

## MT83D 2D Mini Scan Engine

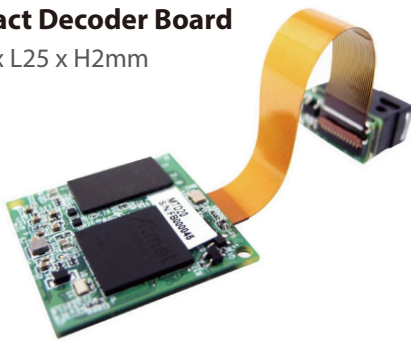
MT83D is designed to deliver high performance and affordable OEM 2D barcode scanning solution. MT83D consists of a mini imager and a decoder board that can be easily integrated into host system. With the ability to scan 2D barcodes from as far as 438mm away with motion tolerance of 28 cm/sec, MT83D 2D barcode scan engine is an ideal choice for both portable and fixed devices.

### High Performance 2D Scanning Solution

- Low profile imager is the smallest in its class
- Outstanding 1D and 2D scanning performance
- Integrated into the most space-constrained product
- Support real-time dynamic configurations

### Compact Decoder Board

- W25 x L25 x H2mm



### Easy and Flexible Operations

- Small Size : W14 x L10 x H6.8 mm
- Interfaces : USB HID, USB VCP and UART



Optic & Performance	
Light Source	3000K CCT white LED, 625nm visible red LED dot aimer
Sensor	1280 x 800 pixels
Scan Rate	60 Frames/Sec
Resolution	4mil/ 0.1mm (Code 39), 8mil/ 0.2mm (QR Code)
Scan Angle	Horizontal 42°, Vertical 27°
Pitch / Skew / Roll Angle	±60° / ±30° / 360°
Print Contrast Ratio	30%
Width of Field	110 mm (13Mil Code39)
Typical D.O.F ( @800 lux)	UPC/EAN 13 Mil : 38 ~ 319 mm QR Code 40 Mil : 75 ~ 438 mm
Physical Characteristics	
Dimension	MT83D: W14 x L10 x H6.8 mm MD20 decoder board: W25 x L25 x H2 mm
Weight	MT83D: 1g MD20 decoder board: 2.7g
Color	Black
Material	ABS
Connector	MT83D Imager: 25pin ZIF (pitch=0.3mm) MTD20 Decoder: 20pin board-to-board (pitch=0.4mm)
Cable	MT83D to MTD20 Decoder: 25pin flex cable (pitch=0.3mm) MTD20 to Host: 12pin flex cable (pitch=0.5mm)
Electrical	
Operation Voltage	3.3 VDC±5%
Working Current	< 270mA
Standby Current	< 190mA
Connectivity	
Interface/ Profile	UART, USB HID, USB VCP
User Environment	
Operating Temperature	0°C ~50°C
Storage Temperature	-20°C ~60°C
Humidity	0%~95% RH (Non-condensing)
Drop Durability	1.5M
Ambient Light	100,000 Lux (Sunlight)
Regulatory	
ESD	Functional after 4KV contact, 8KV Air discharge (requires housing that is designed for ESD protection and stray from electric fields)
EMC	FCC Part 15B Class B, CE EN55024/32
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 Plessey Code, UK Plessey Code, EAN/UCC 128, Telepen Code, IATA Code, GS1 Databar
2D	QR Code, Data Matrix, PDF417, Aztec

\* All specifications are subject to change without notice.



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