

Model: MIR5 Embedded 2D Barcode Scanning Module Specification V1

#### Introduce

MIR5 is a high performance, cost-effective embedded 2D barcode scanning module. It delivers the same high-quality when your products need to capture 1D, 2D bar codes.

It has good capability to read bar codes that are printed on paper labels or displayed on the screen of a mobile phone or computer; and the rapid scanning speed that protects worker productivity and the customer experience. With MIR5, you can create products that will make a difference for your customers — and their customers. It is designed for various built-in and OEM solutions, such as self-service kiosks, POS (Point-of-Sales) terminals, ATM, price checkers, healthcare and mobile device solutions etc.

#### **Features**

- Easily integrated with various OEM application while 1D and 2D barcode scanning.
- Excellent reading performance for barcodes on screen and paper.
- It is easy to integrate into other equipment with small size and multiple fixing holes.
- Supports multiple working modes (manual, continuous, induction) to meet different requirements.

### **Interface Definition**

MIR5 uses 12pin pitch 0.5 data interface. The following table lists the names and signal descriptions of each PIN of the 12PIN-connector.



PIN	In/out	Signal	Definition
PIN 1	-	NC	-
PIN 2	Power	VCC	3.3V/5.0V input
PIN 3	Power	GND	Ground
PIN 4	input	RXD	TTL-RS232 Receive
PIN 5	output	TXD	TTL-RS232Send
PIN 6	input	D-	USB_D- Signal
PIN 7	output	D+	USB_D+ Signal
PIN 8	output	-	-
PIN 9	output	beeper	Passive buzzer output signal, idle low level
PIN 10	output	Good Read	Decoding successful prompt output signal, idle
			low level
PIN 11	input	-	-
PIN 12	input	trigger	keep low level to trigger a scan

# Dimension (unit: mm)



#### **Physical Characteristics**

Dimensions: 32mm x13.4mm x 13.4mm	Weight: 6g
Voltage: 3.3-5V	Starting Current: 240mA
Stand-by Current: 80mA	Work Current: 300mA

#### **Performance Characteristics**

Image (Pixels): 1280pixels (H) x 1024 pixels (V)				
Light Source: (Aimer) Green color LED; (Illumination) White color LED				
Reading Precision:1D ≥ 4mil/0.1mm (PCS90%,CODE 39;2D≥8mil/0.2mm@PCS90% QRCode				
Field of View: 44° Horizontal, 33° Vertical				
Roll / Pitch / Yaw: 360°, ±65°, ±65°				
Print Contrast : 20% minimum reflective difference				
Interfaces Supported: <b>USB</b> , TTL(Optional)				
Interface cable: FPC 12PIN Pitch 0.5, length 5cm				

Motion Tolerances: 1m/s

#### Symbology Decode Capability

1-D: Coda bar, Code 39, Code 32 Pharmaceutical (PARAF), Interleaved 2 of 5, NEC 2 of 5, Code 93, Straight 2 of 5 Industial, Straight 2 of 5 IATA, Matrix 2 of 5, Code 11、Code 128, GS1-128, UPC-A, UPC-E, EAN/JAN-8, EAN/JAN-13, MSI, GS1 DataBar Omnidirectional, GS1 DataBar Limited, GS1 DataBar Expanded, China Post(Hong Kong 2 of 5), Korea Post 2-D: QR Code, Micro QR Code, Data Matrix, PDF417, Micro PDF 417, MaxiCode, Aztec, HanXin Code、Code block A、Code block F、GS1 Composite Codes

#### **User Environment**

Operating Temperature:-20°C to 60°CStorage Temperature:-30°C to 70°CHumidity:5% to 95% relative humidity,non-condensingShock Specifications :2000 G, 0.7 ms, half sinus, 3 axesAmbient Light Immunity:0-100,000 Lux.

## **Decode Ranges**

- Code39(5mil) : 7-25cm
- Code39(13mil) : 6-47cm
- QR code (20mil) : 7-30cm
- ENA13(13mil) : 6-45cm

Performance may be impacted by bar code quality and environmental conditions