



SB20UF

Size:

#### FEATURES:

- Qualified for Bluetooth spec. 2.0+EDR Compliance
- Point to multipoint, 7 slaves
- Variable input clock frequency
- Two 16C550 UART interfaces
- USB 1.1 full speed interface device
- Up to 16 bits general purpose IO
- JTAG Debug & Test interface
- Capability for embedded solutions
- External flexible Flash sizes, 2–64 Mbit
- Power management, PARK, SNIFF & HOLD

#### BENEFITS :

- Low component count
- Low profile implementation

#### APPLICATIONS

- 2G, 2.5G and 3G handsets
- PDA's
- Notebook PC's
- Computer peripherals
- Office network equipment
- Home applications

## SB20UF BLUETOOTH BASEBAND CONTROLLER

Bluetooth Baseband SB20UF from SCI is a generic v2.0+EDR baseband controller designed to be suitable for both host and embedded applications. The baseband controller is integrated with a radio module and Flash memory to form a complete Bluetooth system. As the SB20UF is a generic product, it can be used for many different types of applications that require Bluetooth capability

#### **32Bit RISC CPU architecture**

The system controller is an embedded Janus™ microprocessor communicating with the baseband controller core and peripheral interfaces over an AMBA™ system bus. This configuration allows for embedded stand-alone Bluetooth applications where your target application is embedded within the baseband controller, in addition to traditional host-based applications. This possibility is especially useful in accessory-type applications, like cordless headsets, industrial sensor and actuator devices. Providing a wide-range of external interfaces like USB, GPIO, PCM and a pair of UARTs, the SB20UF is ideally suited for

Our flexible approach offers system designers a high degree of choice.

#### **Variable Input Frequency**

By combining an input clock and a programmable divider this device is able to generate all the necessary clocks for a Bluetooth link. The divider can operate with a wide variety of input clock frequencies. This feature offers a high degree of flexibility for system designers, as they are not constrained by frequency requirements thus reducing the need for additional discreet components.

#### **Variable System Frequency**

The system frequency can be adjusted to match the processor performance required for your target application to either reduce power consumption or enhance system performance. The system frequency can be varied from 12-64 MHz.

#### **Radio and Flash Support**

This chip can be combined with a variety of standard Bluetooth radios and a selection of Flash memories to form a complete Bluetooth system. Thus offering system designers a high degree of flexibility.

*Note: Janus™ — trademark of Avalent Technologies, Inc*



SB20UF BLOCK DIAGRAM

