NLV-5201

2D CMOS Imager

The NLV-5201 is specifically designed to deliver high-volume, hands-free scanning of any barcode no matter the quality. It can be incorporated into an assortment of application within retail, hospitality, healthcare and manufacturing.

Highlights

- Full spectrum illuminated 2D CMOS imager
- Ultra-fast 100 frames per second CMOS imager sensor enables high speeding scanning of 1D and 2D barcodes
- Rapidly scans and decodes a wide variety of 1D or 2D barcodes
- Fast global shutter technology with auto exposure – easily scan barcodes off a wide variety of surfaces
- Custom configuration capabilities including multi-read
- Exceptional motion tolerance for moving applications
- Improved scanning of curved, wide and poorly printed barcodes
- Green bar LED aim function providing laser-free aiming with no laser class warning
- Complete unit with integrated decoder
- IP65 rating against dust and moisture
- Low power consumption provides design flexibility
- Communication interface: USB or RS232
- Backed by a two year warranty

NLV-5201
Product Specifications

Operating indicators
Visual: 1 LED (red/orange/green)
Non-visual: Buzzer

Communication
RS232: 1.5 m cable without connector
USB: 1.5 m cable with USB connector

Power
Voltage requirement: 5V ±10%
Operating Current: 265 mA, standby current: 40 mA

Barcode scanner optics
Light source: aiming single green LED, warm white illumination LED
Scan method: CMOS area sensor, 640 x 480 pixels
Scan rate: up to 100 fps
Reading pitch angle: ± 65°
Reading skew angle: ± 65°
Reading tilt angle: 360°
Curvature: R≥20 mm (UPC12)
Min. resolution at pcs 0.9: 0.1 mm / 3.94 mil for 1D Codes, 0.169 mm / 6.6 mil for 2D and stacked Codes
Min. pcs value: 0.3
Field of view: horizontal 38˚, vertical 28.9˚
Depth of field at code 39:
53 - 126 mm (0.127 mm) / 2.09 - 4.96 in (5 mil)
52 - 237 mm (0.254 mm) / 2.05 - 9.33 in (10 mil)
69 - 433 mm (0.508 mm) / 2.72 - 17.05 in (20 mil)
Depth of field at code QR code:
60 - 111 mm (0.169 mm) / 2.36 - 4.37 in (6.7 mil)
22 - 250 mm (0.381 mm) / 0.87 - 9.84 in (15 mil)

Supported symbologies
Barcode (1D): 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-A, OCR-B), Maxi Code (mode 2~5), MicroPDF417, MicroQR Code, PDF417, QR Code

Durability
Temperature in operation: 0 to 50 °C / 32 to 122 °F
Temperature in storage: -20 to 60 °C / -4 to 140 °F
Humidity in operation: 20 - 85% (non-condensing)
Humidity in storage: 20 - 90% (non-condensing)
Ambient light immunity: Fluorescent 10,000 lx max, direct sun 100,000 lx max
Electrostatic discharge protection: 6 kV contact discharge / 15 kV air discharge (non-destructive)
Drop test: 0.75 m / 2.5 ft drop onto concrete surface
Vibration test: 10 - 100 Hz with 2G for 60 min per cycle in each X, Y and Z direction.
Protection rate: IP65

Physical
Dimensions (WxHxD): 41.1 x 24.0 x 33.0 mm / 1.62 x 0.94 x 1.3 in
Weight: Ca. 125 g / 4.2 oz (excl. cable)
Case: Zinc alloy die casting, black

Regulatory & Safety
CE, FCC Class B, VCCI Class B, RoHS, IEC 62471, EN55032 Class B, EN55024 Class B

Models
Lens type: SR-Standard Range (113 mm), HD-high density (63 mm), UHD-Ultra high density (43 mm)

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