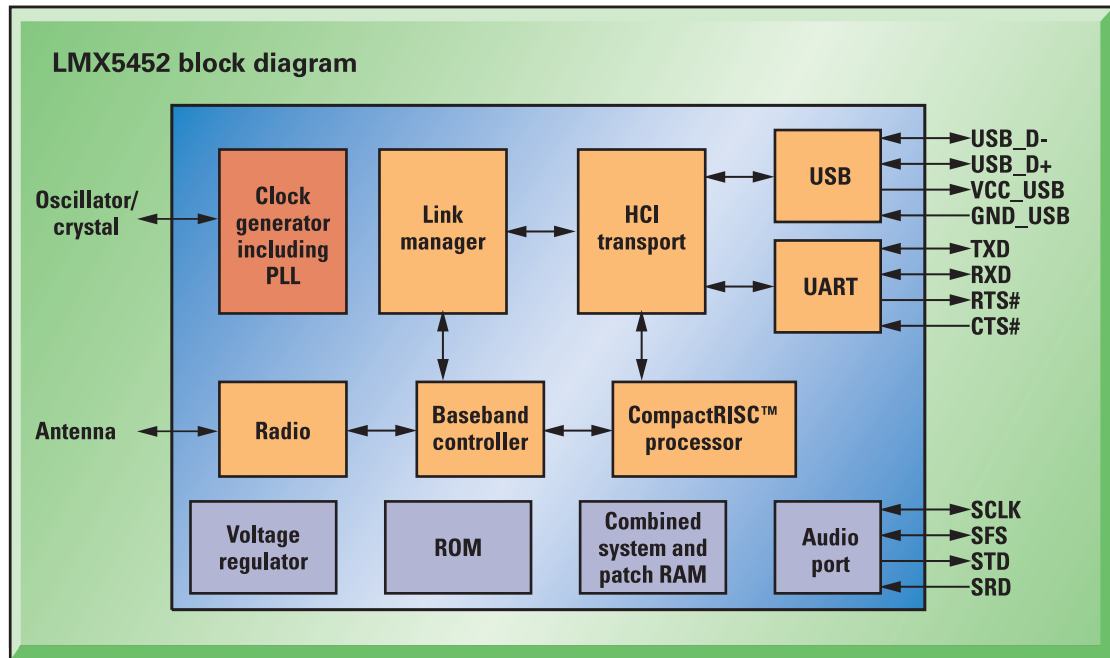


Technical specifications



Outstanding features

- Implemented in 0.18 μm CMOS technology
- Embedded ROM and Patch RAM memory
- Bluetooth® 1.2 compliant
- On-chip firmware with complete HCI
- RF includes baluns, switch and filters on chip
- Secondary 32.768 kHz oscillator for low-power modes
- Typically -84 dBm receiver sensitivity at antenna
- Class 2 operation
- Fractional-N sigma-delta modulator
- Operating voltage range 2.5V to 3.0V
- I/O voltage range 1.6V to 3.6V
- Several power management functions
- Accepts external clock 10 MHz to 40 MHz or crystal input 10 MHz to 20 MHz
- Clocking option 12/13 MHz with PLL bypass mode for power reduction
- Current consumption typically below 45 mA
- Support for 2 simultaneous voice or SCO links
- Available in a BGA-60 (6 mm x 9 mm) package

Interfaces

- Full duplex UART supporting transfer rates up to 921.6 kbps including baudrate detection for HCI
- Full speed (12 Mbps) USB 2.0 for HCI
- I²C and SPI/Microwire for interfacing with external non-volatile memory
- Advanced Audio Interface (AAI) for interfacing with external 8/13-bit PCM CODEC
- Single Rx/Tx-pin radio interface

Applications

- Mobile handsets
- Personal digital assistants
- Personal computers

National Semiconductor

2900 Semiconductor Drive
PO Box 58090
Santa Clara, CA 95052
1 408 721 5000

Visit our Web site at:
www.national.com/bluetooth

For more information,
send Email to:
new.feedback@nsc.com