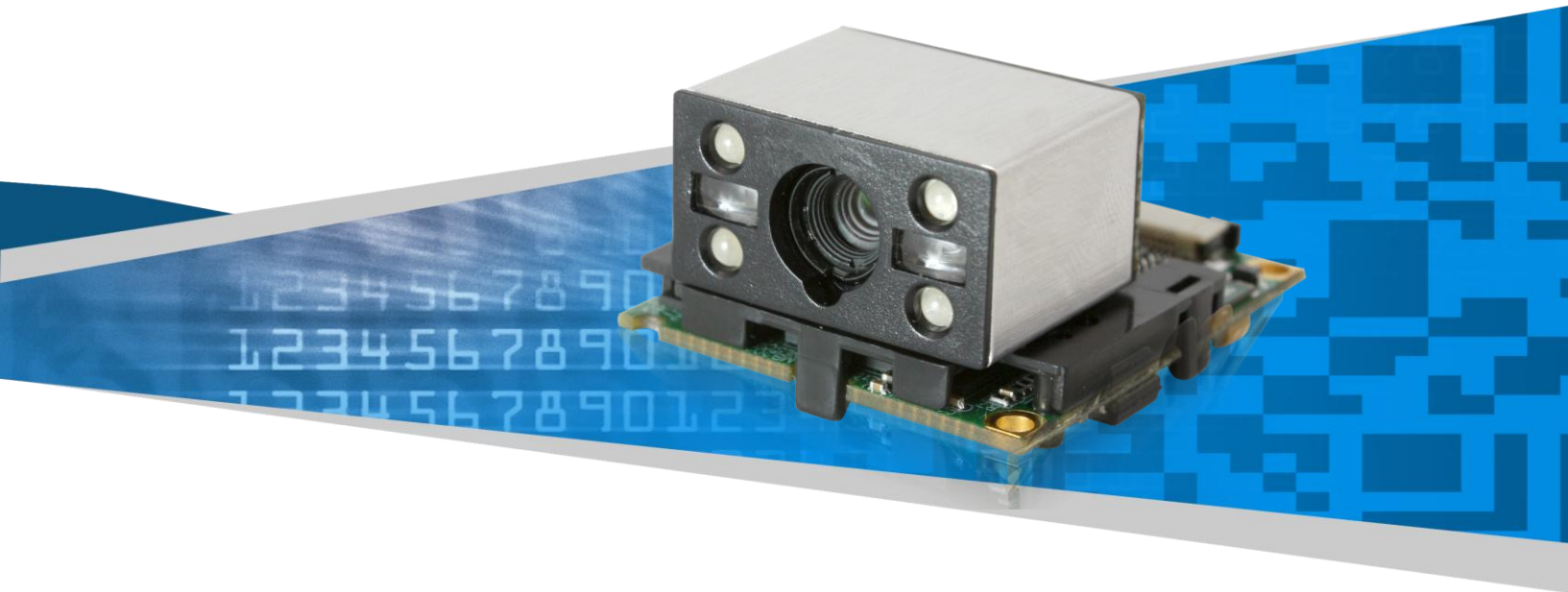


NLS-EM2028 series

Embedded 2D Barcode Scan Engine



Designed for OEM applications, this high performance CMOS engine can easily be integrated into various solutions such as kiosks, ticketing machines, PDA's and many more.

Product Features

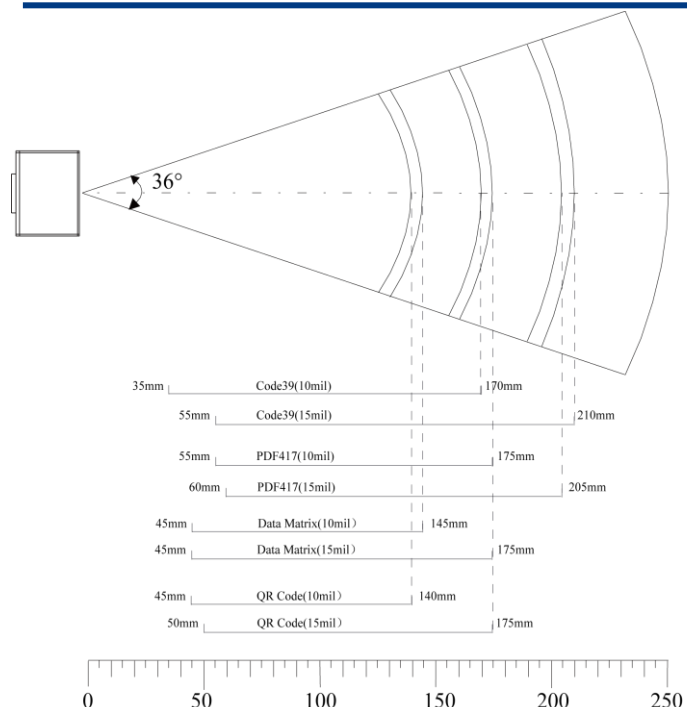
- **Ease of integration**

Compact and easy to integrate design, where the CMOS engine and decoder board can be placed separately into your solution. The small form factor enables easy integration into various solutions.

- **Advance Technology**

Includes core-technology **UIMG**[®], which is independently designed and manufactured by Newland Auto-ID. **UIMG**[®] technology includes the optical, CMOS, digitizer, decoder, image processing & embedded systems. The scanner supports all global standard 1D and most 2D barcode symbologies. Its' reading performance reaches and exceeds global standards. By using the accessories provided, the user can ideally set up the scanner to its user environment.

Decode Zones



Specifications

Image Capture	
Image Sensor	CMOS
Resolution	752*480
Interface	RS232, USB
Barcode Scan	
2D	PDF417, QR Code(Model 1/2), DataMatrix (ECC200, ECC000, 050, 080,100,140),Aztec, Maxicode, etc.
Symbols	Code128, EAN-13, EAN-8, Code39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ISBN, Code 93, UCC/EAN-128, GS1 Databar, etc
1D	
Precision	≥ 5mil
Depth of Scan Field	35mm-210mm
Print Contrast Ratio	≥ 30%
Roll	360°@ 0°Pitch and 0° Skew
Sensitivity**	Yaw (skew) ±60°@ 0°Roll and 0° Pitch
	Pitch ±60°@ 0°Roll and 0° Skew
Illumination	
Light Source	LED (622 nm - 628 nm)
Light Intensity	330 LUX (130 mm)
Electrical and Mechanical	
Power Consumption(Max)	2W
Voltage	DC 5V (4.5-5.5V)
Working	400mA
Idle	115mA
Standby	18mA
Deep Sleep	800uA
Dimensions	35.0 *30.0*19.0mm
Weight	14g
Environment	
Operating Temperature	-5°C - +45°C
Storage Temperature	-40°C - +60°C
Humidity	5% - 95% (non-condensing)
Ambient Illumination	0 ~ 100,000 LUX
Certificates	
FCC Part15 Class B, CE EMC Class B	
Accessories	
Cradle EVK2028	The Evaluation Kit for EM2028, with trigger, beep functions and USB, RS232 interfaces.
RS232 Cable	This cable connect to the RS232 port of EVK2028 with a RJ45 port.With a standard female RS232 port to connect to standard male RS232 port.
Flex Cable	With a power port to accept power adapter supply.
USB Cable	This cable connect to the USB Slave port of EVK2028 with a USB-B male port.With a standard USB Slave port to connect to standard USB Host port.
Power Adapter	The power adapter for EVK2028 by the RS232 Cable. Output: DC5V, 2A; Input: AC100~240V, 50~60HZ.

**Test Condition:

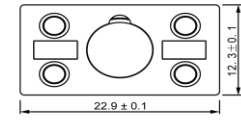
Code39: 4 Bytes ; Resolution = 10mil; W:N = 3:1 ; PCS = 1.0 ;

Barcode Height = 12mm; Distance = 100mm; T=23°C; Illumination= 200 LUX

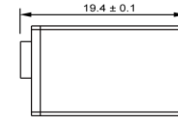
Specifications are subject to change without notice.

Dimension (Unit: mm)

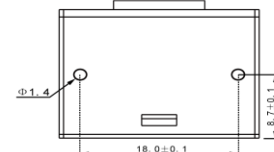
• EM2028 Image Sensor



Front View

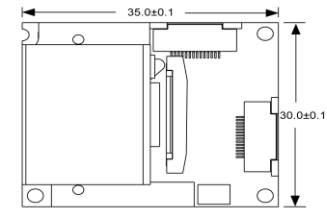


Left View



Bottom View

• EM2028



Bottom View



Left View

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