



MT88L 2D Scan Engine

MT88L features a high-performance megapixel sensor, high-speed processor and a precision crosshair Laser aimer, delivering fast and accurate scanning in a compact form factor. Its all-in-one design combines advanced capabilities with easy integration, making it an ideal choice for a wide range of applications, including retail, logistics, field service, mobile POS, and inventory management.

Industry-Leading Performance in a Compact Form

- High-visibility crosshair Laser aimer for accurate targeting
- Equipped with a high-quality megapixel sensor
- Delivers aggressive reading distance of up to 720mm
- Supports all major 1D, 2D, postal codes and OCR fonts

Easy and Flexible Operations

- Small Size: W21.5 x L10.5 x H7 mm
- Interface: UART / USB HID / USB VCP
- Compatible with existing global leaders
- Minimal integration time and cost



Optic & Performance	
Light Source	White LED, Visible red Laser
Sensor	1280 x 800
Resolution	3.3 mil
Scan Angle	Horizontal 39° , Vertical 26°
Pitch / Skew / Roll Angle	±60° / ±60° / ±360°
Print Contrast Ratio	10%
Typical D.O.F. (@800 lux)	UPC / EAN 13 Mil: 50 ~ 720 mm QR Code 15 Mil : 30 ~ 400 mm
Physical Characteristics	
Dimension	W21.7 x L10.5 x H7 mm
Weight	5 g
Color	Black
Material	Plastic
Connector	12pin ZIF (pitch=0.5mm)
Cable	12pin FFC cable (pitch=0.5mm)
Electrical	
Operation Voltage	3.2 ~ 3.6 VDC ±5%
Working Current	Typ. 280 mA
Standby Current	Typ. 40mA (UART), Typ. 45mA (USB)
Idle Current (Sleep Mode)	Max. 5mA
Connectivity	
Interface/ Profile	UART / USB HID / USB VCP
User Environment	
Operating Temperature	-20°C ~ 65°C
Storage Temperature	-40°C ~ 70°C
Humidity	5%~95% RH (Non-condensing)
Ambient Light	100,000 Lux (Sunlight)
Regulatory	
ESD	Functional after 4KV contact, 8KV air discharge
EMC/RF	TBA
Environmental	RoHS 2.0
Symbolologies	
1D	Code128, Code39, Code93, EAN-13, EAN-8, UPC-E, UPC-A, Interleaved 2 of 5, Industrial 2 of 5, Matrix 2 of 5, GS1 Databar, Codabar, MSI Plessey, Code 11, Standard 2 of 5, Plessey, ChinaPost 2 of 5, Code 16K, Code49, GS1 Composite
2D	PDF417, MicroPDF417, Data Matrix, MaxiCode, QR Code, Micro QR Code, Aztec, Han Xin, GridMatrix
Postal Codes	Japanese Post, Australian Post, Korean35, MailMark, Netherlands KIX, UK Postal, US Postal, US Planet, USPS_4CB
OCR	OCR-B (Passport MRZ)

* All specifications are subject to change without notice.



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