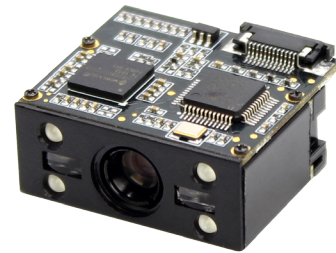


EM3090

OEM Scan Engine



Features

- ◆ **Unparalleled barcode reading performance.**

Improve speed and productivity with the EM3090. The engine scans 1D and 2D barcodes without delay, with a particularly exceptional performance in linear barcode reading. Optimized design and Newland's sixth generation UIMG technology allow for first time every time scanning, even when a barcode is damaged or displayed on a screen set to its lowest brightness level.

- ◆ **Multi-interface.**

The EM3090 supports USB and TTL-232 interfaces to meet diverse customer needs.

- ◆ **Compact and lightweight.**

With seamless integration of image sensor and decoder board, this compact and lightweight engine can be easily integrated into the most space-constrained devices, including handheld scanners, self-service kiosks, ATMs, lottery terminals and more .

- ◆ **Low power consumption.**

The advanced NLDC technology incorporated in the scan engine helps reduce the power consumption and prolong the service life of the device.

Application Scenarios

Self-service cabinets used in e-commerce, express delivery services and smart homes; ATMs; kiosks; queue machines; lottery terminals; certificate makers and more.

EM3090

OEM Scan Engine

| | | | | |
|----------------------|-------------------------------|--|--|--|
| Performance | Image Sensor | 752×480 CMOS | | |
| | Light Source | Red LED 625±10 nm | | |
| | Symbologies | 2D | PDF417, QR Code (QR1/2, Micro), Data Matrix (ECC200, ECC000, 050, 080, 100, 140), Chinese Sensible Code | |
| | | 1D | Code128, UCC/EAN-128, AIM128, EAN-8, EAN-13, ISBN/ISSN, UPC-E, UPC-A, Interleaved 2 of 5, ITF-6, ITF-4, Matrix 2 of 5, Industrial 25, Standard 25, Code 39, Codabar, Code 93, Code 11, Plessey, MSI-Plessey, GS1-DataBarTM(RSS), (RSS-14, RSS-Limited, RSS-Expand) | |
| | Resolution | ≥5mil | | |
| | Typical Depth of Field | EAN-13 | 50mm-445mm (13mil) | |
| | | PDF417 | 70mm-170mm (6.67mil) | |
| | | Code 39 | 50mm-285mm(5mil) | |
| | | Data Matrix | 60mm-160mm (10mil) | |
| | | QR Code | 30mm-220mm (15mil) | |
| | Symbol Contrast | ≥25% reflectance difference | | |
| | Scan Angle** | Roll: 360°, Pitch: ±55°, Skew: ±55° | | |
| | Field of View | Horizontal 36°, Vertical 23° | | |
| | Mechanical/ Electrical | Interface | TTL-232, USB (HID-KBW, COM Port Emulation, HID-POS) | |
| Operating Voltage | | 3.0~3.6VDC | | |
| Current@3.3VDC | Operating | 190mA | | |
| | Idle | 7mA | | |
| | Sleep | <5uA | | |
| Dimensions | 28.0(W)×24.5(D)×13.9(H)mm | | | |
| Weight | 9.5g | | | |
| Environmental | Operating Temperature | -20°C~+55°C (-4°F~131°F) | | |
| | Storage Temperature | -40°C~+80°C (-40°F~176°F) | | |
| | Humidity | 5%~95% (non-condensing) | | |
| | Ambient Light | 0~100000lux (natural light) | | |
| Accessories | NLS-EVK3000 | Software development board for the EM3090, equipped with a trigger button, beeper and RS-232 & USB interfaces. | | |
| | Cable | USB | Used to connect the NLS-EVK3000 to a host device. | |
| | | RS-232 | Used to connect the NLS-EVK3000 to a host device. | |
| | Power Adaptor | Used to provide power for the NLS-EVK3000. Output: DC5V, 2A; Input: AC100~240V, 50~60Hz | | |

**Test conditions: Code 39; 3 Bytes; Resolution=10mil; W:N=3:1; PCS=0.8; Barcode Height=11mm; Scan Distance=120mm; T=23°C; Illumination=300lux.

Specifications are subject to change without notice.

Version: V1.0

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