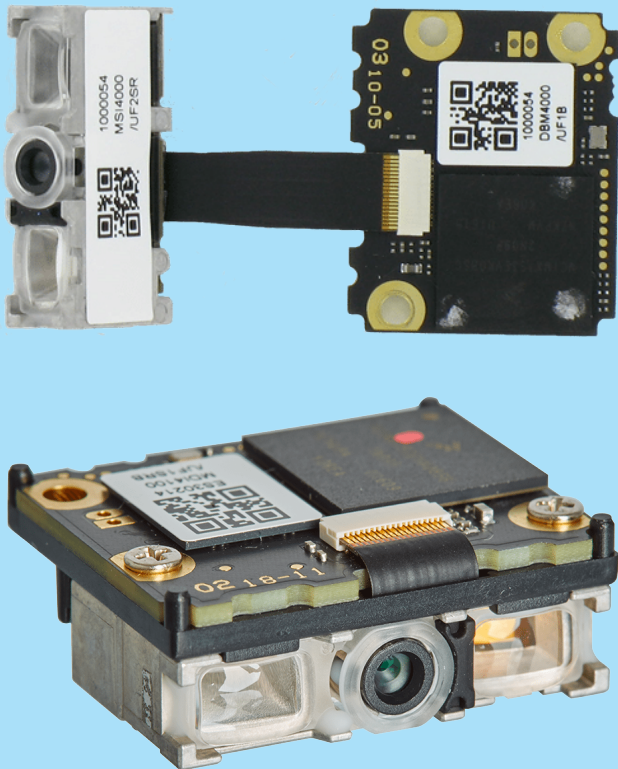


MDI-4050/4150

2D Imager Barcode Scan Engine



Highlights

- Ultra-low profile (just 9.7mm high), full spectrum illuminated 2D CMOS imager
- Perfect for integration into small, space constrained mobile, medical, or retail barcode scanning devices
- High performance, lower power 800MHz CPU and an ultra-fast 100 frames per second (fps) CMOS imager sensor enable high speed scanning of 1D and 2D barcodes and OCR fonts
- Fast global shutter technology providing exceptional motion tolerance for moving applications
- Improved scanning of curved, wide, poorly printed and damaged barcodes
- Data editing program function captures up to 16 codes on multiple images simultaneously
- Single line green LED and warm, white LED illumination makes it easy to aim while providing safety and an extended service life
- Low power and an adjustable power consumption to fit your design needs
- Communication interface: serial CMOS: 12 pin FFC connector, serial TTL, USB
- Engineering kit available – enables faster time to market
- Two year warranty protects your investment

MDI-4050/4150

Product Specifications

COMMUNICATION

SERIAL CMOS: 12 pin FFC connector, Serial TTL, USB

POWER

VOLTAGE REQUIREMENT: 3.0V ~ 5.5V

CURRENT CONSUMPTION: Max. 300mA

LOW POWER CURRENT: 9mA

SUSPEND MODE: <2mA

2D IMAGER OPTICS

LIGHT SOURCE: Aiming green LED, warm white illumination LED

SCAN METHOD: CMOS area sensor, 640 x 480 pixels, black and white

SCAN RATE: Up to 100 fps

READING PITCH ANGLE: -65 to 0°, 0 to +65°

READING SKEW ANGLE: -65 to 0°, 0 to +65°

READING TILT ANGLE: 360°

CURVATURE: R>15 mm (EAN8), R>20 mm (EAN13)

MINIMUM RESOLUTION AT PCS 0.9: 4 mil (0.1 mm)

MINIMUM PCS VALUE: 0.9

FIELD OF VIEW:

Horizontal: 38°

Vertical: 28.9°

DEPTH OF FIELD AT CODE 39:

5 mil (0.127 mm) 2.16 - 5.04 in (55 - 128 mm)

10 mil (0.254 mm) 2.13 - 9.41 in (54 - 239 mm)

20 mil (0.508 mm) 2.79 - 17.13 in (71 - 435 mm)

DEPTH OF FIELD AT QR CODE:

6.7 mil (0.169mm) 2.44 - 4.45 in (62 - 113 mm)

15 mil (0.381mm) 0.94 - 9.92 in (24 - 252 mm)

SUPPORTED SYMBOLOGIES

BARCODE (1D): JAN/UPC/EAN incl. add on, Codabar/NW-7, Code 11, Code 39, Code 93, Code 128, GS1-128 (EAN-128), GS1 Databar (RSS), IATA, Industrial 2of5, Interleaved 2of5, ISBN-ISSN-ISMN, Matrix 2of5, MSI/ Plessey, S-Code, Telepen, Tri-Optic, UK/Plessey

BARCODE (2D): Aztec Code, Aztec Runes, Chinese Sensible code, Codablock F, Composite codes, Data matrix (ECC200), DotCode, Passport MRZ (OCR-B), maxi Code (mode 2-5), MicroPDF417, MicroQR Code, PDF417, QR Code

BARCODE (POSTAL CODES): Chinese Post, Intelligent Mail Barcode, Korean Postal Authority code, POSTNET

DURABILITY

TEMPERATURE:

Operation: -4 to 140 °F (-20 to 60 °C)

Storage: -40 to 158 °F (-40 to 70 °C)

HUMIDITY:

Operation: 5 - 90% (non-condensing)

Storage: 5 - 90% (non-condensing)

AMBIENT LIGHT IMMUNITY:

Fluorescent: 10,000 lx max

Sunlight: 100,000 lx max

Incandescent: 10,000 lx max

DROP TEST: Packed in dummy case 6 ft (1.8 m) drop onto concrete surface

PHYSICAL

DIMENSIONS (WXHxD):

Camera (CMOS): 0.97 x 0.24 x 0.53 in

(24.6 x 6.0 x 13.6 mm)

PCB (decoder board): 0.99 x 0.13 x 0.82 in

(25.1 x 3.2 x 20.8 mm)

WEIGHT: Ca. 5.5 g / 0.19 oz

REGULATORY AND SAFETY

RoHS, IEC62471

ITEMS

SOLD SEPERATELY: MEK development kit

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