Circuit Description

After the installation of battery, the CPU starts the initialization and switches to the sleep state. Activate the collector in sleep state by pressing button 1 or inserting test strip. Then it switches to the measuring and viewing BG data mode. After CPU is working, all kinds of prompts are displayed on the LCD. The CPU uses external 8 MHz and 32.768 KHz crystal oscillator to work. Weak current signal generated by enzyme reaction on the test stripe can be transformed from AD to digital signals after being amplified. The CPU processes these signals and generates buzz prompt. Countdown information is displayed on the LCD. After the CPU finishes processing the signals, it generates measuring result and displays on the LCD. Meanwhile, BG data and time information are stored into the EEPROM. The collector switches to the sleep state. It can be activated by pressing button 1. Stored BG data can be invoked in order and displayed on the LCD. By pressing button 2 in the sleep state, the collector can be activated and switch to the system configuration mode. Then, you can set system time, BG unit, alarm, as well as deleting data. By pressing button 3 in the state of CPU shutting down, the collector can be activated and switch to the Bluetooth communication mode. The blue LED flashes. Bluetooth is enabled. The collector can communicate with other Bluetooth devices. COM 1 can communicate with PC by chip PWL transformation for debugging.