

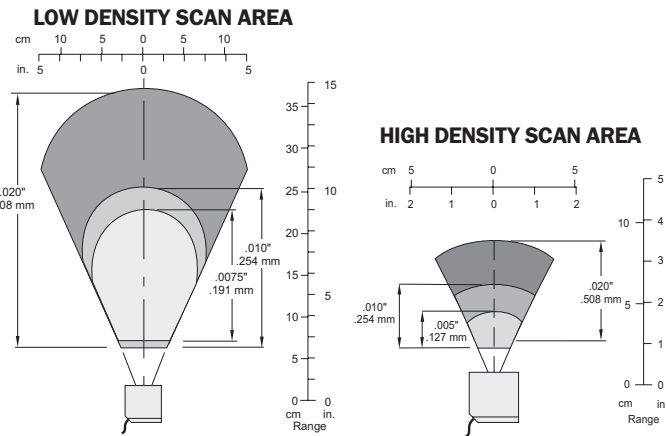
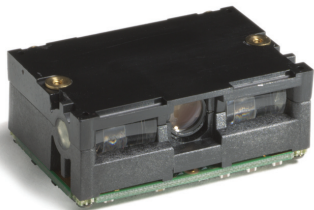
MS-3

For simple embedded bar code scanning, the MS-3 Engine offers small size and reliable performance with minimal budget impact.

One of the smallest and lightest scan engines in its class, the **MS-3 Engine** is ideal for embedded bar code applications where space is restricted or weight is a consideration. Designed for industry standard form factor, it offers embedded power management, bi-directional serial link for dynamic configuration, and upgradeable flash memory.

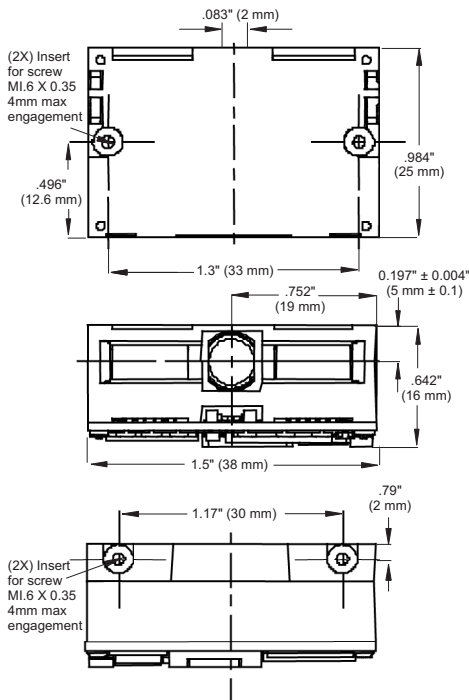
The **MS-3 Engine** is part of Microscan's **MS-3** trio that also includes the **MS-3 CCD** and the **MS-3 Laser**. The **MS-3 Engine** is the base model offering fewer features than the CCD and Laser options but at considerable budget savings.

ENGINE



MECHANICAL (ACTUAL SIZE)

Weight: 17 g (0.6 oz.)



Min. X dimension: down to 0.05 mm (2mil) on Code 39
Depth of field: 0 to 49.2 cm (19.4")
Barcode width: up to 18 cm (7") on 0.3 mm (12 mil) resolution code
Print contrast: down to 20%
Scan angle: 48° nominal

SYBOLOGIES

UPC (E&A), EAN, Code 11, Code 39, Code 128, UCC EAN 128, ISBN, ISBT, Interleaved, Industrial and Standard 2 of 5, Codabar, Code 93, MSI, Plessey, Telepen.

INTERFACES

Undecoded mode: industry standard output (DBP)
Decoded mode: RS232 TTL

CONNECTION

Connector: 12 pin ZIF
Flexwire:
Undecoded mode: 12 to 8 pin ZIF
Decoded mode: 12 to 12 pin ZIF

CONFIGURATION (DECODED INTERFACE ONLY)

Setup Options: EasySet PC, Windows™ software, and dynamic RS-232 configuration.

HOST CONNECTOR/PIN ASSIGNMENTS 12 Pin ZIF Connector

Pin No.	Decoded Operation	In/Out
1	VCC	In
2	RXD	In
3	Trigger input	In
4	Power enable	In
5	TXD	Out
6	RTS	Out
7	GND	
8	Detect in 1 Must be connected to contact 11	In
9	LED	Out
10	CTS	In
11	Buzzer Must also be connected to contact 8	Out
12	Detect in 0 Must be connected to GND	In

CHARACTERISTICS

Voltage: 5V +/- 5%
Current:
Undecoded mode: 122 mA typical
Decoded mode: 130 mA typical
Standby current: 1uA

ENVIRONMENTAL CHARACTERISTICS

Operating temperature: -30 to 60° C (-22 to 140° F)
Storage temperature: -40 to 60° C (-40 to 140° F)
Relative humidity: 5% to 95% (non-condensing)
Shock: 2000G **Vibration:** 50G r.m.s.
Ambient light: works in any lighting conditions, from 0 to 100 000 lux

ACCESSORIES

Demo board kit compatible with standard RS-232 cable.

REGULATORY APPROVALS

UL recognized component, VDE certified

ISO CERTIFICATION

Issued by RWTüV, USA Inc.
 ISO 9001:2000 – Cert No. 03-1212



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GENERAL

Compact CCD scan engine for OEM devices.

DESIGN

Processor: Custom chip (ASIC inc. DSP processor) for signal processing and decoding.
Flash memory Sensor: CCD linear image sensor
Optics: 645 nm visible LED
 Bright and sharp scanning line

SCANNING PERFORMANCE

Scan rate:
Decoded mode: 270 scans/sec auto-adaptive.
Undecoded mode: 36 scan/sec