

Communication Products Division



TECHNOLOGY → PRODUCTS → PROFITS

Get there faster with SMART.

Communication Products Division Overview

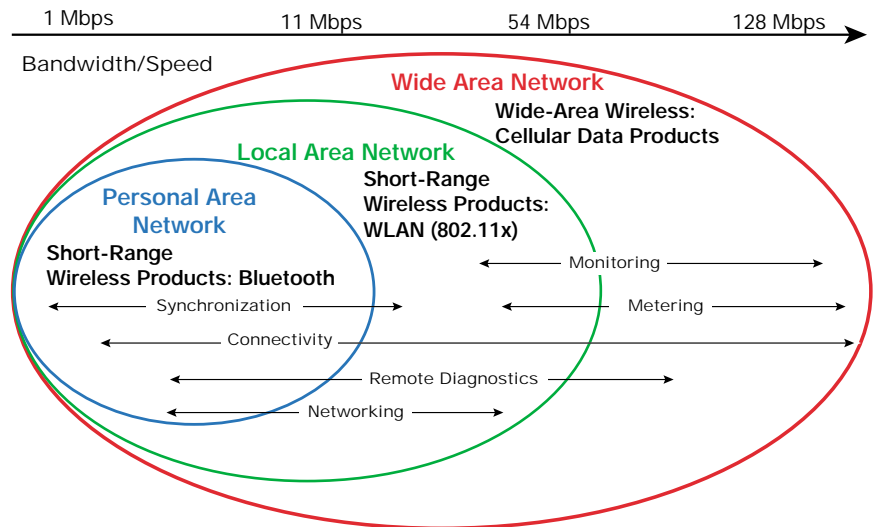
SMART Module Technologies **Communication Products Division (CPD)** provides complete product development, program management and full-service product engineering of leading edge, personal communication sub-systems for wired and emerging wireless technologies supporting Personal Area, Local Area and Wide-Area Networks.

SMART has built its foundation by providing proven technology and quality products in a low total cost solution to the most demanding fortune 100 OEMs around the world. SMART backs these products with outstanding services and expertise in design, manufacturing, test and logistical support.

More information on CPD Bluetooth products and services can be obtained at www.smartm.com/bluetooth

Product Line Overview

SMART CPD has focused its development in communication products that address the markets of Computing, Networking, Telemetry (machine to machine) and Telematics (automotive). With products in both wireline and wireless arenas, the portfolio of standard and custom products enable SMART to be a leader in the OEM/ODM space addressing the outsource design, product development and high-quality manufacturing required for today's communication applications. The product offering crosses the three prominent networks (PAN, WLAN, WAN) with both wireline and wireless products in both custom and standard form factors enabling SMART CPD to be a one-stop outsourcing solution for communication sub-systems.



Engineering and Product Development

SMART CPD Engineering provides complete product development for both standard and custom products. Through partnerships with industry leading silicon developers, SMART develops and delivers world-class, high-quality wireline and wireless communication solutions to our customers.

With facilities located in Fremont California, SMART Engineering develops, integrates and qualifies complete product solutions. And, as part of the Solectron family of companies, SMART leverages industry leading, 2-time Malcom-Baldrige award winning manufacturing and test expertise to deliver products with world-class quality built in from the very start of development. This quality in design is carried through the entire product lifecycle.

Key Highlights and Advantages

- Certified ISO-9001 Development
- Ability to develop multi-function combination solutions.
- Experience with leading silicon providers for V.90/92, IEEE 1394A, Bluetooth and 802.11x solutions.
- Use of industry leading design rules and test solutions.
- Extensive experience in both standard and custom form-factors.
- Provides industry and regulatory certification services for customers.
- Experience in Worldwide Homologation of products.

Bluetooth Product Line

Bluetooth USB Adaptor

SMART's USB adaptor transforms legacy machines into wireless communication tools. Connect to PCs, PDAs, mobile phones, printers and more.

- Small Formfactor
- Class 2 Bluetooth Device
- Receiver Sensitivity Better than -80dBm
- Windows 2000, XP and MAC OS X v.10.2 or later
- Compatible with USB 1.1 interface



CompactFlash Bluetooth Card

This card adds wireless communication functionality to Pocket PC devices with a CF slot.

- Class 1 Bluetooth Device
- Integrated Antenna
- Type I CompactFlash Extended
- Pocket PC Stack Included



Bluetooth USB Printer Adapter

Eliminate your USB cable and wireless enable your printer through its existing USB port. Print directly from other Bluetooth enabled devices such as PDA's, notebooks and even cell phones!

- Wireless USB cable replacement
- Class 1 Bluetooth Device
- Compatible with USB 1.1 interface



Bluetooth RS-232 Serial Port Adapter

A true high-performance, low-power serial port cable replacement solution ideal for applications in telematics, telemetry, and industrial data acquisition areas!

- Embedded Bluetooth Protocol Stack
- Board Mounted Antenna
- Class 1 Bluetooth Device

PMG-Client Mobile Messaging Terminal

The Mobile Messaging Terminal (MMT) is a thin terminal or client of a Personal Mobile Gateway (PMG) which communicates via the PAN. Using IXI Mobile's PMG efficient client software the device is the perfect addition to a PMG. The MMT uses Bluetooth for the wireless link to the PMG which means that the product can be used for extended periods of time without recharging the battery pack.

- Easy to use
- Ideal for Instant Messaging Applications
- Fashionable Compact Design



Mini Module

SMART's mini module is a class 2 Bluetooth device designed to meet a variety of applications in notebooks, PDA, cellular handsets and other consumer electronics markets

- +3dBm typical output power
- Receiver sensitivity better than -82dBm
- form factor (14.43mm x 21.47mm x 3.0mm)
- Bluetooth version 1.1 Compliant
- USB, or UART Interface with optional SPP or HID profiles
- Low power consumption



Bluetooth Serial Class 1 Module

The serial class 1 module designed for high integration, cost effective embedded solutions for host-less and host based implementations. It is been designed to focus on industrial, medical and automotive applications among others.

- +16 dBm of output power
- Receiver sensitivity of -82dBm for BER<0.1%
- Small form factor (25mm*35mm*3mm)
- Low power consumption
- High Speed UART 9.6 to 921 kbps, User programmable
- Fully embedded upper and lower stack and application



PMG Client Module

The Personal Mobile Gateway-Client Module (PMG-CM) was developed for integration of BT into "designed for PMG products". It meets the emerging mobile wireless connectivity markets where small form factor, low cost, and low power consumption are of great priority.

- +4dBm of output power
- Receiver sensitivity of -82dBm typical
- Small form factor (13mm x 20mm x 3mm)
- Bluetooth version 1.1 compliant
- UART Host control Interface (HCI)

Bluetooth/WiFi Combo MiniPCI (CSR/Intersil)

This combination Bluetooth and WiFi solution is based on leading technologies from Cambridge Silicon Radio (CSR) and Intersil. It addresses the coexistence issues in PAN and WLAN markets by offering true simultaneous connectivity.

- Compliant with WiFi and Bluetooth 1.1 standards
- WiFi output power up to +20dBm at the Antenna connector
- WiFi receiver sensitivity of -82dBm to -91dBm
- Bluetooth output power up to +6dBm at the Antenna connector
- Bluetooth receiver sensitivity better than -82dbm



Bluetooth/WiFi Combo MiniPCI & CardBus-32 (Mobilian)

Available as both a MiniPCI for system integration as well as a CardBus-32 product, these designs use Mobilian silicon as well as their SimOp software which allows for simultaneous operation with a high degree of isolation.

- Compliant with WiFi and Bluetooth 1.1 standards
- Minimum isolation of -30dBm between both systems
- Bluetooth receiver sensitivity better than -80dBm for BER of 0.1



Company Overview



Worldwide Manufacturing Headquarters,
Fremont, California



Manufacturing,
Penang, Malaysia



Manufacturing,
East Kilbride, Scotland



Manufacturing,
Aguadilla, Puerto Rico



Manufacturing,
Wilmington, Massachusetts

SMART Modular Technologies Inc. (SMART) is a wholly owned operating company within Solectron Corporation's (NYSE: SLR) Technology Solutions Business Unit (TSBU). SMART, a leading independent manufacturer of memory, communication sub-systems and DC-DC converters offers more than 500 products to premier OEMs in the computer, networking and telecommunications industries. Through its relationship to Solectron, SMART offers customers competitive outsourcing advantages, such as access to advanced manufacturing technologies, shortened product time-to-market, reduced total cost of ownership and more effective asset utilization.

History

In 1988, SMART was founded as an independent memory module manufacturer. Over the span of the Company's first 11 years, SMART strengthened and expanded its product line to include Communication and Embedded products through acquisitions. In December of 1999, SMART merged with Solectron Corporation, the world's largest provider of customized electronics manufacturing solutions and two-time winner of the prestigious Malcolm Baldrige Award for quality excellence.

SMART manufactures its product throughout the world in Fremont, California; Wilmington, Massachusetts; East Kilbride, Scotland; Aguada, Puerto Rico; and Penang, Malaysia. SMART has design centers in Wilmington, Massachusetts, Fremont and Irvine, California, plus sales organizations worldwide.

TSBU Value Add Proposition

Combining standard or custom form-factors with leading edge technology, product development and complete program management, SMART's CPD can provide recognized value-add to our customers. Leveraging established silicon and software technology partnerships, CPD offers expertise in quality design and integration, world-class manufacturing and supply chain logistic excellence.

