

Single Chip 802.11b/g WLAN Radio for Mobile Applications

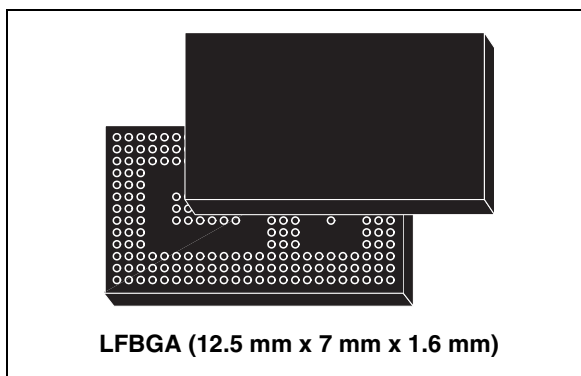
DATA BRIEF

Features

- Extremely small footprint
- Ultra Low Power consumption
- Fully compliant with the IEEE 802.11b and 802.11g WLAN standards
- Support for 54, 48, 36, 24, 18, 12, 9, and 6Mbps OFDM, 11 and 5.5Mbps CCK and legacy 2 and 1Mbps data rates
- Single Chip 802.11b/g WLAN solution with fully integrated:
 - Zero IF (ZIF) transceiver,
 - Voltage Controlled Oscillator (VCO),
 - High-speed A/D and D/A converters,
 - Radio Power Management Unit (PMU),
 - OFDM and CCK baseband processor,
 - ARM9 Media Access Controller (MAC),
 - SPI serial host interface (up to 48Mbps)
- Intelligent power control, including 802.11 power save mode
- Fully integrated Bluetooth coexistence

Applications

- Cellular phones
- Personal Digital Assistants (PDA)
- Portable computers
- Hand-held data transfer devices
- Cameras
- Computer peripherals
- Cable replacement



Order codes

Part Number	Package
E-STLC4370A	Lead-free LFBGA228

Description

The STLC4370 is a single chip 802.11b/g WLAN radio for embedded, low-power and very small form factor mobile applications. The product conforms to the IEEE 802.11b and 802.11g protocols operating in the 2.45GHz ISM frequency band supporting OFDM data rates of 54, 48, 36, 24, 18, 12, 9, and 6Mbps as well as CCK data rates of 11 and 5.5Mbps and legacy data rates of 2 and 1Mbps.

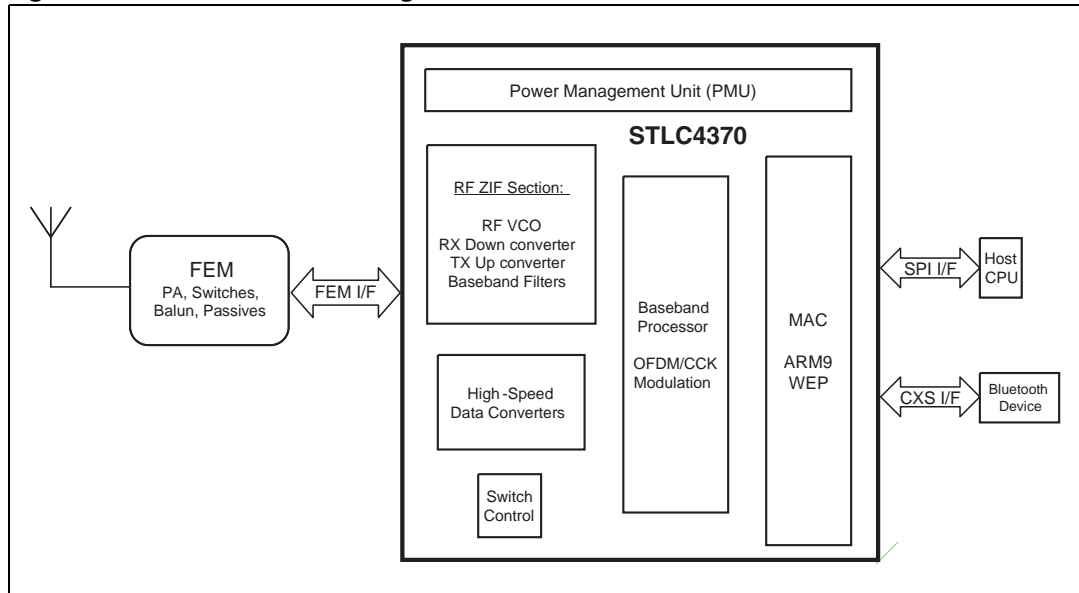
The STLC4370 is a fully integrated wireless radio including a ZIF transceiver, RF Synthesizer/VCO, high-speed data converters, an OFDM/CCK digital baseband processor, an ARM9-based MAC and a complete Power Management Unit.

Host control is provided by a flexible serial interface (SPI) supporting bit rates of 48Mbps. For maximum flexibility, the STLC4370 accepts system reference clock frequencies of 19.2, 26, 38.4 and 40MHz.

A reference design evaluation platform of hardware and software is provided to system integrators to rapidly enable wireless connectivity to mobile platforms.

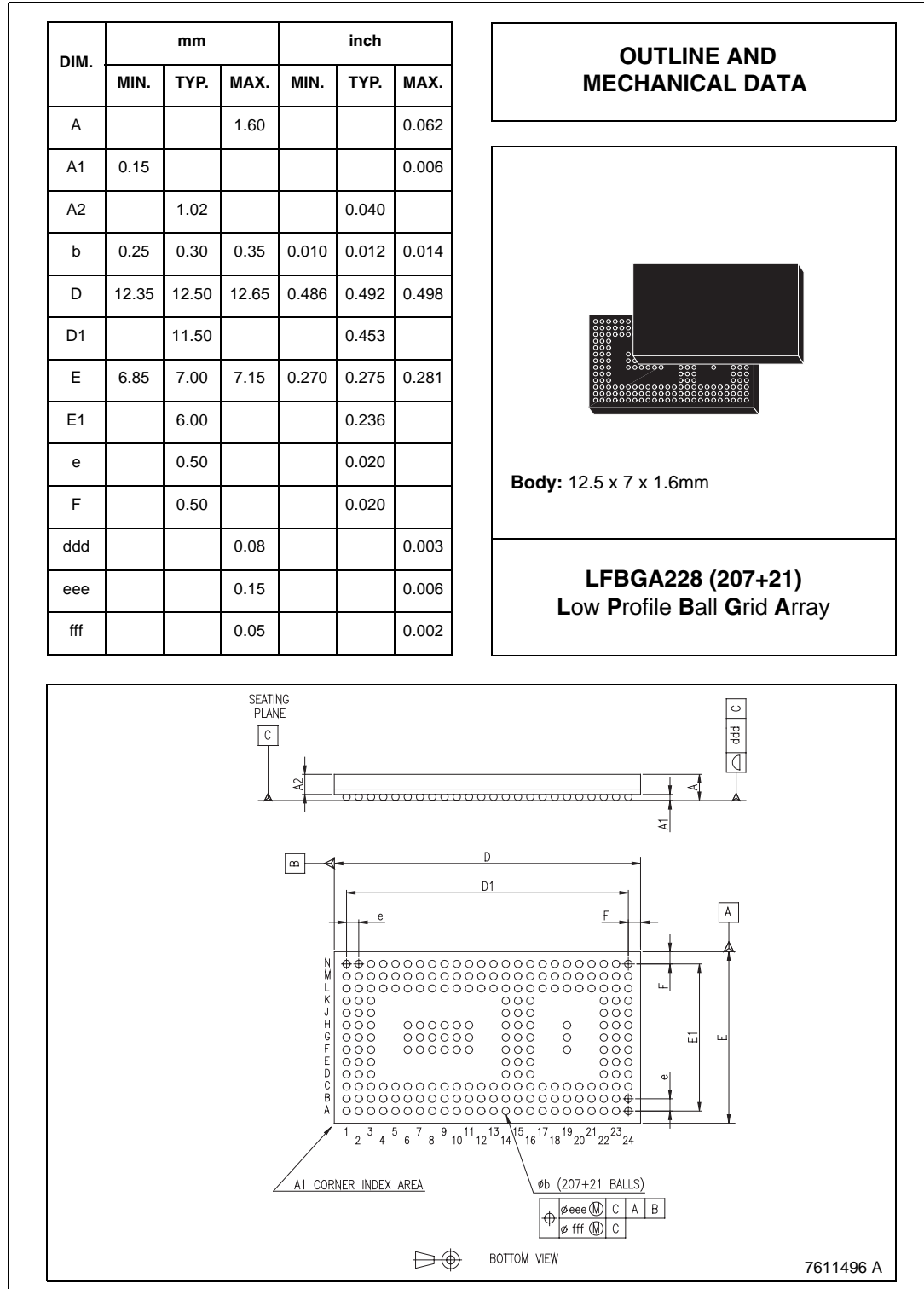
Block diagram

Figure 1. STLC4370 block diagram



Package information

Figure 2. LFBGA228 mechanical data and package dimensions



Revision history

Table 1. Document revision history

Date	Revision	Changes
13-Jan-2006	1	Initial release.

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