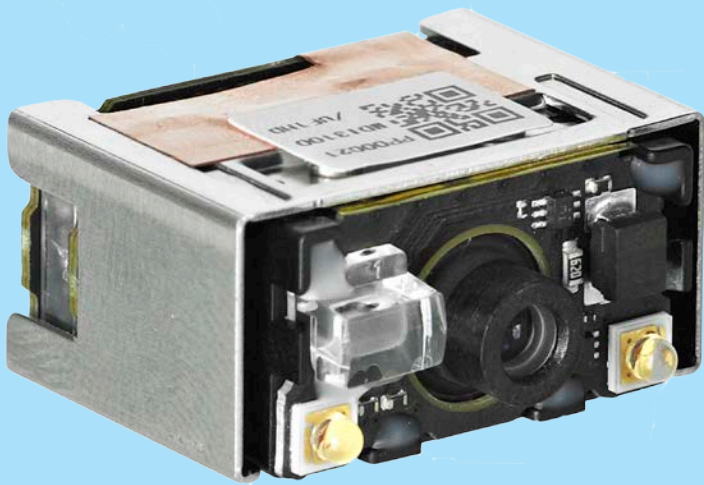


OEM

MDI-3100

2D Imager Barcode Scan Engine



Highlights

- CMOS image sensor with fast decode speed of 60 fps
- Two models available: Standard Resolution (SR) and High Density (HD)
- Features an integrated camera and decoder in an ultra-miniature module
- Omnidirectional 360° scanning, reads 1D and 2D barcodes
- Fast global shutter technology providing exceptional motion tolerance for moving applications
- Adjustable illumination makes it easy to read a wide variety of surface types
- Bar form LEDs provide barcode targeting without the need for lasers and their associated regulations
- Programmable and image capture software available
- Communication interface: serial CMOS via 12 pin FFC connector
- Low power, operates under 3.3V or 5V to fit your design needs
- Two year warranty protects your investment

MDI-3100

Product Specifications

COMMUNICATION

SERIAL CMOS: 12 pin FFC connector

POWER

VOLTAGE REQUIREMENT: 3.0 ~ 5.5V

CURRENT CONSUMPTION: Maximum 390mA for 3.0V and maximum 260mA for 5.5V

2D IMAGER OPTICS

LIGHT SOURCE: Aiming green LED + red illumination LED

SCAN METHOD: CMOS area sensor, 752 x 480 pixels

SCAN RATE: Up to 60 fps

READING PITCH ANGLE: -50 to 0°, 0 to +50°

READING SKEW ANGLE: -50 to 0°, 0 to +50°

READING TILT ANGLE: 360°

CURVATURE: R>16 mm (EAN10), R>20 mm (EAN12)

MINIMUM RESOLUTION AT PCS 0.9: 5 mil (0.127 mm)

MINIMUM PCS VALUE: 0.9

FIELD OF VIEW: Horizontal 48°, Vertical 34°

DEPTH OF FIELD AT CODE 39:

5 mil (0.127 mm) 2.36 - 3.54 in (60 - 90 mm)

10 mil (0.254 mm) 2.17 - 4.72 in (55 - 120 mm)

DEPTH OF FIELD AT QR CODE:

6.7 mil (0.169 mm) 2.56 - 3.35 in (65 - 85 mm)

15 mil (0.381 mm) 1.57 - 4.72 in (40 - 120 mm)

DEPTH OF FIELD AT DATA MATRIX:

8.4 mil (0.212 mm) 2.36 - 3.74 in (60 - 95 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), Maxi Code (mode 2-5), MicroPDF417, Micro QR Code, Passport MRZ (OCR-B), PDF417, QR code

POSTAL CODE: Chinese Post, Intelligent Mail Barcode, Korean Postal Authority code, POSTNET

DURABILITY

TEMPERATURE:

Operation: -22 to 140 °F (-30 to 60 °C)

Storage: -40 to 158 °F (-40 to 70 °C)

HUMIDITY:

Operation: 5 - 90% (noncondensing)

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 MBT F: 50,000 hours

PHYSICAL

DIMENSIONS (WXHxD): 0.99 x 0.49 x 0.83 in (25.3 x 12.4 x 21.2 mm)

WEIGHT: 0.28 oz (Ca. 8 g)

REGULATORY AND SAFETY

RoHS, IEC62471

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