HVAC&R Sector

Table 6.5 Global Market for Semiconductors in the Lighting, Building Automation, HVAC&R Sector by Equipment Type

Table 6.6 Global Market for Semiconductors in the Lighting, Building Automation, HVAC&R Sector by Product

Table 6.7 Global Market for Semiconductors in the Lighting, Building Automation, HVAC&R Sector by Region

Table 7.1 Key Changes to the EPOS, EFT & ID Sector

Table 7.2 Definition of Equipment Types in the EPOS, EFT & ID Sector

Table 7.3 Global Equipment Production Estimates and Forecasts in the EPOS, EFT & ID Sector

Table 7.4 Average Semiconductor Value Estimates and Forecasts in the EPOS, EFT & ID Sector

Table 7.5 Global Market for Semiconductors in the EPOS, EFT & ID Sector by Equipment Type

Table 7.6 Global Market for Semiconductors in the EPOS, EFT & ID Sector by Product

Table 7.7 Global Market for Semiconductors in the EPOS, EFT & ID Sector by Region

Table 8.1 Key Changes to the Test & Measurement Sector

Table 8.2 Definition of Equipment Types in the Test & Measurement Sector

Table 8.3 Global Equipment Production Estimates and Forecasts in the Test & Measurement Sector

Table 8.4 Average Semiconductor Value Estimates and Forecasts in the Test & Measurement Sector

Table 8.5 Global Market for Semiconductors in the Test & Measurement Sector by Equipment Type

Table 8.6 Global Market for Semiconductors in the Test & Measurement Sector by Product

Table 8.7 Global Market for Semiconductors in the Test & Measurement Sector by Region

Table 9.1 Key Changes to the Consumer Medical Sector

Table 9.2 Definition of Equipment Types in the Consumer Medical Sector

Table 9.3 Global Equipment Production Estimates and Forecasts in the Consumer Medical Sector

Table 9.4 Average Semiconductor Value Estimates and Forecasts in the Consumer Medical Sector

Table 9.5 Global Market for Semiconductors in the Consumer Medical Sector by Equipment Type

Table 9.6 Global Market for Semiconductors in the Consumer Medical Sector by Product

Table 9.7 Global Market for Semiconductors in the Consumer Medical Sector by Region

Table 10.1 Key Changes to the Medical Imaging & Diagnostics Sector

Table 10.2 Definition of Equipment Types in the Medical Imaging & Diagnostics Sector

Table 10.3 Global Equipment Production Estimates and Forecasts in the Medical Imaging & Diagnostics Sector

## Industrial/Medical Semiconductor Service — 2016 Edition

### Market Analysis and Forecasts to 2021 | July 2016

---

Table 10.4 Average Semiconductor Value Estimates and Forecasts in the Medical Imaging & Diagnostics Sector

Table 10.5 Global Market for Semiconductors in the Medical Imaging & Diagnostics Sector by Equipment Type

Table 10.6 Global Market for Semiconductors in the Medical Imaging & Diagnostics Sector by Product

Table 10.7 Global Market for Semiconductors in the Medical Imaging & Diagnostics Sector by Region

Table 11.1 Key Changes to the Power & Energy Sector

Table 11.2 Definition of Equipment Types in the Power & Energy Sector

Table 11.3 Global Equipment Production Estimates and Forecasts in the Power & Energy Sector

Table 11.4 Average Semiconductor Value Estimates and Forecasts in the Power & Energy Sector

Table 11.5 Global Market for Semiconductors in the Power & Energy Sector by Equipment Type

Table 11.6 Global Market for Semiconductors in the Power & Energy Sector by Product

Table 11.7 Global Market for Semiconductors in the Power & Energy Sector by Region

Table 12.1 Key Changes to the Industrial Transport Sector

Table 12.2 Definition of Equipment Types in the Industrial Transport Sector

Table 12.3 Global Equipment Production Estimates and Forecasts in the Industrial Transport Sector

Table 12.4 Average Semiconductor Value Estimates and Forecasts in the Industrial Transport Sector

Table 12.5 Global Market for Semiconductors in the Industrial Transport Sector by Equipment Type

Table 12.6 Global Market for Semiconductors in the Industrial Transport Sector by Product

Table 12.7 Global Market for Semiconductors in the Industrial Transport Sector by Region

Table 13.1 Key Changes to the Other Industrial Applications Sector

Table 13.2 Global Market for Semiconductors in Other Industrial Applications by Equipment Type

Table 13.3 Global Market for Semiconductors in Other Industrial Applications by Product

Table 13.4 Global Market for Semiconductors in Other Industrial Applications by Region

Table 14.1 Industrial/Medical Market for Actuators & Sensors by Sub-sector

Table 14.2 Industrial/Medical Market for Application Specific Analog ICs by Sub-sector

Table 14.3 Industrial/Medical Market for General Purpose Analog by Sub-sector

Table 14.4 Industrial/Medical Market for Power Discretes & Modules by Sub-sector

Table 14.5 Industrial/Medical Market for Other Discretes by Sub-sector

Table 14.6 Industrial/Medical Market for Gate Arrays & Standard Cells by Sub-sector

Table 14.7 Industrial/Medical Market for PLDs/FPGAs by Sub-sector

Table 14.8 Industrial/Medical Market for Other Logic by Sub-sector

Table 14.9 Industrial/Medical Market for 4/8-bit MCUs by Sub-sector

Table 14.10 Industrial/Medical Market for 16-bit MCUs by Sub-sector

Table 14.11 Industrial/Medical Market for 32-bit MCUs by Sub-sector

Table 14.12 Industrial/Medical Market for 32/64-bit MPUs by Sub-sector

Table 14.13 Industrial/Medical Market for ARM-based MCUs by Sub-sector

Table 14.14 Industrial/Medical Market for ARM-based MPUs by Sub-sector

Table 14.15 Industrial/Medical Market for MIPS-based MCUs/MPUs by Sub-sector

Table 14.16 Industrial/Medical Market for Power Architecture-based MCUs/MPUs by Sub-sector

Table 14.17 Industrial/Medical Market for 68K/Coldfire-based MCUs/MPUs by Sub-sector

Table 14.18 Industrial/Medical Market for x86-based MCUs/MPUs by Sub-sector

Table 14.19 Industrial/Medical Market for SuperH-based MCUs/MPUs by Sub-sector

Table 14.20 Industrial/Medical Market for TriCore-based MCUs/MPUs by Sub-sector

Table 14.21 Industrial/Medical Market for V850/RH850-based MCUs/MPUs by Sub-sector

Table 14.22 Industrial/Medical Market for Other 32/64-bit MCUs/MPUs by Sub-sector

Table 14.23 Industrial/Medical Market for DSPs by Sub-sector

Table 14.24 Industrial/Medical Market for DRAM/SRAM by Sub-sector

Table 14.25 Industrial/Medical Market for PROM/EPROM/Flash/Other Memory by Sub-sector

Table 14.26 Industrial/Medical Market for LEDs by Sub-sector

Table 14.27 Industrial/Medical Market for Other Optoelectronics by Sub-sector

Table AP1.1 Global Market for Semiconductors in the Industrial/Medical Sector by Product (July 2014 Forecast)

Table AP1.2 Global Market for Semiconductors in the Industrial/Medical Sector by Sub-sector (July 2014 Forecast)

Table AP1.3 Global Market for Semiconductors in the Industrial/Medical Sector by Product (July 2012 Forecast)

Table AP1.4 Global Market for Semiconductors in the Industrial/Medical Sector by Sub-sector (July 2012 Forecast)

Table AP1.5 Global Market for Semiconductors in the Industrial/Medical Sector by Product (July 2010 Forecast)

Table AP1.6 Global Market for Semiconductors in the Industrial/Medical Sector by Sub-sector (July 2010 Forecast)

Table AP1.7 Global Market for Semiconductors in the Industrial/Medical Sector by Product (May 2008 Forecast)

Table AP1.8 Global Market for Semiconductors in the Industrial/Medical Sector by Sub-sector (May 2008 Forecast)

Table AP1.9 Global Market for Semiconductors in the Industrial/Medical Sector by Product (October 2006 Forecast)

Table AP1.10 Global Market for Semiconductors in the Industrial/Medical Sector by Sub-sector (October 2006 Forecast)

Tables AP1.1 thru AP1.10 Global Market for Semiconductors in the Industrial/Medical Sector by Product (Historical Market Forecasts)

### List of Figures

Figure 1: Semiconductor Revenues in the Industrial/Medical Sector

Figure 2: Semiconductor Revenues in the Factory Automation & Control Sector

Figure 3: Semiconductor Revenues in the Motor Drives Sector

Figure 4: Semiconductor Revenues in the Lighting, Building Automation, HVAC&R Sector

Figure 5: Semiconductor Revenues in the EPOS, EFT & ID Sector

Figure 6: Semiconductor Revenues in the Test & Measurement Sector

Figure 7: Semiconductor Revenues in the Consumer Medical Sector

Figure 8: Semiconductor Revenues in the Medical Imaging & Diagnostics Sector

Figure 9: Semiconductor Revenues in the Power & Energy Sector

Figure 10: Semiconductor Revenues in the Industrial Transport Sector

Figure 11: Semiconductor Revenues in the Other Industrial Applications Sector



## Analyst Biography

Colin Barnden - Principal Analyst



Colin joined Semicast Research in 2006 and is principal analyst for semiconductor research and vice president of business development. Prior to joining Semicast, he worked for 12 years at IMS Research, rising to the position of Senior Research Director of its Semiconductor Research Group and responsible for analyst coverage on the analog/mixed signal, optoelectronic and embedded processing industries. Colin also set-up and established IMS Research's Automotive Electronics Group. During his tenure, Colin authored dozens of reports and became a well respected industry analyst. He holds a B.S. in Electronic Engineering from Aston University, England and has more than twenty years of experience as an industry analyst.

## About Semicast

Founded in 2006, Semicast has an established reputation at most top 20 semiconductor suppliers, with areas of expertise covering industrial and medical electronics and semiconductors; under-the-hood automotive electronics; automotive audio, infotainment & navigation systems; automotive semiconductors; and embedded processing.

With more than twenty years of market research experience, our analysts use a combination of technical expertise, a proven method for producing electronics focused market research and specific applications knowledge to produce concise and timely research to help you make effective business decisions.

Semicast is a privately-held company and is not tied to any PR, media or financial organizations. This gives vital impartiality in making independent market forecasts, free of alternative agenda or bias.

Scan & e-mail to : [info@semicast.net](mailto:info@semicast.net) | Fax to : +1 (408) 351-9400

**Industrial/Medical Semiconductor Service — 2016 edition**

**Published July 2016**

I confirm my order for “Industrial/Medical Semiconductor Service — 2016 Edition”

Specify	License Type	Deliverables	Price
<input type="checkbox"/>	Enterprise	PDF + Excel by e-mail	\$9,995
<input type="checkbox"/>	5 User	PDF + Excel by e-mail	\$7,995
<input type="checkbox"/>	1 User	PDF by e-mail	\$5,995

**Notes:**

- Analyst support time is included to answer all reasonable questions relating to forecasts and conclusions.
- PDF files are printable.
- Enterprise license permits storage of the research on the purchasing company’s intranet for access by permanent company employees.
- VAT number must be quoted for orders from the EU. VAT will be added to orders from the UK.

Name : \_\_\_\_\_

Company : \_\_\_\_\_ VAT # (EU only) : \_\_\_\_\_

Address : \_\_\_\_\_

Address : \_\_\_\_\_

Country : \_\_\_\_\_ Phone # : \_\_\_\_\_

E-mail : \_\_\_\_\_

Date : \_\_\_\_\_ Signature : \_\_\_\_\_

**METHOD OF PAYMENT**

**Purchase Order:** Semicast will supply a formal quotation on receipt of this order form and the report will be e-mailed on receipt of the purchase order. Standard invoice payment terms are net 30 days.

**Credit Card:** American Express, MasterCard and Visa are accepted. You will receive a Payment Request by e-mail. Click “Pay Now” to enter your card details and make secure payment through our payment services provider (Worldpay). Your card details will not be transferred to Semicast.