

The CC3100MODR1 is the second-generation series of modules in the SimpleLink family and consists of a Wi-Fi network processor and a power-management subsystem. CC3100MOD minimizes host microcontroller unit (MCU) software requirements and is the ideal solution for embedded applications using any on-board MCU with or without an RTOS. The module comes integrated with all required components including flash, clocks, and RF filter for easy hardware integration and quick time-to-market.

The Wi-Fi network processor subsystem contains a dedicated ARM® Cortex®-M3 MCU to completely offload the host MCU. This subsystem includes 802.11 b/g/n radio, baseband, and medium access control with a powerful crypto engine for fast, secured Wi-Fi, and internet connections with 256-bit encryption. The CC3100MOD supports station, access point, and Wi-Fi Direct modes. The CC3100MOD also supports WPA2 personal and enterprise security and WPS 2.0. The Wi-Fi network processor includes an embedded IPv4 TCP/IP stack. The power-management subsystem includes an integrated DC-DC converter with support for a wide range of supply voltages. This subsystem enables low-power consumption modes such as hibernate with RTC mode, which requires less than 18 μ A of current.

The antenna is external to the module and it is a Taiyo Yuden 2.4GHz Multilayer RadiEdge antenna (MN: AH 316M245001) with a peak gain of 1.9dBi.