![Newland - SCANNING MADE SIMPLE]

1D | **2D** | CMOS mega pixel | USB | TTL-232

EM2037-V4
OEM scan engine

FEATURES

Superior decoding performance.

No matter what type of barcode is presented, the megapixel camera allows users to scan 1D and 2D barcodes, including very small ones, with impressive speed and ease. In adition to excellent scanning of high-density barcodes, the EM2037 V4 also provides the added value of decoding postal barcodes.

Advanced technology.

The EM2037 V4 is powered by advanced imaging technology and Newland patented UIMG technology, a computerized image recognition system, can read barcodes printed on paper/plastic or displayed on mobile phones with excellent motion tolerance.

Powerful data editing capability.

The scan engine allows customizing scanned data with ease and provides supporting software to address diverce application needs.

Compact & lightweight design.

Seamless integration of imager and decoder board makes the scan engine very small, lightweight and easy for integration.

Various interfaces.

The EM2037 V4 supports USB and TTL interfaces to meet customer needs.

Application Scenarios
Kiosks • ticketing machines • PDA's • tablets and many more.

Performance	Image Sensor		1280 * 800 CMOS	
	Illumination		Red LED	
	Aimer		Red LED	
	Symbologies	2D	PDF 417, QR Code, Micro QR, Data Matrix, Aztec, Maxicode, Chinese Sensible Code, GM Code, MicroPDF417 Code, Code One	
		Postal	USPS Postnet, Royal Mail, KIX Post, Australian Postal, etc.	
		1D	EAN-8, EAN-13, UPC-E, UPC-A, Code 128, UCC/EAN128, I2Of5, ITF-14, ITF-6, Matrix 25, CodaBar, Code 39, Code 93, ISSN, ISBN, Industrial 25, Standard 25, Plessey, Code11, MSI-Plessey, UCC/EAN Composite, GS1 Databar, China Post 25, Code 49, Code 16K	
	Resolution*		≥3mil	
	Typical Depth of Field*		**SR**	**HD**
			Code 39 (5mil): 70mm-180mm	Code 39 (3.3mil): 50mm-90mm
			EAN-13 (13mil): 55mm-365mm	Code 39 (5mil): 50mm-105mm
			PDF417 (6.7mil): 55mm-175mm	PDF417 (5mil): 45mm-95mm
			Data Matrix (10mil): 50mm-175mm	Data Matrix (6.7mil): 45mm-75mm
	Min. Symbol Contrast*		25%	
	Scan Angle**		Roll: 360°, Pitch: ±55°, Skew: ±55°	
	Field of View		Horizontal 51°, Vertical 32°	
Mechanical/ Electrical	Interface		TTL-232, USB	
	Operating Voltage		12-pin FPC connector: 3.3-5VDC±5% 5-pin DuPond connector: 5VDC±5%	
	Rated Power Consumption		916.6mW (typical)	
	Current@5VDC	Operating	179.2mA (typical), 190.9mA (max.)	
		Idle	66.8mA	
	Dimensions		39.5(W)×25.4(D)×20(H)mm	
	Weight		9.2g	
Environmental	Operating Temperature		-20℃ to 60℃ (-4°F to 140°F)	
	Storage Temperature		-40℃ to 70℃ (-40°F to 158°F)	
	Humidity		5% to 95% (non-condensing)	
	Ambient Light		0~100,000lux (natural light)	
Certifications			FCC Part15 Class B, CE EMC Class B	
Accessories	NLS-EVK		Software development board for the NLS-EM2037 V4, equipped with a trigger button, beeper and RS-232 & USB interfaces.	
	Cable	USB	Used to connect the NLS-EVK to a host device.	
		RS-232	Used to connect the NLS-EVK to a host device.	
	Power Adapter		DC5V power adapter to power the NLS -EVK with RS-232 cable.	

*Test conditions: T=23℃ ; Illumination=300lux using incandescent lamp; sample barcodes made by Newland.

**Test conditions: Scan Distance=(min. DOF + max. DOF)/2; T=23℃ ; Illumination=300lux using incandescent lamp; 2D: QR Code; 10 Bytes; Resolution=15mil; PCS=0.8.

Specifications are subject to change without notice.

Version:V1.0