

2D Embedded barcode scanner module

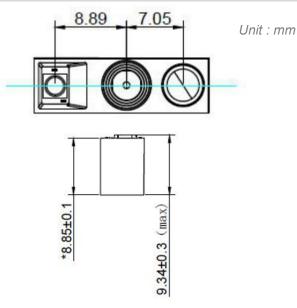
HW-1210

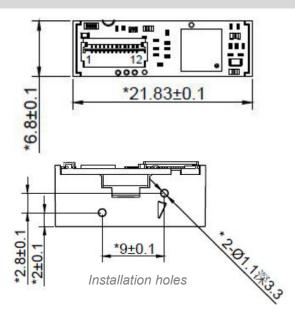
FEATURES & BENEFITS

- 300,000 pixels resolution
- Decoding min barcode density:4mil
- Support 1D/2D barcode on paper and screen
- Interface TTL232 and USB by 12pin FFC
- 6.8mm thickness, convenient installation



Installation Dimensions and Interface definition





Interface definition

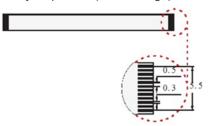
PIN	I/O	Definition	Description
1	-	NC	floating
2	-	vcc	3.3VDC power
3	-	GND	ground
4	Input	RX	TTL serial port reception
5	Output	TX	TTL serial port transmission
6	I/O	D-	USB D-
7	I/O	D+	USB D+
8	Output	PWRDWNMoto_drive	Weak pull-up, high level indicates the engine is in sleep mode Vibration motor drive signal**
9	Output	BEEPER	Control external buzzer Output high level pulse available
10	Output	DLED	Control external Indicator LED Output high level available
11	Input	WAKE	Weak pull-up, low level triggers engine sleep/wake-up
12	Input	TRIG	Trigger signal, low level available

12pin FFC 0.5mm pitch



Connection

 Directly connect to MCU board by 12 pin FFC(Actual usage)



12pin FFC flat cable 0.5pitch

Co-directional transmission

2. Connect with test board



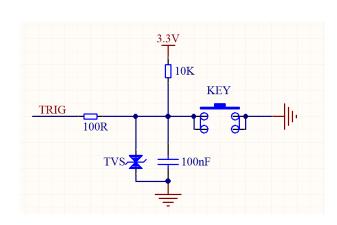
Test board has multiple output interface,5VDC/3.3VDC power

3. Connect to GPIO of RPI



Can connect by ribbon connector Also need use test board

It is for pin9(buzzer control),pin10(LED indicator control),Pin12(trigger pin)



DLED

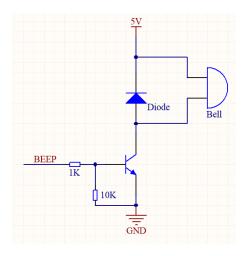
1K

10K

GND

(1)Pin12 trigger pin

(2)Pin10 LED indicator



(3)Pin9 Passive buzzer

Note:

If the module is installed in the window

- 1. If the module is installed in the window, the window needs to use glass, you can use the anti-reflection layer, the red light transmission rate is not less than 90%, and the blur degree is less than 1%.
- 2. The window material should be anti-scratch and anti-fouling, choose high wear-resistant materials or add wear-resistant coatings.
- 3. Check the window surface to make sure it is not scratched, pitted or dirty.
- 4. The window should be on the inside of the device's housing
- 5. The window should be parallel to the scanner.

Application Scenario



HHT,POS,etc.



PDA



self-order machine



Self-service machine



Factory traceability



Vending machine

Technical Specification

HW-1210 Parameters				
	Image Sensor	CMOS		
	Resolution	300,000 pixels,640*480pixels,30fps		
	Decoding capacity	Support paper and screen barcodes		
		2D: QR Code、PDF417、DataMatrix (ECC200)、Micro QR		
		Micro PDF417, Maxi Code, Aztec, Hanxin		
		1D: EAN13、EAN8、UPC-A、UPC-E0、UPC-E1、Code128、		
		Code39、Code93、CodaBar 、Interleaved 2 of 5、Industrial 25、		
		Matrix 2 of 5、Code11、 MSI Plessey 、RSS-14、limited RSS、		
		Expanded RSS、Standard 2 of 5、Plessey、ChinaPost 25 etc. all		
Reading		normal 1D		
performance	Precision	1D ≥4mil; 2D ≥5mil		
	Light Source	Visible Red Diode, White LED for illumination		
	View Angle	42° (H) x32° (V)		
	Scan Angle	Rotation360 $^{\circ}$,tilt \pm 60,skew \pm 60		
	Min Contrast	20%		
	Trigger Mode	Manual, Continuous, Auto sensing, Host Mode		
	Typical DOF	EAN13 (13mil) 45-280mm Code 128(15mil)50-320mm		
		QR code(15mil)30-210mm Code39(8mil)30-190mm		
		Performance may be impacted by bar code quality and environmental conditions		
	Interface	TTL232,USB(HID-KBW,virtual serial port)by 12pin FFC flat cable		
	Working Voltage	DC 3.3V		
Mechanical and	Current	250mA(max) 20mA(standby)		
electrical	Dimensions	$22(W)\times9.5(D)\times6.8(H)$ mm		
	Weight	2g		
	Indication	LED(fill light),can trigger external buzzer and LED indicator		
Environ	Working Tem	-20~60℃		
Environment Request	Storage Tem	-40~70℃		
	Humidity	5%-95%(Non-condensing)		