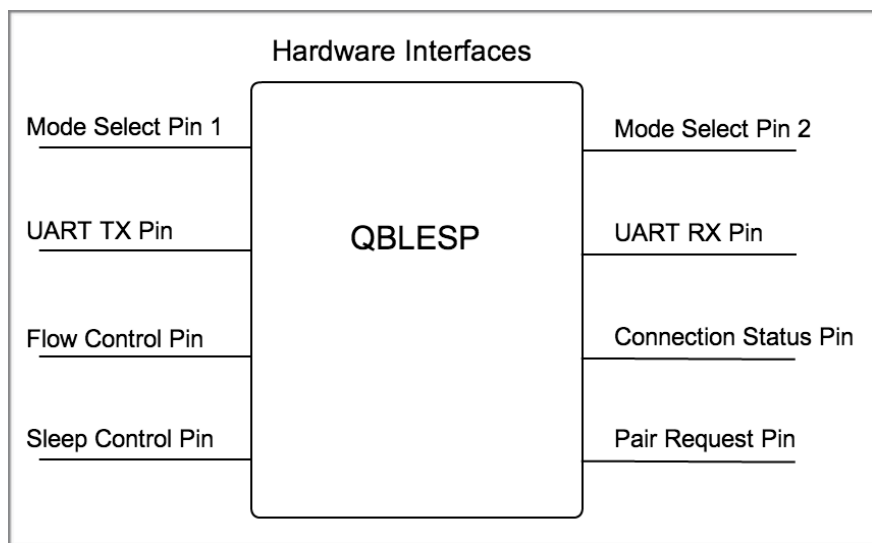


Quan BLE SPP Solution

Serial Wireless Data-transfer Solution via Bluetooth Low Energy

QBLESP is a firmware/hardware solution for serial data transfer through Bluetooth low energy technology. With Central and Peripheral role determined by software AT command, QBLESP can play versatile role in wireless applications. Together with hardware pins, QBLESP provide easy utilization on user interfaces.



Specifications

- Powerful AT command set for easy control of BLE module.
- Central role or Peripheral role set by AT command.
- Provides RF receiving acknowledgement.
- Maximum Air Data Rate: 19200bps (considering protocol overhead).
- Burst UART Data Rate: 1200 bps~ 115200bps (for continuous data transfer, do not exceed 19200bps).
- 3 operation modes: command mode, transparent mode, gateway mode:
 - The operation mode is determined by hardware input pin and software keyword(consecutive &&&).
 - In command mode, data received at UART-end are parsed as AT command. Data received on Air will be sent out with AT command format.
 - In transparent mode, data received at UART-end will be sent out as is. No AT command are allowed.

- In gateway mode, 3 consecutive ‘&’ will make QBLESP enter AT command mode. Otherwise, QBLESP work in transparent mode.
- Support hardware connection status pin.
- Support hardware flow control pin.
- Hardware/software pairing request.
- Hardware pin to do deep sleep for better power consumption.
- Changeable device name stored in NVM(Flash storage). This name will be broadcast over the air.

Application Block Diagram

