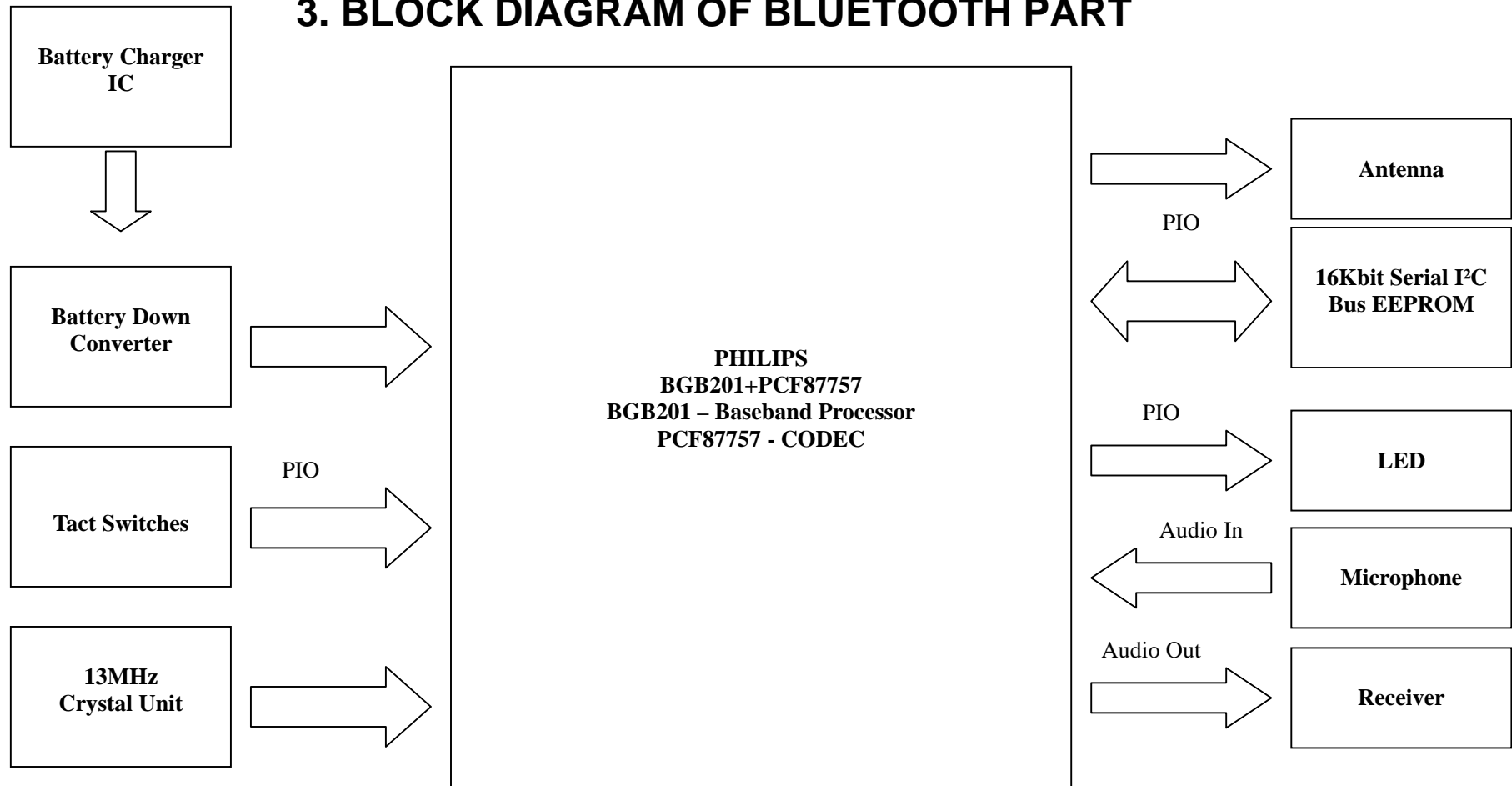


3. BLOCK DIAGRAM OF BLUETOOTH PART



4. BLOCK DIAGRAM DESCRIPTION

PHILIPS BGB201+PCF87757

PHILIPS BGB201 is a single chip radio and baseband chip for Bluetooth 2.4GHz systems. Together with the mono audio CODEC PCF87757, it allows for compact designs and low power consumption for battery powered applications. All hardware and device firmware is fully compliant with the Bluetooth specification v1.1 and v1.2.

Battery Charger and DC/DC Down Converter

The battery charger IC TI BQ24010 provides the charging current to the Li-Ion battery and the Power adaptor is plug in.

The TI TPS62222 devices provide power supply from a single cell Li-Ion battery. The down-converted 1.8 volts by the converter is used to power the BGB201 and PCF87757 Chip.

Tact Switches

The three tact switches are configured as multifunction, volume increase and volume decrease button. The two volume buttons are used to adjust the speaker volume up or down and the multifunction button to operate other features of the headset.

13MHz Crystal Unit

The crystal unit provides the reference clock for the system (BGB201 RF local oscillator and internal digital clocks).

16Kbit Serial I²C Bus EEPROM

The 16 Kbit Electrically Erasable PROM is organized as eight blocks of 256 x 8-bit memory with a 2-wire serial interface. Low-voltage design permits operation down to 1.8V with standby and active currents of only 1 μ A and 1 mA respectively.

LED