A World of Solutions™

mobility • connectivity • smart planet

Corporate Profile
Circuit Protection
Semtech’s Transient Voltage Suppressors (TVS) safeguard circuits against damage or latch-up caused by ESD, lightning and other destructive voltage transients. Our protection devices feature low clamping voltage, low capacitance and low leakage current.

- ESD Protection
- ESD-EMI Filter Protection
- High-Current Lightning Protection
- Low Capacitance ESD Protection
- Low Voltage ESD Protection

Wireless Charging
Semtech offers innovative industry leading wireless power transmitter and receiver platforms for magnetic inductive and resonant wireless charging technologies. Our broad portfolio includes low, medium and high power applications supporting standards compliant and highly differentiated proprietary systems in consumer, industrial, medical, automotive, and hospitality and infrastructure markets.

Semtech is a member of the Wireless Power Consortium and AirFuel Alliance (PMA & A4WP), and is active in helping shape the future standards for wireless power.

- Transmitters
- Receivers

Security & Surveillance
Semtech’s video surveillance products for HD video surveillance enable the upgrade of analog CCTV installations to full digital HD, leveraging installed base of cabling. Our products enable the highest performance HDcctv standard-compliant designs.

- HD Video Surveillance Cameras
- Digital Video Recorders (DVR)
- HD Monitors & Displays
- Industrial Imaging
- Video Servers
- Cable Extenders

Video Broadcast
Semtech’s comprehensive platform of UHD-SDI products, based on more than 20 years of video expertise, enables our customers to develop next generation broadcast television interface solutions for high definition television (HDTV), ultra-high definition television (UHDTV), high dynamic range (HDR), high frame rate (HFR) and wide color gamut (WCG) services.

- Equalizers
- Cable Drivers
- UHD-SDI Gearboxes
- Reclockers
- SDI Transmitters (Serializers) and Receivers (Deserializers)
- Crosspoint Switches
- Timing & Synchronization

Power Management
Semtech’s Power Management solutions feature rich, highly integrated and efficient products in small package sizes for automotive, communications, industrial, enterprise computing and high-end consumer markets where Energy Star and other energy compliance initiatives continually raise the bar for greener, smarter and smaller products.

- Switching & LDO Regulators
- LED Backlight Drivers
- Neo-Iso™ Solid State Relays
- Load Switches
- nanoSmart®
- Battery Chargers
- MOSFET Drivers

Smart Sensing
Semtech’s Smart Proximity sensors are commonly used in smartphones and tablets to manage the RF power. The unique human sensing feature enables smartphone and tablet OEMs to optimize wireless performance (cellular/Wifi) for improved connectivity and data rate and yet limit the user’s RF exposure to be compliant with safety regulation for SAR standards (Specific Absorption Rate). Semtech also offers a wide variety of touchscreen controllers with multi-touch and proximity sensing capability.

- Smart Proximity SAR Sensors
- Human Sensors
- Touch and Proximity Controllers
- Touchscreen Solutions

Optical Networking, Storage & Computing
Semtech offers one of the industry’s most comprehensive portfolios of ICs for optical transceivers, backplane applications and consumer high-speed interfaces. Semtech solutions range from 100Mbps to 400Gbps, supporting key industry standards such as Ethernet, Wireless Infrastructure, PON, Fibre Channel, SONET, and Infiniband®.

- Transimpedance Amplifier (TIA)
- Laser Driver (LD)
- Limiting Amplifier (LA)
- Clock and Data Recovery (CDR)
- Transceiver (LD+LA)
- Optical Receiver (ROSA)
- Backplane CDR/Driver/Re-driver
- Repeater/Signal Conditioner
Semtech provides integrated, long and short range wireless connectivity solutions. Our wireless RF products consist of RF transceiver, RF transmitter, and RF receiver components covering the Industrial, Scientific and Medical (ISM) band radio frequency spectrum from low kHz up to 2.4 GHz. Our wireless RF ICs are used worldwide for automated wireless remote control, meter readers, wireless security systems, building automation equipment, and much more.

- RF Transceivers
- RF Transmitters
- RF Receivers

Semtech designs and manufactures discrete power diodes with axial and surface mount (US) terminations which are listed in the Qualified Product List (QPL). These rectifier diodes, Zener diodes and TVS diodes are also configured into catalog and custom modules and ISOPAC™ packages.

- Rectifier Diodes (QPL)
- TVS Diodes (QPL)
- Zener Diodes (QPL)
- Silicon Carbide Schottky Barrier Diodes (SiC SBD)
- Diode Arrays/Assemblies in ISOPAC™ and Module Packages

Semtech significantly reduces network operating expenses by providing high-performance, standards-based network timing and synchronization products that allow service providers to migrate from circuit networks to Ethernet packet networks. Our timing solutions based on the IEEE 1588-2008 protocol are deployed worldwide throughout 3G & 4G networks, optical telecom networks and IP backhaul solutions.

- Synchronous Equipment Timing Source PLL
- Timing Over Packet Networks (ToPSync®)

Semtech’s Power Line Communications (PLC) products enable communications via low-voltage and medium-voltage power lines. Power line communications has long been a favorite application for utility companies because it allows them to reliably move data over an infrastructure that they own and control. One of the main benefits of PLC to utilities is that it efficiently addresses their communications needs across a vast array of applications (metering, substation monitoring, load control and load shedding, home energy management, etc.) all focused on collectively addressing their energy management tasks.

Our PLC product platforms work on Medium Voltage (LV) and Low Voltage (LV) networks and our System on Chip (SoC) offers both end-device and DCU/Service Node functionalities throughout the PHY, MAC and Convergence layers.

- Universal PLC Modem SoC
- ITU-Standards PLC Modem SoC
- Display PLC Modem SoC
- PLC & Hybrid PLC/RF

Semtech’s new LoRa long range wireless products are the ultimate solution for eliminating repeaters, reducing cost, extending battery life and improving network capacity. LoRa is a wireless technology developed to create the low-power, wide-area networks (LPWANs) required for machine-to-machine (M2M) and Internet of Things (IoT) applications. The technology offers a very compelling mix of long range, low power consumption and secure data transmission and is gaining significant traction in IoT networks being deployed by wireless network operators.

A network based on LoRa wireless technology can provide coverage that is greater in range compared to that of existing cellular networks. In fact, many mobile network operators have chosen to complement their existing cellular/wireless networks with a LPWAN based on LoRa technology because it is easy to plug into their existing infrastructure and also allows them to offer their customers a solution to serve more IoT battery-operated applications.

- LoRa Long Range Wireless
- Internet of Things (IoT)
- Machine to Machine (M2M)
- Geolocation
Semtech Corporation is a leading supplier of analog and mixed-signal semiconductor platforms for high-end consumer, computing, communications, and industrial applications.

Our vision is to be the global leader in analog and mixed-signal platforms enabling architectural and performance differentiation. Semtech, publicly traded since 1967, is listed on the NASDAQ Global Select Market under the symbol SMTC and has more than 30 sales and application support offices in 14 countries as well as distribution support locations in more than 30 countries.

Semtech is dedicated to providing proprietary platforms, differentiated by innovation, size, efficiency, performance, and reach. Our solutions are used in some of the most innovative systems and products in the fastest growing markets today. These markets include smartphones, LCD TVs, notebooks, tablets, smart grid, automotive, automatic meter reading, medical, wireless infrastructure, PON, Internet of Things, optical transport and datacenters. More than 5,000 customers worldwide rely on our diverse product portfolio and world class technology roadmap for solutions in low-power wireless communications, optical data transport, video broadcasting, power management, circuit protection, touch sensing, and more, making Semtech one of the most balanced semiconductor companies in the industry.