

W6411 bluetooth keyboard

Circuit Description:

Y1 the 24M crystal oscillator driver the base of U1(MCU) the final/buffer

Ground and power source

Integrated 8 Kbytes of non-volatile flash memory(U2)for storing bluetooth address and configuration data

The ground is only that of the printed circuit board, no external ground connection, electric current is supplied by 2\*AAA batteries.

Functional Description:

The keyboard is a 3.0 compliant Bluetooth Human Interface Device(HID).The keyboard is designed on Broadcom BCM20730 chip solution.

Integrated 8 Kbytes of non-volatile flash memory(U2)for storing bluetooth address and configuration data.

The primary component is the Broadcom BCM20730,which is a Bluetooth 3.0 compliant single-chip device. The baseband and radio are integrated into a single chip implemented in standard digital CMOS.

The BCM20730 has an integrated 8051 microprocessor core that runs software from the link control layer up to the Host Control Interface(HCI).The baseband portion of the BCM20730 performs all time-critical functions required for high-performance Bluetooth operation.

The radio incorporates complete receive and transmit functions,including

PLL,VCO,LNA,PA,up-converter,down-converter,modulator,demodulator,and channel select filtering.

The BCM20730 on-chip keyboard scanner is designed to sample the keys and store them into buffer registers without the need for the host micro controller to intervene.A state machine of three states-Idle,Scan,and Scan-End-controls the key scan block.