# **Scan Engine**







## MT40/MT40W Scan Engine

The MT40 (long range) and MT40W (wide angle) 1D barcode scan engine not only deliver high-speed scanning but also provide versatility needed in various applications. MT40 and MT40W operate with a wide range of input voltage from 3.3V to 5V and blend powerful scanning performance for portable and fixed devices applications.

### **Outstanding Performance from Near to Far**

- 65° wide scan angle and 3 Mil resolution (MT40W)
- Long scan distance up to 540mm (MT40)
- Read all major 1D barcodes in the market
- Support real-time dynamic configurations

### Useful Demo Kit: MB100 Multi I/O Board



#### **Easy and Flexible Operations**

• Size: W32 x L24 x H11.6 mm

• Interfaces: USB HID, USB VCP and UART





Optic & Performance	
Light Source	625nm visible red LED
Sensor	Linear Image Sensor
Scan Rate	510 Scans/Sec
Resolution	MT40: 4Mil/ 0.1mm MT40W: 3Mil/ 0.075mm
Scan Angle	MT40: 40° MT40W: 65°
Pitch / Skew / Roll Angle	±60° / ±45° / ±40°
Print Contrast Ratio	30%
Width of Field	MT40: 200 mm (13Mil Code39) MT40W: 110 mm (13Mil Code39)
Typical D.O.F ( @800 lux)	MT40: UPC/ EAN 13 Mil: 35 ~ 421 mm MT40W: UPC/ EAN 13 Mil: 20 ~ 188 mm
Physical Characteristics	
Dimension	W32 x L24 x H11.6 mm
Weight	8g

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Color	Black
Material	ABS
Connector	12pin ZIF (pitch=0.5mm)
Cable	12pin flex cable (pitch=0.5mm)
Electrical	
Operation Voltage	3.3~5.0VDC±5%
Working Current	< 160mA
Standby Current	< 80mA
Idle Current (Sleep Mode)	< 1uA
Connectivity	

Interface/ Profile	UART, USB HID, USB VCP
User Environment	
Operating Temperature	-20°C ~ 60°C
Storage Temperature	-20°C ~ 60°C
Humidity	0%~95% RH (Non-condensing)
Drop Durability	1.5M
Ambient Light	70,000 Lux (Sunlight)

Regulatory		
ESD	Functional after 4KV contact, 8KV Air discharge	
EMC	FCC Part 15B Class B, CE EN55022/24/32	
Safety Approval	EN/IEC62471 (Exempt Group)	
Environmental	RoHS 2.0, WEEE	

Symbologies	
1D	UPC-A/UPC-E, EAN-8/EAN-13, Industrial 2 of 5, Codabar, Matrix 2 of 5, Code 11, Code 93, Code 32, Code 128,
	Standard Code 39, Full ASCII Code 39, Interleaved 2 of 5, China Postal Code, MSI Plessy Code, UK Plessy Code, EAN/UCC 128, Telepen Code, IATA Code, GS1 Databar

<sup>\*</sup> All specifications are subject to change without notice.



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