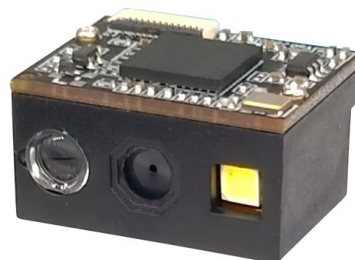


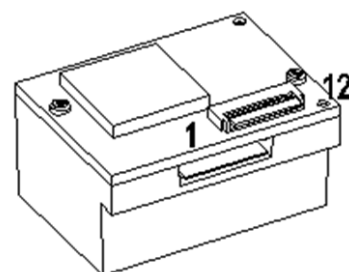
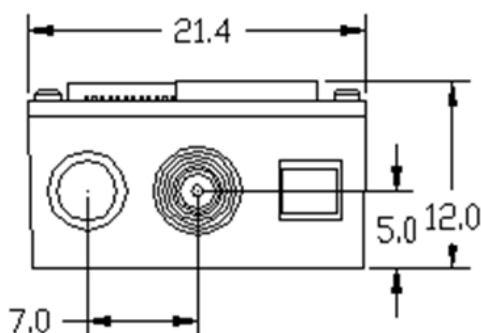
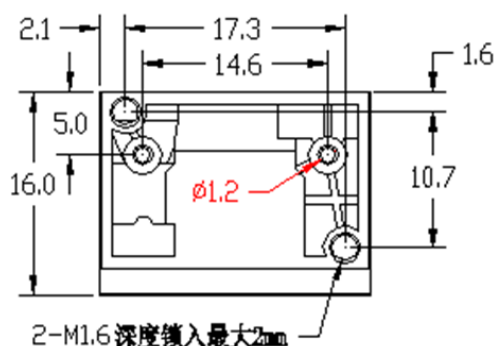
## HW-1280

### FEATURES & BENEFITS

- 1,000,000 pixels resolution
- Decoding min barcode density:3mil
- Support 1D/2D barcode on paper and screen
- Decode long PDF 417,large QR, up to 2000bytes.
- Interface TTL232 and USB by 12pin FFC
- Small size, fast and convenient installation



### Installation Dimensions and Interface definition



#### Interface definition

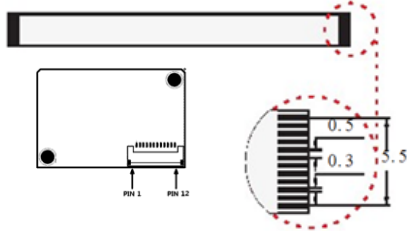
PIN	I/O	Definition	Description
PIN 1	-	NC	floating
PIN 2	-	VCC	3.3VDC power
PIN 3	-	GND	ground
PIN 4	Input	RX	TTL serial port reception
PIN 5	Output	TX	TTL serial port transmission
PIN 6	I/O	D-	USB D-
PIN 7	I/O	D+	USB D+
PIN 8	-	NC	floating
PIN 9	Output	BEEPER	Control external buzzer High level valid, low level free
PIN10	Output	DLED	Control external Indicator LED High level valid, low level free
PIN11	-	NC	floating
PIN12	Input	TRIG	Trigger signal

#### Description of electrical characteristics

1. Power voltage:3.3VDC $\pm$ 5% Supply ripple need less than 100mV
2. Serial port TTL level:3.3VDC $\pm$ 5% ripple need less than 100mV
3. Control pins: 3.3VDC $\pm$ 5% ripple need less than 100mV
4. Pin9 is a output pin, that is used for controlling the buzzer in external circuit(if client need), when there are operations for reader ,pin9 will send out a **high level**(PWM signal, set frequency by scanning setting code, refer to the Chapter 9.1 in user manual)  
The premise :enable buzzer
5. Pin10 is a output pin, that is used for controlling the indicator LED in external circuit(if client need), when there are operations for reader, pin10 will send out a **high level**, refer to the chapter 9.2 in the manual  
The premise :enable LED indicator.
6. Pin 12—trigger signal, keep low level for more than 10ms,scanner will start to scan, used for controlling the scanner to work according to the software setting of client.

## Connection

1. 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



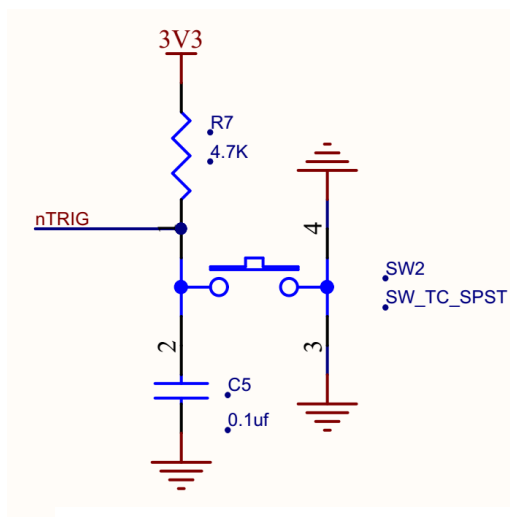
Test board has multiple output interface, 5VDC/3.3VDC power  
USB/RS232(RJ45), TTL(ribbon, UART)

3. Connect to GPIO of RPI

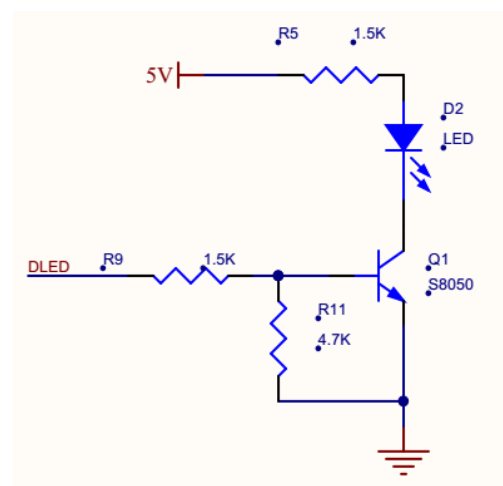


Can connect by ribbon connector  
Also need use test board

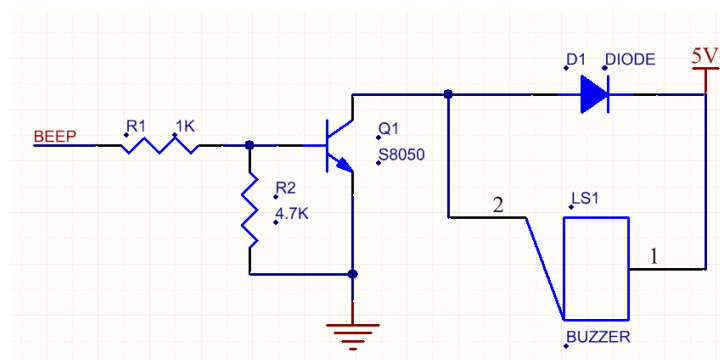
It is for pin9(buzzer control), pin10(LED indicator control), Pin12(trigger pin)



(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,PDA etc.



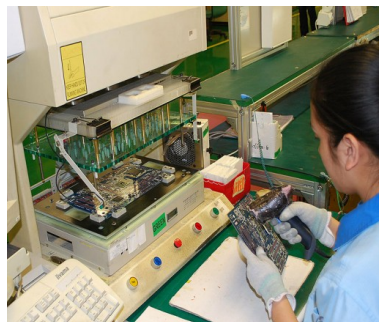
Cabinet for logistic



self-order machine



Self-service machine



Factory traceability



Vending machine

# Technical Specification

## HW-1280 Parameters

Reading performance	Image Sensor	CMOS
	Resolution	1,000,000 pixels,1200*800pixels,60fps
	Decoding capacity	Support paper and screen barcodes
		2D: QR,PDF417, Micro PDF417, Data Matrix, Maxicode, Aztec, Hanxin code etc.
		1D: EAN,UPC,Code 39,Code 93,Code 128,UCC/EAN 128, Codabar, Interleaved 2 of 5, ITF-6,ITF-14,ISBN,ISSN, MSI-Plessey GS1 Databar,GS1 Composite Code, Code 11, Industrial 25, Standard 25,Plessey,Matrix 2 of 5 etc. all normal 1D
	Precision	3mil
	Light Source	620nm Visible Red Diode, red LED for illumination
	View Angle	66° (H) x50° (V)
	Scan Angle	Rotation360°, tilt±65°, skew±65°
	Min Contrast	20%
Mechanical and electrical	Trigger Mode	Manual, Continuous, Motion sensing, Host Mode etc.
	Typical DOF	EAN13 (13mil) 50-260mm    Code 39(5mil)40-220mm
		QR code(20mil)25-320mm    PDF417(6.67mil)30-180mm
	Performance may be impacted by bar code quality and environmental conditions	
	Interface	TTL232,USB(KBW/COM) by 12pin FFC flat cable(0.5mm pitch)
	Working Voltage	DC 3.3V
	Current	160mA(working)    20mA(USB standby)    2mA(TTL standby)
Environment Request	Dimensions	21.6(W)×16(D)×12(H)mm
	Weight	3.5g
	Indication	LED fill light (can trigger external buzzer and LED indicator)
	Working Tem	-20~60℃
	Storage Tem	-40~70℃
	Humidity	5%-95%(Non-condensing)
	Light brightness	0-100000LUX