

Product Summary

WE10

High performance, Standalone Wi-Fi 802.11 b/g/n Engines

- Standalone WiFi b/g/n 1T1R 2.4 GHz protocol
- 21 x 14 x 2.2 mm
- High performance
- Supports AP, STA and AP+STA
- Supports TCP, UDP, HTTP and SSL and MQTT



Overview

WE10 is a high performance, Wi-Fi 802.11 b/g/n module, targeted for applications where highly reliable wireless connection, High performance and ease of integration are the key requirements.

WE10 is a highly integrated single chip 802.11 b/g/n WiFi module. WE10 has a 1T1R capable WLAN baseband, RF circuitry, built-in 2MB flash and a host for other peripherals. The module ships with either an on board high performance antenna or u.FL connector or just an RF port for the use to connect external antenna.

Key features

Protocol	802.11 b/g/n, 1T1R 2.4 GHz	Modes	Supports AP, STA and AP+STA
Processor	REAL M300(K4) Processor@ 100 MHz	Form factor	21 mm x 14 mm x 2.2 mm
RAM	256 KB	Footprint	Castellations 30
ROM	384 KB	Firmware	Serial Command
Flash	2 MB	Internet services	Supports TCP, UDP, HTTP and SSL and MQTT
Crystals	40 MHz		
Antenna	PCB chip, u.FL Connector		

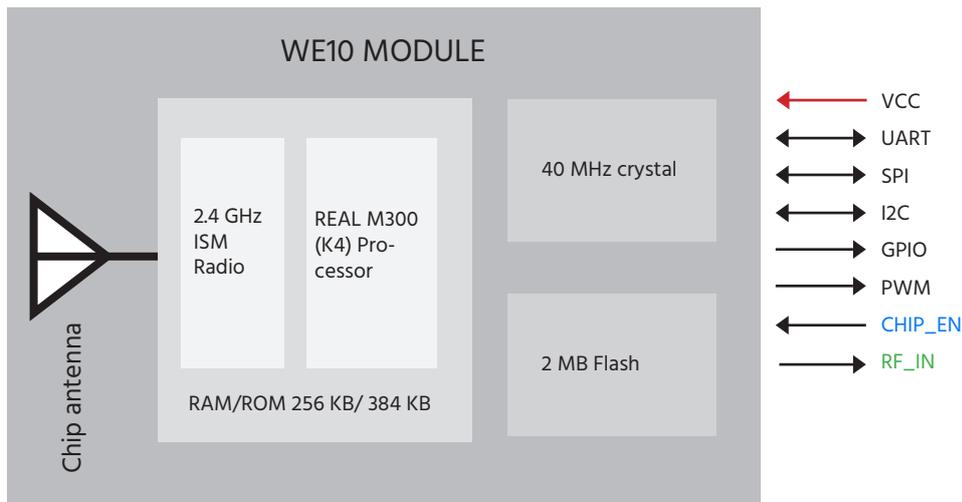
Applications

Gateways
Audio/Video
Smart Toys
Industry 4.0
Health Care
Internet of things



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Block diagram



Specifications

INTERFACES	UART, SPI, GPIO, PWM, I ² C, SDIO
Module FEATURES	<ul style="list-style-type: none">• 802.11 b/g/n, 1T1R, 2.4GHz• Supports Secure Boot• Supports WEP, WPA, WPA2, WPS• 3 x UART• 1 x I2C• 1 x SDIO 2.0 Device, upto 50MHz• 1 x SPI Master Clock upto 25Mbps or 1 x SPI Slave upto 5Mbps• 8 x PWM with configurable duration and duty• 8 x HS Timers• 1 x LP Timer• Chip Enable pin to de-assert the whole module without any external power cut components.
MODULATION MODE	DSSS, OFDM
NETWORK PROTOCOL	TCP/UDP/ARP/ICMP/DHCP/DNS/HTTP/MQTT
INTERFACE PROTOCOL	Celium Connectivity Serial Command

Further information

For contact information, visit www.celiumdevices.com

For more product details and ordering information, see the product data sheet.



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