Barcode scan engine • 85.8° diagonal field of view • 640 x 480 CMOS • 5 g module

XL-609-SSR Barcode Scan Engine

85.8° diagonal FOV | FOV 67.4° x 56° | 640 x 480 CMOS | ≥ 5 mil | 5 g | 3.3 VDC | TTL-232 / USB / USB COM

01 Compact & Lightweight

At 21.3 x 14.5 x 11.2 mm and just 5 g, the integrated board and image module slot into PDAs, tablets, thin devices and self-service terminals.

02 Clear Aiming, Fast Start

6500 K white illumination with 625 nm red aiming gives a clear target; the engine starts fast and triggers on a low TRIG level.

03 Full Symbology Coverage

2D: PDF417, Data Matrix, QR Code and AZTEC. 1D: Code 128/39/93/11, EAN/UPC, ITF, Codabar, GS1 DataBar and 20+ more.

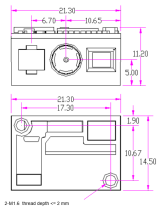
04 Triple Interface, Wide Range

TTL-232, USB and USB COM; 3.3 VDC at 600 mW with 20 mA standby; -20 to +55 °C operating, 0-100,000 lux ambient light.





45° view



Dimensions (mm)

Applications

Supplied as a device component for PDAs, tablets, thin devices and conventional self-service terminals.

Product Features

- 640 x 480 CMOS image sensor
- 67.4 H x 56 V field of view
- 20% print contrast
- Three interfaces
- 5 mil minimum resolution
- 13 mil decode range
- Pitch and skew +/-55 deg
- -20 °C to +55 °C operating

SCAN PERFORMANCE	
Image sensor	640 x 480 CMOS
Illumination	White LED 6500 K
Aiming	Red LED 625 nm +/-10 nm
Minimum resolution	≥5 mil 1D code
Print contrast	≥20%
Sensitivity	Pitch +/-55, skew +/-55, roll 360
Field of view	67.4 H / 56 V / 85.8 diagonal
Decode range	Code 39 (5 mil) : 30 ~ 60 mm
2-D symbologies	PDF417, Data Matrix, QR Code, AZTEC
1-D symbologies	Code 128/39/93/11, EAN-13/8, UPC-A/E, ITF-6/14, Interleaved 2 of 5, Matrix 2 of 5, Industrial 2 of 5, Standard 2 of 5, Codabar, ISBN, UCC/EAN-128, GS1 DataBar, GS1 Composite, Plessey, MSI-Plessey and more

MECHANICAL & ENVIRONMENT	
Interfaces	TTL-232, USB, USB COM
Dimensions	21.3 (D) x 14.5 (W) x 11.2 (H) mm
Weight	5 g
Voltage	3.3 VDC ± 10%
Power	600 mW (typical)
Operating current	180 mA (typical), 220 mA (max)
Standby current	20 mA
Operating temp.	-20 °C ~ +55 °C
Storage temp.	-40 °C ~ +70 °C
Humidity	5% - 95% (non-condensing)
Ambient light	0 ~ 100,000 LUX
Thermal shock	30 min hot / 30 min cold, 24 cycles
Shock	Vibration 2000 G, 0.7 ms, half sine, 3 axes
Drop	1.2 m drop onto concrete

* Test conditions: 23 °C ambient, 300 lux incandescent light, custom test codes. ** Test distance = (min DOF + max DOF) / 2; 2D: QR Code, 10 bytes, 15 mil module, PCS = 0.8.

Installation Notes

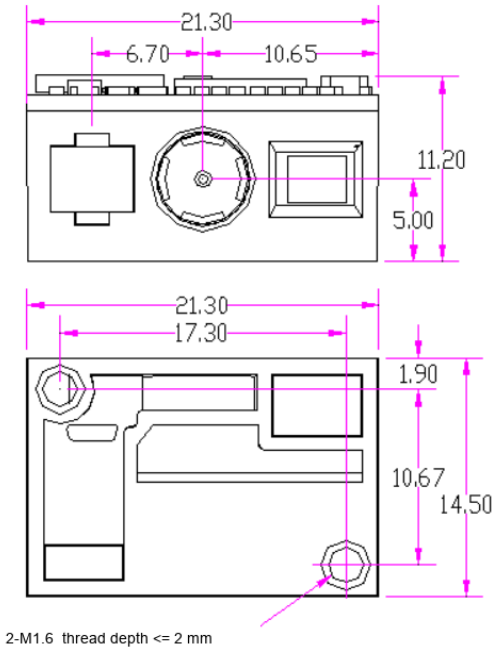
1) Fix the M1.6 mounting screws before plugging in the FPC. 2) Keep VCC at 3.3 VDC (±10%). 3) Keep the window away from direct glare and dust, and clean it periodically. 4) Specifications subject to change without notice.

SHENZHEN XINLONG IOT TECHNOLOGY CO., LTD.

Address Room 207, Building A, No.168 Cenxia Rd, Fuyong, Baoan, Shenzhen **Email** 2388326754@qq.com

Web www.xinlongiot.com

Dimensions (mm)



Key Dimensions	
Overall depth	21.30 mm
Overall width	14.50 mm
Overall height	11.20 mm
Mounting threads	2 x M1.6
Thread depth	≤ 2 mm
Weight	5 g

12-Pin Interface

Pin Definition			
PIN	**Type / I/O**	**Signal**	**Description**
PIN 1	NC	**NC**	—
PIN 2	Power	**VCC**	+3.3 V input
PIN 3	Ground	**GND**	—
PIN 4	Input	**RX**	UART receive
PIN 5	Output	**TX**	UART transmit
PIN 6	Input	**D-**	USB D-
PIN 7	Output	**D+**	USB D+
PIN 8	NC	**NC**	—
PIN 9	Output	**BEEPER**	Passive buzzer, idle low
PIN 10	Output	**DLED**	Decode LED, idle low
PIN 11	NC	**NC**	—
PIN 12	Input	**TRIG**	Weak pull-up, low to trigger

SHENZHEN XINLONG IOT TECHNOLOGY CO., LTD.
Address Room 207, Building A, No.168 Cenxia Rd, Fuyong, Baoan, Shenzhen **Email** 2388326754@qq.com
Web www.xinlongiot.com