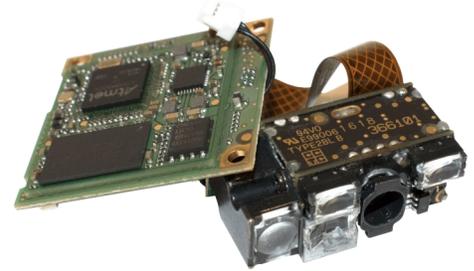


Product Overview

MP1 Barcode Scan Module

The MP1 represents the latest technology in OEM embedded barcode scan modules. It incorporates an ultra compact high performance 2D Mega Pixel imager along with single decode and interface board. The MP1 scan module supports several options for scanning imagers including standard range, close range, and wide angle. This flexibility allows the MP1 to meet a wide range of barcode scanning applications in Medical devices, lab instruments, kiosks, vending machines, and other customer facing applications. Designed for OEM barcode scan applications, the MP1's close range imager option is suited for reading barcodes at close range while the wide angle imager allows for excellent field of view in reading test tubes in medical applications. The MP1 delivers outstanding motion tolerance and decodes poorly printed barcodes as well as barcodes displayed on mobile devices. Additionally the small size makes it ideal for OEM use in size constrained applications. The MP1 also features a multifunction interface board with an integrated beeper, trigger button, easy mounting, and multi-connectivity options. The interface board significantly reduces engineering and implementation time for the scan engine.



MP1



MP1 with Integrated
Interface board

Features

- Designed for easy integration
- Compact size is able to fit into space constrained applications
- Excellent reading of 1D or 2D codes on printed materials or displayed on electronic devices
- Integrated interface board
- Snappy reading and high motion tolerance
- Highly visible center cross and four corner dots aiming system
- Green Spot technology for visual good read feedback

Applications



The MP1 is perfectly suited for OEM applications and specifically designed for embedded barcode requirements in:

- Medical devices
- Lab Automation systems
- Kiosks
- Vending machines
- Bedside point of care devices
- Lottery Machines
- Self Service Systems
- Loyalty reward programs

Technical Specifications

DECODING CAPABILITY

1D / LINEAR CODES	Auto discriminates all standard 1D codes including GS1 DataBar™ linear codes.
2D CODES	Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Code
POSTAL CODES	Australian Post; British Post; China Post; IMB; Japanese Post; KIX Post; Korea Post; Planet Code; Postnet; Royal Mail Code (RM4SCC)
STACKED CODES	EAN/JAN Composites; GS1 DataBar Composites; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF; MicroPDF417; PDF417; UPC A/E Composites
DIGITAL WATERMARKS	Support for Digimark® Barcode

CURRENT CONSUMPTION (RMS @ 5V)

CURRENT CONSUMPTION	Operating (scan engine running/decoding): 235mA Idle (scan engine stop/ready): 45mA Low Power (standby/suspend): 5mA Peak Current: <400mA (<500 us peak width)
---------------------	---

ELECTRICAL

INPUT VOLTAGE	3.2V to 5.5V - USB power compliant (increased range after startup: 3V to 5.5V)
---------------	--

ENVIRONMENTAL

AMBIENT LIGHT	0 - 100,000 lux
HUMIDITY	95% (NON -CONDENSING)
SHOCK	2000 G ± 5% (at -30 and 70° C for a period of 0.85 ± 0.05msec); 2500 G at 23 °C at 0.85 m sec.
TEMPERATURE	Operating: -30 to 55 °C / -22 to 131 °F Storage/Transport: -40 to 70 °C / -40 to 158 °F
ESD PROTECTION	±2.0 KV (Air Discharge)

INTERFACES

INTERFACES	MicroUSB, DF13 Pluggable Connector, RJ45
------------	--

PHYSICAL CHARACTERISTICS

DIMENSIONS (Scan Engine)	26mm x 13mm x 6.3mm
DIMENSIONS(Decoder)	36.2mm x 37.2mm x 15.7mm
WEIGHT	15.0 g / 0.52 oz

SOFTWARE INTERGRATION

OPERATING SYSTEM SUPPORT	WinCE; Android; Windows; Linux
--------------------------	--------------------------------

BASE MODELS

OEM barcode scan module remote scan engine mega pixel std range imager, USB, UART	MP1-RD-001
OEM barcode scan module remote scan engine mega pixel close range, USB, UART	MP1-RD-002
OEM barcode scan module remote scan engine mega pixel wide angle/close range, USB, UART	MP1-RD-003
OEM barcode scan module remote scan engine, integrated carrier, mega pixel wide angle/close range imager, USB, RS232	MP1-RC-003
OEM barcode scan module on integrated carrier board, mega pixel wide angle/close range, USB, RS232	MP1-IC-003

READING PERFORMANCE

IMAGER SENSOR	MP: 1280 x 960 pixels
LIGHT SOURCE	Aiming: 650 nm VLD Illumination: White LEDs
PRINT CONTRAST RATIO (MIN)	25%
FIELD OF VIEW	RD-001: 42° H x 32° V RD-003: 52° H x 40° V
READING ANGLE	Pitch: +/- 60°; Roll (Tilt): +/-180°;Skew (Yaw): +/- 60°
READING INDICATORS	Green Spot good read confirmation (optional),
RESOLUTION (MAXIMUM)	1D Linear: 2.5 mils (RD-002 and RD-003) - 3mils (RD-001); DataMatrix: 6 mils (RD-002 and RD-003) - 7.5 mils (RD-001); PDF417: 3 mils (RD-002 and RD-003) - 6.6 mils (RD-001)

READING RANGES

TYPICAL DEPTH OF FIELD	Minimum distance determined by symbol length and scan angle. Printing resolution, contrast, and ambient light dependent.
1D / 2D CODES: (RD-002) Models	3 mils Code 39: 6.5 - 20.0cm / 2.5 - 7.8in 5 mils Code 39: 3.5 - 29.0 cm / 1.3 - 11.4in 10 mils Data Matrix: 7.5 - 26.0 cm / 2.9 - 10.2in 13 mils EAN-13: 4.5 - 42.0cm / 1.7 - 16.5in 15 mils DataMatrix: 5.5 - 32.0 cm / 2.1 - 12.5in 20 mils Code 39: up to 60.0 cm / up to 23.6in
1D/2D CODES: (RD-001) Models	3 mils Code 39: 13.0 - 22.0cm / 5.1 - 8.6in 5 mils Code 39: 8.5 - 36.0 cm / 3.3 - 14.1in 10 mils Data Matrix: 10.0 - 28.0 cm / 3.9 - 11.0in 13 mils EAN-13: 4.5 - 74.0cm / 1.7 - 29.1in 15 mils DataMatrix: 6.5 - 40.0 cm / 2.5 - 15.7in 20 mils Code 39: up to 110.0 cm / up to 43.3in
1D/2D CODES: (RD-003) Models	3 mils Code 39: 5.0 - 18.0cm / 2.0 - 7.1in 5 mils Code 39: 3.0 - 24.0 cm / 1.2 - 9.4in 10 mils Data Matrix: 4.0 - 20.0 cm / 1.6 - 7.9in 13 mils EAN-13: 3.5 - 37.0cm / 1.4 - 14.6in 15 mils DataMatrix: 3.0 - 25.0 cm / 1.2 - 9.8in 20 mils Code 39: up to 60.0 cm / up to 23.6in

SAFETY & REGULATORY

ENVIRONMENTAL COMPLIANCE	Complies to China RoHS; Complies to EU RoHS
LASER CLASSIFICATION	Caution Laser Radiation - Do not stare into beam IEC 60825 Class 2

WARRANTY

Warranty	18-Month Factory Warranty
----------	---------------------------

UTILITIES

APPLICATION	DSCU - Decoded Scan Engine Configuration Software
-------------	---