DUAL-CORE CONTROLLER · 1600 × 1200 CMOS · 36 × 14 × 11.3 mm

XL-F3-BW

Embedded OEM Scan Engine



1600 × 1200 CMOS | Resolution ≥ 3.3 mil | 36 × 14 × 11.3 mm · 5 g | 3.3 V ±5% · 65 mA | TTL-232 · USB · RS-232 | 200 mW typical

PRODUCT FEATURES

- **Dual-core controller** — high-performance processing for demanding embedded scanning tasks
- **Rich interfaces** — USB, TTL-232 and RS-232 on board; Ethernet protocol extension supported
- **Ultra-compact** — 36 × 14 × 11.3 mm and 5 g, with an M1.6 × 3 threaded insert for direct mounting
- **Complete algorithm library** — full 1D and 2D symbology set on a self-developed core algorithm
- **ImageTool** — single all-in-one utility for setup, tuning and firmware update
- **Low power** — 200 mW typical at 3.3 V

PRODUCT SPECIFICATIONS

SCANNING PERFORMANCE

Image Sensor	1600 × 1200 CMOS
Illumination	White light
Aimer	Red dot
Resolution	≥ 3.3 mil
Print Contrast Signal (PCS)	≥ 25%
Pitch / Skew / Tilt	±60° / ±60° / 360°
Field of View (FOV)	42° (H) × 31.5° (V)
Depth of Field (DOF)	Code 128 3.3 mil: 5–8 cm Code 128 10 mil: 4–21 cm QR 20 mil: 5–26 cm
Ambient Light Immunity	0–100,000 lux

ELECTRICAL

Host System Interfaces	TTL-232, USB RS-232 and Ethernet protocol extension supported
Input Voltage	3.3 V ±5%
Operating Current	65 mA @ 3.3 V Typical
Power Consumption	200 mW Typical

MECHANICAL

Dimensions	36 × 14 × 11.3 mm (max.)
Weight	5 g
Mounting Holes	M1.6 × 3 threaded insert

ENVIRONMENTAL & CONFIGURATION

Storage Temperature	−40 °C to +70 °C
Humidity	5–95% RH, non-condensing
Configuration	ImageTool Setup and tuning software
Warranty	2 years

SUPPORTED SYMBOLOGIES

2D	MicroPDF417, PDF417, QR Code, Micro QR, Aztec, Data Matrix, Grid Matrix, and others
1D	Code 32, Code 39, Code 93, EAN-13, EAN-8, UPC-A, UPC-E, IATA 2 of 5, Interleaved 2 of 5, Codabar, Code 11, Code 128, Matrix 2 of 5, Straight 2 of 5, MSI/Plessey, GS1 DataBar, and others

Shenzhen Xinlong IoT Technology Co., Ltd. XINLONG IOT

ADDRESS Room 207, Building A, No. 168 Cenxia Road, Fenghuang Community, Fuyong Street, Bao'an District, Shenzhen 518103, China

EMAIL lixuan@xinlongiot.com **WEB** www.xinlongiot.com

Specifications subject to change without notice.