Operational Description

GW52 is built on the Marvell® 88W8787 low-cost highly-integrated IEEE 802.11b/g/n MAC/Baseband/RF WLAN and Bluetooth Baseband/RF system-on-chip (SoC). The module supports IEEE 802.11n with maximum data rates up to 72Mbps (20 MHz channel) and 150 Mbps (40MHz), 802.11g payload data rates of 6, 9, 12, 18, 24, 36, 48, and 54 Mbps, as well as 802.11b data rates of 1, 2, 5.5 and 11 Mbps for WLAN operation. For Bluetooth operation, the module supports Bluetooth 3.0 + High Speed (HS) (also compliant with Bluetooth 2.1 + EDR). For security, the 88W8787 Supports the IEEE 802.11i security standard through implementation of the Advanced Encryption Standard (AES)/Counter Mode CBC-MAC Protocol (CCMP), and Wired Equivalent Privacy (WEP) with Temporal Key Integrity Protocol (TKIP) security mechanisms. For security, the 88W8787 supports the IEEE 802.11i security standard through implementation of the Advanced Encryption Standard (AES)/Counter Mode CBC-MAC Protocol (CCMP), and Wired Equivalent Privacy (WEP) with Temporal Key Integrity Protocol (TKIP) security mechanisms. The module also supports Internet Protocol Security (IPsec) with DES/3DES/AES encryption and MD5/SHA-1 authentication as well as 802.11e Quality of Service (QoS). The module supports dual SDIO host interface for connecting the WLAN and Bluetooth to the host processor. For Bluetooth application the high-speed UART (up to 4MB/s, PCM/Inter-IC Sound (I2S), are supported.