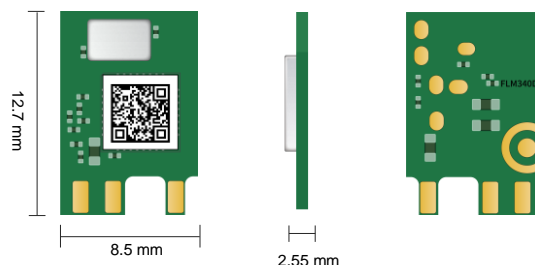


Quectel FLM340D

Wi-Fi 4 & BLE 5.2 Module Compact DIP Package



FLM340D is a cutting-edge MCU Wi-Fi and Bluetooth module launched by Quectel. It boasts a high-performance processor with a frequency of up to 120 MHz and supports IEEE 802.11b/g/n protocol and BLE 5.2. The module features built-in 256 KB RAM, 2 MB or 4 MB flash, ensuring efficient performance. In addition, it complies with WPA-PSK, WPA2-PSK and WPA3-SAE security standards.

FLM340D is in a DIP form factor with an ultra-compact package size of 12.7 mm × 8.5 mm × 2.55 mm, which optimizes the size and cost for end-products and is compatible with diverse designs.

The module supports ADC and PWM functions in QuecOpen® solution, and many low power consumption modes and keep-alive mechanism, which provide flexibility and versatility for a range of applications, especially in smart homes, industrial IoT, consumer electronics and other application scenarios to meet various product needs. It is especially suitable for small-sized, high-temperature IoT devices, such as filament lamps, candle bulb lamps, small spotlights.

The module supports the QuecOpen® solution and standard AT commands, has a compact protocol stack, which can realize efficient product development for customers.



Key Features

- ✓ Wi-Fi 4 module, single band (2.4 GHz) Wi-Fi, 1 × 1 antenna
- ✓ BLE 5.2 and Wi-Fi pairing via Bluetooth
- ✓ Large memory, 256 KB RAM, 2 MB or 4 MB flash
- ✓ Wide operating temperature: -40 °C to +105 °C
- ✓ High stability, high reliability and full compatibility



IEEE 802.11b/g/n



BLE 5.2



Large Memory



Compact Size



Operating Temperature
Range: -40 °C to +105 °C

Wi-Fi 4 & BLE 5.2		FLM340D	
WLAN Protocol		IEEE 802.11b/g/n	
Wi-Fi Frequency Band		2.4 GHz	
Wi-Fi Modulation Mode		BPSK/ QPSK/ CCK/ 16QAM/ 64QAM	
Wi-Fi Operating Mode		AP/ STA	
Bluetooth Protocol		BLE 5.2	
Encryption Mode		WPA-PSK/ WPA2-PSK/ WPA3-SAE	
Internet Protocol		IPv4	
Kernel		ARM968 (up to 120 MHz)	
RAM		256 KB	
Flash		2 MB/ 4 MB ①	
Dimension		12.7 mm × 8.5 mm × 2.55 mm	
Weight		Approx. 0.32 g	
Temperature Range			
Operating Temperature Range		-40 °C to +105 °C	
Storage Temperature Range		-45 °C to +115 °C	
Certification			
Regulatory		Europe: CE America: FCC Canada: IC China: SRRC* Australia/New Zealand: RCM	
Interfaces			
Antenna Interface		× 1 (Pin antenna interface)	
Other Interfaces ②		GPIO/ ADC/ PWM	
Electrical Features			
Power Supply Voltage		3.0–3.6 V, Typ. 3.3 V	
RF Performance			
2.4 GHz		Receiver Sensitivity	Transmit Power
	802.11b/1 Mbps	-96 dBm ±2 dB	16 dBm ±2 dB
	802.11b/11 Mbps	-87 dBm ±2 dB	16 dBm ±2 dB
	802.11g/6 Mbps	-90 dBm ±2 dB	15 dBm ±2 dB
	802.11g/54 Mbps	-73.5 dBm ±2 dB	14 dBm ±2 dB
	802.11n/HT20 MCS 0	-89 dBm ±2 dB	14 dBm ±2 dB
	802.11n/HT20 MCS 7	-71 dBm ±2 dB	13 dBm ±2 dB
BLE	1 Mbps	-95 dBm ±2 dB	6 dBm ±2 dB

Ordering Code	Flash	Operating Temperature Range	Antenna	Development Board (Only for Debugging)
FLM340DAAMD-OL-04	4 MB	-40 °C to +105 °C	Pin antenna interface	FLM340DAATB-PL-04
FLM340DAAMD-OL-02	2 MB	-40 °C to +105 °C	Pin antenna interface	FLM340DAATB-PL-04

NOTE:

- 1. ①: Contact Quectel sales if you need a flash of other specifications.
- 2. ②: See hardware design manual for details of the module interfaces.
- 3. *: In progress.