

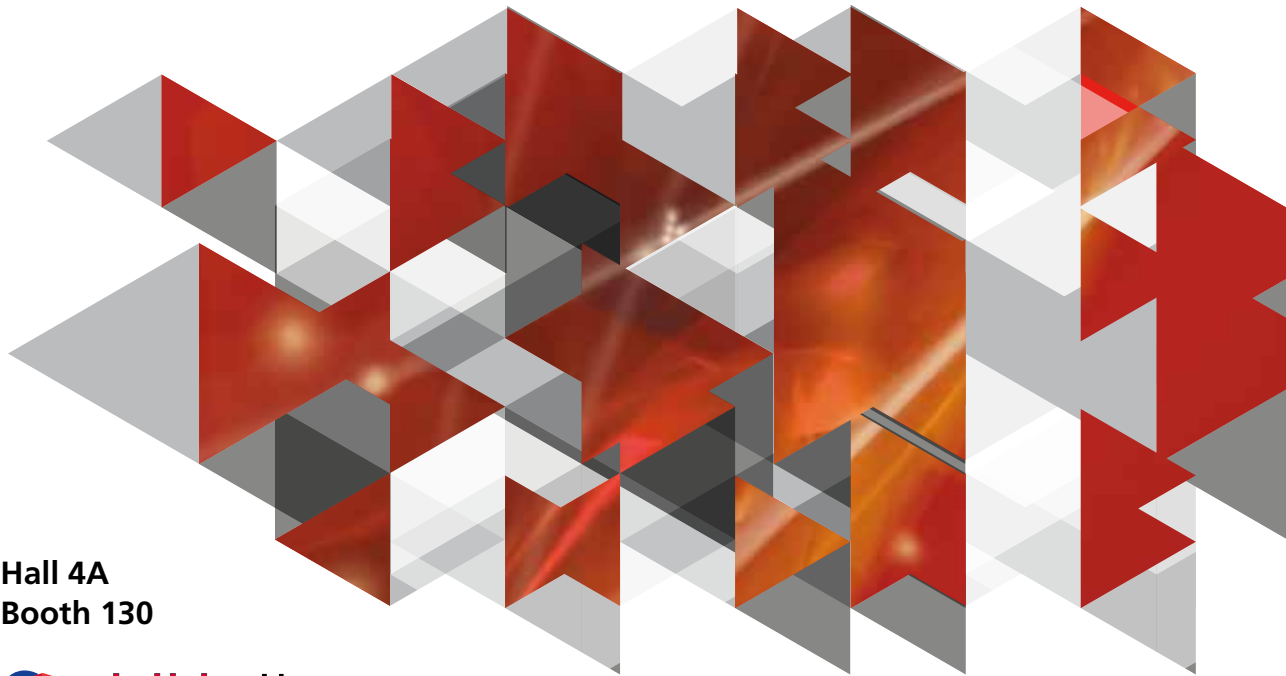
CREATE  
INNOVATE  
ACCELERATE

[www.avnet-memec.eu](http://www.avnet-memec.eu)



# EMBEDDED WORLD 2015

## AVNET MEMEC BOOTH GUIDE



Hall 4A  
Booth 130



## Hall 4A Booth 130

Avnet Memec is your highly specialised semiconductor distributor. Together with our supplier partners, we present the latest products and technologies at the embedded world show in Nuremberg from February, 24<sup>th</sup>-26<sup>th</sup>. Find the ideal solution for your application.

Highly skilled application engineers from Avnet Memec present and explain the latest products and technologies. We support you from the concept phase right through to implementation. As a result, we guarantee a fast realisation of your projects with rapid time-to-market, cost-effective and competitive solutions. Come and talk to us, we look forward to your visit!

### Avnet Memec Internet of Things (IoT)

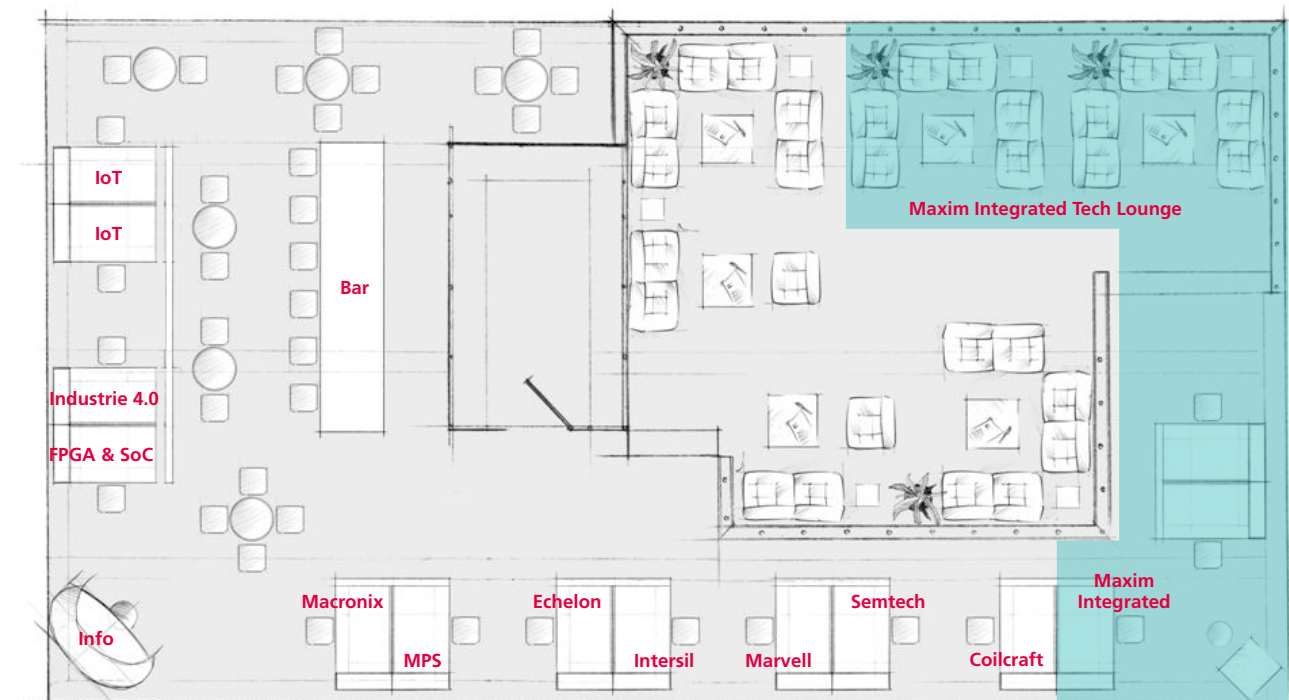
- Live Customer Demos Using Latest Low Power Wide-Area Wireless Networks Based on SIGFOX and LoRa-Technology
- PowerHouse Energy Monitoring Module, Plug'n Play, Robust Power Line Communication and SmartServer Web Connectivity from Avnet Memec
- Seamless Integration of Different Networks, Nodes, Sensors and Actuators into Single Cloud Services and Web-Based Applications
- Cloud-on-Chip - Bring the Cloud to the Things and Explore New User Experiences with Smart Objects from Telecom Design
- IzoT - Industrial Internet of Things Platform: IP-Enabled Family of Chips, Stacks, Interfaces, and Management Software from Echelon
- Plug & Play GSM- and UMTS-Modems (2G, 3G, LTE ) for M2M or Tracking Applications from Quectel and Sierra Wireless
- Global Cellular Network Connectivity with a Cloud-Based Management Platform from Wyless
- Methods to Secure Your IoT Product
- Bluetooth 4.0 Low Energy Modules
- IEEE 802.11 a/b/g/n/BT WLAN Modules

### Avnet Memec Industrie 4.0

- SiC – Silicon Carbide: Diodes and MOSFETs from Microsemi
- Industrial Communication ASSP: R-IN32 (EtherCAT, CC-LinkIE, ...) / TPS-1 (PROFINET IRT V2.3) / Ethernet PHY (IEEE1588) from Renesas
- RZ/A: Cortex A9, Large 10MB RAM, Single Chip HMI Solution and RZ/T: Cortex R4F + R-IN32 Advanced Motor Control & Communication in one Device - the New RZ ARM CPU Family from Renesas
- RX: 32-bit MCU, 120 MHz no Wait State Flash Access, up to 4 MB Flash, 512 kB RAM, CAN, Ethernet, USB, 105 °C Support from Renesas
- SmartAnalog - A Fully Configurable Analog Front End Technology from Renesas, Enabling Smarter Sensors
- Functional Safety Solution (SIL3 / SIL2), Certified Safety Library Compliant to IEC61508 for RX MCU from Renesas
- Embedded HMI and Communication Solutions with PIC32 High Performance 32-bit MCU from Microchip
- 3D Tracking and Gesture Control for Breakthrough User Interfaces and Capacitive Touch Solutions Including Multitouch from Microchip
- EtherCAT Slave Controller, and Ethernet PHY / Switch / Controller, with Industrial and Extended Temperature Range from Microchip
- Finisar Endurance: First Embedded Optical Transceiver for Industrial Applications. 850b nm and 1310 nm, Data Rates from Fast Ethernet up to 10 GBit/s
- Low Power 8-, 16- and 32-bit Microcontroller in Small Packages for Sensors from Microchip, Renesas, Silicon Labs
- Digital Isolators with Integrated DC/DC Controllers from Silicon Labs
- Isolated Gate Drivers for MOSFETs, IGBTs and SiC Diodes from Silicon Labs
- Hall-Effect-Based Current, Position and Speed Sensors from Allegro Microsystems
- Spin Your Motor in 45s: Bring Your Motor, Hook it up and Win a Renesas YROTATE-IT Motor Control Kit Based on RX 32-bit MCU with Motor Control Software, Auto-Tuning & Calibration

### Avnet Memec FPGA & SoC Solutions

- SmartFusion2: The Cortex-M3 SoC Flash FPGA with DSP Blocks, DDR2 / DDR3 Memory and 5 Gbps SERDES Interfaces from Microsemi
- IGLOO2: Pure Flash FPGA with DSP Blocks, DDR2 / DDR3 Memory and 5 Gbps SERDES Interfaces from Microsemi
- Secure Boot: Root of Trust Solution from Microsemi
- 64-bit SoC Processors from Applied Micro: High Performance, Low Power, Scaleable with Integrated 10G PHYs for Embedded Applications



### Monolithic Power Systems

- DC/DC Converter ICs, Power Modules and PMIC's, Including Automotive AEC-Q100 Qualified
- LED Driver ICs, Backlight Driver and Panel Bias ICs Used in LCD Displays
- Stepper Motor, Brushless DC Motor, and Brushed DC Motor Drivers
- Electronic Fuses, Load Switches, and USB Current-Limit Switches
- AC/DC Controller and Converter ICs for Consumer and Industrial Markets
- Battery Chargers and Protection Devices for Mobile and Portable Applications

### Echelon

- Create Communicating Devices for the Industrial Internet of Things and Reduce Your Hardware Cost
  - Start Developing Today With a Free IzoT™ SDK and Software Stacks
  - Develop Applications for the Raspberry Pi, BeagleBone Black, or Your Custom Hardware
- Choose from Optimized Wired and Wireless Media
  - Wi-Fi for Ubiquitous Wireless Applications and Ethernet for High-Performance Wired Applications
  - 802.15.4 RF and Power Line Communication for Lighting Applications

### Intersil

- Demo to Showcase Intersil's Power Management and Analog Technology Innovations
- Learn How to Power FPGAs and MCUs Using Intersil's Modules and LDOs/SWRs
- Power Drill Demo Featuring Intersil's Bridge Driver and Digital Power Monitor Products
- HIP2103, HIP2104 MOSFET Drivers, the ISL28236 Low Offset Op Amp for Current Sensing, and the ISL28022 Digital Power Monitor
- Controller Board Including an MCU for Speed Control, Current Limit, Rotation Reversal, and Battery Voltage Monitoring

### Marvell

- Ethernet PHYs and Switches for Industrial / Embedded Applications
- Multi-Core ARM Based SoCs – up to 2 GHz per Core, up to 8 Cores
- IoT Solutions Based on ARM Microcontroller with Integrated WLAN or BT or Zigbee
- Wireless Modules Supporting WiFi 802.11 b/g/n/ac and Bluetooth
- Audio Video Bridging (AVB / IEEE1588) – QoS Over Ethernet

### Semtech

- SX1276 / SX1236: 137 to 1050 MHz Ultra Low Power Long Range Transceiver
- TVS: High Speed Interface Protection (Ethernet, HDMI, USB)
- GN1406 / 1407: PCI-SIG Compliant Quad Retiming Re-Driver
- SC4530: 30 V, 300 mA Output Micropower Step-Down Switching Regulator
- SX9500 Family: Capacitive Touch Controllers & Proximity Sensing Solutions

### Coilcraft

- New Power Inductor Finder Tool to Quickly Locate the Perfect Inductor for Your Operating Current and Temperature
- Complete Range of Fully Shielded Ltra Power Inductor Families in Composite Material
- High Temp / AEC-Q200 Qualified Products Support Your Design in Extreme Conditions
- Magnetics for Emerging Applications: NFC, Ultrawideband, Power Inductors for Ultra High Switching Frequency
- World's Highest Performance Chip Inductors Down to 0201 Size for Perfect RF Matching
- Miniature Transformers Designed for Step-up, Resonant and Flyback Applications, Ideal for Low-Voltage, Step-up in Energy Harvesting Applications

### Macronix

- Wide Voltage Range / Low Power Serial NOR - Ideal for Wearable, Energy Conscious and Mobile Applications
  - Wide Voltage Supply Range: 1.7 to 3.6 V, Deep Power Down Current: <0.5 μA, Small Form Factors
- ONFI 1.0 Compliant SLC NAND
  - P/E Cycles Typical 100K, 10 Years Data Retention
- Complete Serial and Parallel NOR Flash Portfolio from 512 kb to 2 Gb

### Maxim Integrated

#### Industrial Power

- Power Modules: Complete 60 V & 5 V High Efficient Industrial Power Supplies Off-The-Shelf with Integrated Passives
- Himalaya 60 V Synchronous Buck Family: 50% Cooler, 50% Smaller, 75% Fewer Components
- 25 mA & 50 mA Synchronous Buck Converters: > 90% Efficiency Optimized for 2-Wire Sensors
- Transformer Drivers, Isolated Buck, Flyback with Active Clamp: Robust Isolation, High Efficiency, Superior EMI
- Readymade Reference Designs: 24 VDC Factory Automation, 24 VAC Building Automation, DC-DC Isolated

#### Industrial Interface

- Industry's Fastest 5 kVRMS & 2.75 kVRMS Digital Isolators and Isolated RS-485 Transceivers
- ISO15693 HF-RFID Reader with Implemented SHA-256 Encryption
- DeepCover® Secure HF-RFID Tag with Energy Harvesting and I<sup>2</sup>C Master
- IO-Link Reference Designs and New Dual IO-Link Sensor Transceiver
- Industry's First OTP Output Driver Reduces Sensor Variants' Complexity in Production by up to 80%
- Industry's Lowest Latency and Fastest Fully Integrated 8-Channel Driver for Industrial Digital Outputs

#### Signal Chain

- Analog as Flexible as Your FPGA With do-it-all PIXITM Technology
  - Ultrasonic Flow Meter AFE with 4 ps Resolution Enables Designs That are 10x Better Than Mechanical Meters
- 64 kbps 24-bit SD Converter with 6.5 nV/√Hz PGA Achieves up to 130 dB SNR
  - 36 V Zero-Drift Industrial Amplifier and "Beyond the Rail" Amplifiers Eliminate the Need of Negative Supply

# LOCATIONS

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