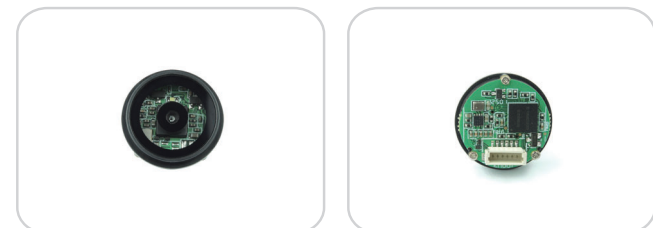# MT688A 2D Scan Engine

MT688A combines fast, accurate scanning with versatile connectivity in a compact form, making it ideal for self-service kiosks, access control, and smart elevator systems. It effortlessly decodes 1D/2D barcodes on products or mobile devices, streamlining checkout, enhancing security, and improving user convenience. With USB, HID, and UART interfaces, it integrates easily into various systems, while stable performance ensures long-term reliability with minimal maintenance.

High-Performance Scanning in a Miniature Module

- Wide-Angle Optics (67.4° x 56°)
- Fast, Accurate 1D/2D Decoding
- Multiple Interface Options
- Real-Time Configuration Support

Compact Design, Effortless Integration

- Small Size: φ: 22mm, H:10.3mm
- Interface: UART / USB HID / USB VCP
- Fits into Space-Constrained Devices
- Low Development Effort, High Compatibility

Optic & Performance	
Light Source	White LED
Sensor	640 x 480
Resolution	5mil/ 0.125mm (1D), 7.5mil/ 0.1875mm (2D)
Scan Angle	Horizontal 67.4° , Vertical 56°
Pitch / Skew / Roll Angle	±55° / ±55° / ±360°
Print Contrast Ratio	20%
Typical D.O.F (@800 lux)	13 Mil UPC/EAN: 30 ~ 110mm
Physical Characteristics	
Dimension	φ: 22mm, H:10.3mm
Weight	1.3 g
Color	Black
Material	Plastic
Connector	6pin Wafer (pitch=1.0mm)
Electrical	
Operation Voltage	3.3 VDC , 5V (Customizable)
Working Current	< 170 mA @3.3V
Connectivity	
Interface/ Profile	UART TTL / USB HID / USB VCP
User Environment	
Operating Temperature	-20°C ~ 60°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
Symbologies	
1D	EAN-13, EAN-8, UPC-A, UPC-E, Code 39, Code 128, ISBN, Code 93, Code 11, GS1-128, GS1 Databar, Interleaved 2 of 5, Matrix 2 of 5, Industrial 2 of 5, Codabar, Standard 2 of 5, MSI Plessey, GS1 Composite
2D	PDF417, Data Matrix, QR Code, Aztec, MaxiCode

＊ All specifications are subject to change without notice.

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