Advanced Medical Electronics
Model: BLUEMOD BlueTooth Transmitting Module
Operational Description

The AME Bluetooth Module is a completely integrated Bluetooth Serial Port module incorporating the Bluetooth 2.0 baseband controller and 2.4 GHz radio in a small form factor ready to be placed onto a host PCB. All the hardware and firmware provides a complete solution from the built-in antenna through the complete lower and upper layers of the Bluetooth stack, up to the application including the Generic Access Profile (GAP), the Service Discovery Application Profile (SDAP), and the Serial Port Profile (SPP). The firmware provides a complete Bluetooth (v2.0) stack including profiles and command interface. This firmware features point-to-point and point-to-multipoint link management supporting data rates over RFComm up 704 kbps.

The AME Bluetooth Module is designed to be included within host PCB applications by soldering the module to the host PCB. The Bluetooth Module interface with the host PCB is accomplished through a number of electrical interface connections. Communication between the host PCB and the Bluetooth Module is through a Universal Asynchronous Receiver Transmitter (UART) consisting of Receive (RX), Transmit (TX), Ready-to-Send (RTS), and Clear-to-Send (CTS). RTS and CTS are used for hardware handshaking between the host and the Bluetooth module. The UART interface supports formats of 8-bit data with or without parity, with one or two stop bits. It can operate at standard baud rates from 2400 bits/sec up to a maximum baud rate of 921.6 Kbits/sec. Commands and data are transferred from the Bluetooth Module to the host PCB through this UART interface.