Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

PB-1SPP

Bluetooth 1SPP Peripheral Board
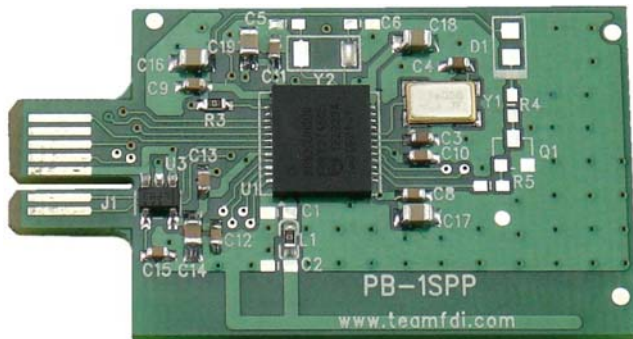
USB-Dongle
and
Peripheral Boards

The **PB-1SPP** is a Bluetooth 2.0 Serial Port Profile (SPP) device that allows for a quick and easy wireless connection to transfer data between Bluetooth capable systems. An NXP BGB203/H1/S06 processor provides complete Bluetooth 2.0 functionality as the embedded protocol stack runs on the PB-1SPP rather than on the host processor. The **PB-1SPP** requires the use of the USB-Dongle for power and the virtual COM port interface to the PC via the USB connection.

The USB-Dongle and **PB-1SPP** can be used as a wireless serial port replacement to easily transfer data between two PC's or for industrial control applications like M2M. A pair of USB-Dongle and **PB-1SPP** boards along with simple serial port communications software like HyperTerminal is all that you need to transfer wireless data. The USB-Dongle and **PB-1SPP** may also be used to communicate with other devices that are compatible with the Bluetooth 2.0 Serial Port profile (SPP). The USB-Dongle provides all power and interface signals required by the **PB-1SPP** to interface to the PC.

Many other low cost Peripheral Boards are available for various functions and can also be used with the same USB-Dongle. Please consult the FDI website for details at **www.teamfdi.com**

Highlights

- Low cost tool for prototyping, testing, and evaluation

- USB port powered so no external Power Supply required

- Supports USB 2.0

- Plugs directly into standard USB Port via USB-Dongle – great for laptops

- BGB203 is preprogrammed for SPP

- PIFA antenna designed into PCB

- PB-1SPP uses BGB203/H1/S06 which provides

  - Adaptive Frequency Hopping (AFH)
  - Link Controller LC / Link Manager LM
  - Logical Link and Adaptation Protocol (L2CAP)
  - Service Discover Protocol (SDP)
  - RFCOMM Protocol
  - Generic Access Profile (GAP)
  - Tested and qualified by Bluetooth SIG
  - Flash-based configuration
  - Automatic Re-connect Mode
  - Low-power sleep mode

The PB-1SPP uses a PCB edge finger connector to interface to the USB-Dongle.
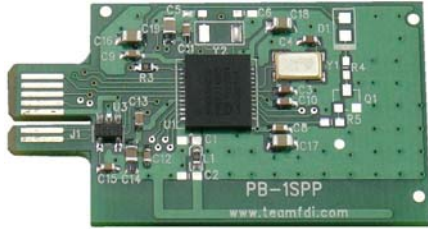
Board Dimensions 1.743" x 0.98"

Target Interface

The USB-Dongle includes a 14 pin connector to the Peripheral Board that uses the following signals. Not all signals are used on all Peripheral Boards:

ISP/ICPn	5V (USB power, unswitched)
Switched Power (3V for ICP) or Reset (High True for 8051 ISP)	Reset (Low True) (for ICP & LPC2000 ARM)
Ground	3V (unswitched)
PCL/SCL (ICP/I2C)	PDA/SDA (ICP/I2C)
TXD (UART)	RXD (UART)
MSIO (SPI)	PSEN/P0.14 (ISP entry)
SCLK (SPI)	MOSI (SPI)

Example of USB-Dongle and PB-1SPP Wireless Serial Ports

USB-DONGLE   PB-1SPP

Bluetooth™

PB-1SPP   USB-DONGLE

Power – The USB-Dongle provides the regulated 3.3V power required by the **PB-1SPP**.

Connectivity - Wireless connectivity on the **PB-1SPP** is controlled by the NXP BGB203 and supports 802.15.1/Bluetooth, and 802.11b/Wi-Fi, WLAN.

Crystal or Clock Frequency - The **PB-1SPP** is clocked by an external 13 MHz crystal oscillator located at position Y1 on the PB.

Typical Configuration – The typical configuration shown above uses the **PB-1SPP** in conjunction with the USB-Dongle to provide the physical interface to the PC via the USB port. Software on the USB-Dongle provides a Virtual COM port interface to the PC and allows RS-232 serial data to be transmitted wirelessly using the **PB-1SPP**. A second set of boards may be used as the other side of the wireless connection or the **PB-1SPP** may also communicate with other compatible devices using the Bluetooth 2.0 Serial Port profile (SPP).

Ordering Information

Order Online at www.digikey.com
Digi-Key Part #: 622-xxxx-ND

Availability: Stock
Digi-Key Contact Info:
1-800-DIGI-KEY Phone
(218) 681-3380 FAX

FDI   Contact Info:
(800) 278-0293 Phone
(256) 883-1241 FAX

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