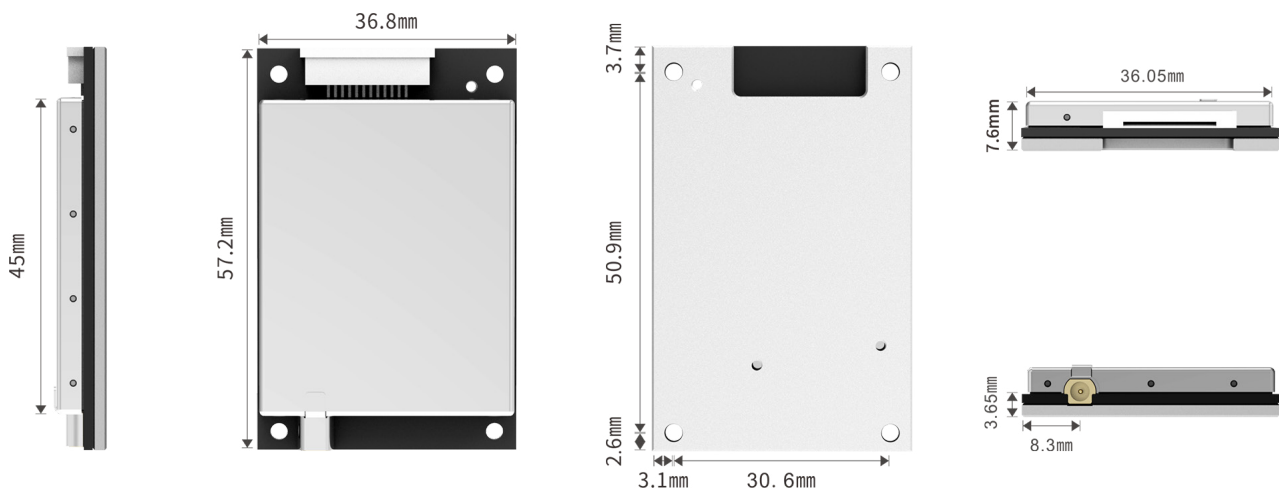


CMX10-1

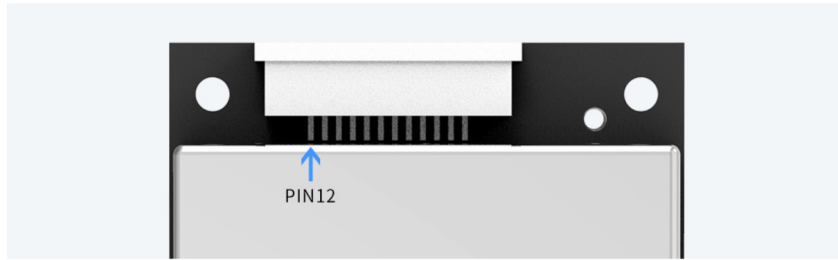
1-Port RFID Module

CM710-1 / CM510-1 / CM310-1 is a 1-port RFID module based on Impinj E710 / E510 / E310 chip. It can be integrated in mobile RFID readers, fixed RFID readers, card issuers and etc. With high integration level, it is small in size, low in power consumption, resistant to electromagnetic interference and good at heat dispersion. The module appeals to challenging industries like warehousing, logistics, apparel, production lines and such.

Dimensions



Interface Definition (12 PIN)



PIN#	Interface	Description
1	VIN	3.5-5.25VDC
2	VIN	
3	GND	Ground
4	GND	Ground
5	EN	High LLT level (>1.2V) boot the module Low LLT level (<0.4V) out the module
6	IO1	Reserved GPIO 3.3V TTL level
7	IO2	Reserved GPIO 3.3V TTL level
8	IO3	Reserved GPIO 3.3V TTL level
9	RXD	UART receive 3.3V TTL level
10	TXD	UART transmit 3.3V TTL level
11	NC	
12	NC	

Specification

Model	
1-Ports RFID Module	CM710-1 / CM510-1 / CM310-1
Development Board Module	CM-X_EDCB
Physical Characteristics	
Dimensions	57.2 mm x 36.8 mm x 7.6 mm
Weight	26.0 g / 0.92 oz.
RFID Features	
RF Chip	Impinj E710 / 510 / 310
Air Interface Protocol	EPCglobal Gen2 (ISO18000-6C)
Working Frequency	865-868 / 920-925 / 902-928 MHz (custom-design for frequency band)
Output Power	1-30dBm adjustable; 1dB step interval; +/- 0.5dB precision
Output Power Flatness	+/- 0.2dB
Antenna Interface	50Ω RF connector MMCX Receptacle
Regions Supported	FCC 902-928 MHz; ETSI 865.6-867.6 MHz; China 920-925MHz; Others for customization (865-868, 902-928MHz)
Receive Sensitivity	CM710-1 : < -87 dBm; CM510-1: < -81 dBm; CM310-1: < -74 dBm;
Tag RSSI	Supported
Antenna Detector	Supported
Ambient Temp Monitor	Supported
Working Mode	Single/DRM

Communication Interface

Connector	12 PIN FPC Connector
Host Communication	UART 3.3V TTL Level Baud Rate: 115200bps

Power Supply

Input Voltage	DC 3.5-5.25V
Power Consumption in RF Output Mode	7.5W
Power Consumption in Standby (EN high TTL level)	0.175W;
Power Consumption in Power Down (EN low TTL level)	42.5uW

User Environment

Operating Temp.	-13°F to 149°F / -25°C to 65°C
Storage Temp.	-40°F to 185°F / -40°C to 85°C
Humidity	10% - 95%

Reading Performance

Fastest Read Rate	CM710-1 : 950+ tags/s; CM510-1: 550+ tags/s; CM310-1: 250+ tags/s;
Reading Range	Up to 10m (with 4dBi antenna)

Notice: Product specifications are subject to change without prior notice. / Model: CM710-1 / CM510-1/CM310-1 / Update Date: 2022-04-02

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