

NLS-EM3095

Embedded 2D Barcode Scan Engine



The NLS-EM3095 embedded 2D barcode scan engine, armed with the Newland patented **UIMG[®]**, a computerized image recognition system, brings about a new era of 2D barcode scan engines.

The EM3095's 2D barcode decoder chip ingeniously blends **UIMG[®]** technology and advanced chip design & manufacturing, which significantly simplifies application design and delivers superior performance and solid reliability with low power consumption.

The EM3095 supports all mainstream 1D as well as PDF417, QR Code (QR1、QR2、Micro QR), Data Matrix and GS1-DataBarTM(RSS) (RSS-Limited, RSS-14, RSS-14 Stacked and RSS-Expand).

The EM3095 can read barcodes on virtually any medium - paper, plastic card, mobile phones and LCD displays. It provides an ideal solution for both emerging mobile phone-based barcode applications, like coupons, e-tickets and boarding passes, and traditional applications.

This compact engine weighs only 4.4 grams and fits easily into even the most space-constrained equipments such as data collectors, meter readers, ticket validators and PDAs. Moreover, the instant power on/off feature along with ultra low power consumption brings greater efficiency and convenience in barcode scanning.

Features:

- **2D Barcode Decoder Chip:** The engine armed with the state-of-the-art 2D barcode decoder chip invented by Newland demonstrates unprecedented reading performance.
- **Two-In-One Design:** Seamless integration of CMOS image sensor and decoder board makes the engine small, lightweight and easy for integration.
- **High Performance & Ultra-Low Power Consumption:** The engine can read most 1D and 2D barcodes with a power consumption only one fourth that of a traditional engine.
- **All-Round Scanning Capability:** It can read barcodes on virtually any medium - paper, plastic cards, mobile phones and LCD displays.

NLS-EM3095 Specifications

Performance		
Image Sensor		752x480 CMOS
Illumination		Red LED 625±10 nm
Symbologies	2D	PDF417, QR Code (Model 1/2, Micro), Data Matrix (ECC200, ECC000, 050, 080, 100, 140)
	1D	Code 128, EAN-13, EAN-8, Code 39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ISBN/ISSN, Code 93, UCC/EAN-128, GS1 Databar, etc.
Reading Precision		≥ 5mil
Depth of Field	UPC-A (13mil)	55mm - 270mm
	Code 39 (20mil)	50mm - 340mm
	PDF 417 (6.67mil)	70mm - 165mm
	Data Matrix (10mil)	55mm - 180mm
	QR Code (20mil)	35mm - 275mm
Symbol Contrast		≥ 30%
Scan Angle		Roll: 360°; Pitch: ±50°; Skew: ±50°
Field of View		Horizontal 36°; Vertical 23°
Mechanical/Electrical		
Interface		TTL-232, USB (HID-KBW, USB COM Port Emulation, DATAPIPE, HID-POS)
Operating Voltage		3.0 ~ 3.6VDC
Current @ 3.3 VDC	Operating Current	230mA
	Sleep Current	40mA
Dimensions		21.17(W)x14.6(D)x11.52(H)mm
Weight		4.4g
Environmental		
Operating Temperature		-20°C to +60°C
Storage Temperature		-40°C to +80°C
Humidity		5% to 95% (non-condensing)
Ambient Light		0 ~ 100000 lux (natural light)
Certifications		
Accessories		
NLS-EVK3000		Software development board for the EM3095, equipped with a trigger button, beeper and RS-232 & USB interfaces.
Cables	RS-232 Cable	Used to connect the NLS-EVK3000 to a host device; equipped with a power connector.
	USB Cable	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

Contact Us

Newland China
+86-400-608-0591
marketing@nlscan.com

Newland Europe
+31(0)-345-87-0033
info@newland-id.com

Newland Taiwan
+886-2-7731-5388
info@newland-id.com.tw

Newland North America
+1-510-490-3888
info@newlandna.com

www.nlscan.com

Specifications are subject to change without notice.

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