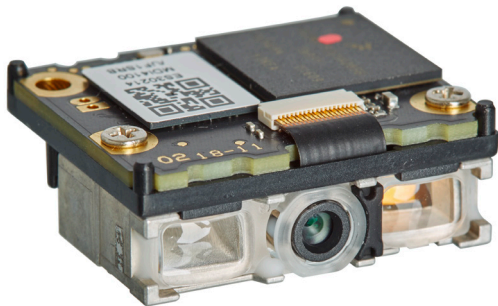


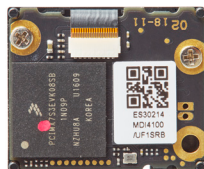
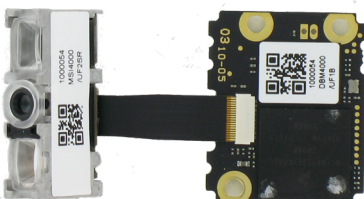
MDI-4000/4100

2D CMOS Imager

The MDI-4x00 is an extremely small 2D CMOS imager with a fast shutter speed, a high speed processor and increased motion tolerance. It easily scans barcodes off cell phone, tablet and computer displays.



scale
100%



Highlights

- Industry's thinnest (10mm) 2D imager barcode scan engine
- Perfect for integration into small, space constrained mobile, medical, or retail barcode scanning devices
- High performance and low power 800MHz CPU and an ultra-fast 100 frames per second (fps) CMOS imager sensor enable high speeding 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: USB or RS232
- Engineering kit available - enables faster time to market
- Two year warranty protects your investment

MDI-4000/4100

Product Specifications

Communication

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

Power

Voltage requirement: 3.0V ~ 5.5V

Current consumption: Max. 300 mA

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: $\pm 65^\circ$

Reading skew angle: $\pm 65^\circ$

Reading tilt angle: 360°

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

Min. resolution at pcs 0.9: 0.1 mm / 4 mil

Min. pcs value: 0.2 (0.3 for UD model)

Field of view: Horizontal 38° , Vertical 28.9°

Depth of field at code 39:

52 - 126 mm (0.127 mm) / 2.05 - 4.96 in (5 mil)

46 - 246 mm (0.254 mm) / 1.81 - 9.68 in (10 mil)

60 - 466 mm (0.508 mm) / 2.36 - 18.35 in (20 mil)

Depth of field at QR code:

64 - 106 mm (0.169 mm) / 2.52 - 4.17 in (6.7 mil)

30 - 234 mm (0.381 mm) / 1.18 - 9.21 in (15 mil)

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

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

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

Durability

Temperature in operation: -20 to 60 °C / -4 to 140 °F

Temperature in storage: -40 to 70 °C / -40 to 158 °F

Humidity in operation: 5 - 90% (non-condensing)

Humidity in 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 1.8 m / 6 ft drop onto concrete surface

MBTF: 50,000 hours

Physical

Dimensions (WxHxD): Camera (CMOS) 24.6 x 6.0 x 13.5 mm / 0.97 x 0.24 x 0.53 in, PCB (decoder board) 27.0 x 3.0 x 22.0 mm / 1.06 x 0.12 x 0.87 in

Weight: Ca. 5.5 g / 0.19 oz

Regulatory & Safety

RoHS, IEC62471

Items

Sold separately: MEK-3100 development board (With power supply, RS232 cable, USB cable, PCBs)