

2D Embedded barcode scanner module

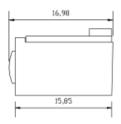
HW-1258

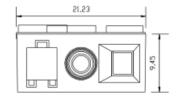
FEATURES & BENEFITS

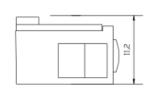
- 32-bit 1GHz frequency CPU
- Decoding min barcode density:5mil
- Support 1D/2D barcode on paper and screen
- Extremely high sensitivity, quick scanning
- Interface TTL232 and USB by 12pin FFC
- High temperature resistance -40~105℃
- Small size, fast and convenient installation

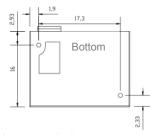


Installation Dimensions and Interface definition









Interface definition

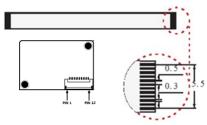
| PIN | I/O | Definition | Description |
|-------|--------|------------|--------------------------------|
| PIN 1 | - | NC | floating |
| PIN 2 | - | VCC | 3.3VDC power |
| PIN 3 | - | GND | ground |
| PIN 4 | Input | RX | TTL serial port reception |
| PIN 5 | Output | TX | TTL serial port transmission |
| 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 |
| PIN10 | Output | DLED | Control external Indicator LED |
| PIN11 | - | NC | floating |
| PIN12 | Input | TRIG | Trigger signal |

Description of electrical characteristics

- Power voltage:3.3VDC ± 5% Supply ripple need less than 100mV
- 2. Serial port TTL level:3.3VDC \pm 5% ripple need less than 100mV
- Control pins: 3.3VDC±5% 3. ripple need less than 100mV
- 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
- 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.
- 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



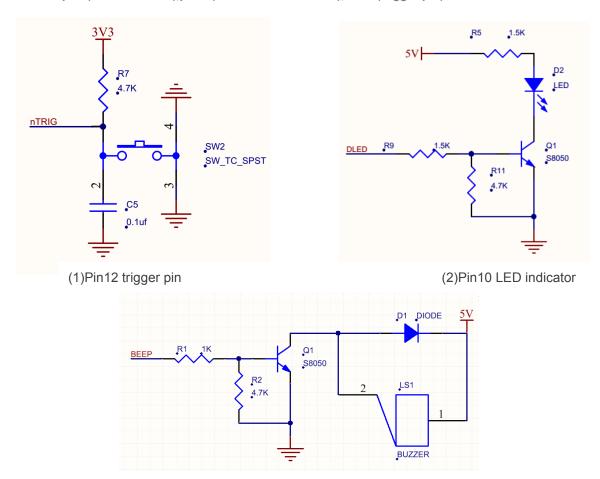
Test board has multiple output interface,5VDC/3.3VDC power USB/RS232(RJ45),TTL(ribbon, UART) 3.Connect to GPIO of RPI



Can connect by ribbon connector Also need use test board

Reference Circuit

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



(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-service machine

Technical Specification

| HW-1258 Para | ameters | | |
|---------------------------|-------------------|--|--|
| | Image Sensor | CMOS | |
| | Resolution | 300k pixels,648*488,30fps | |
| | | Support paper and screen barcodes | |
| | | 2D: QR,PDF417,Micro PDF417, Data Matrix, Aztec, etc. | |
| | Decoding capacity | 1D: Code 39,Code11, Code 128, UPC-A, UPC-E,UPC-E1, | |
| | Decoding capacity | EAN-8,EAN-13,EAN-128, UCC128, ISBN/ISSN, Code32,Code39 | |
| | | full ASCII, Code 93, Interleaved 2 of 5,GS1,Matrix 2 of 5, | |
| | | Industrial 2 of 5, China post, UK/Plessey etc. all normal 1D | |
| Reading | Precision | 5mil | |
| performance | Light Source | 620nm Visible Red Diode, white LED for illumination | |
| | View Angle | 66° (H) x50° (V) | |
| | Scan Angle | Rotation360°, tilt±40°, skew±60° | |
| | Min Contrast | 30% | |
| | Trigger Mode | Manual, Continuous, Motion sensing, Host ,batch processing etc. | |
| | | Code 128(6mil) 30-100mm | |
| | Typical DOF | QR code(5mil)30-60mm QR code(20mil)40-220mm | |
| | | Performance may be impacted by bar code quality and environmental conditions | |
| | Interface | TTL232,USB by 12pin FFC flat cable | |
| | Working Voltage | DC 3.3V | |
| Machanianland | Current | 190mA(Max) 120mA(working) 48mA(USB standby) | |
| Mechanical and electrical | | 2mA(TTL standby) | |
| electrical | Dimensions | 21.2*16.9*11.2mm | |
| | Weight | 5g | |
| | Indication | LED(fill light),can trigger external buzzer and LED indicator | |
| | Working Tem | -10~50℃ | |
| Environment | Storage Tem | -40~70℃ | |
| Request | Humidity | 5%-95%(Non-condensing) | |
| | Drop Test | 1.8M(6ft) | |