

GEA204 Industrial Scan Engine

Combining high decoding performance, broad compatibility, and user-friendly lighting design, the GEA204 is a reliable and efficient solution for embedded barcode reading needs. With its outstanding screen scanning performance, the GEA204 effortlessly decodes barcodes displayed on digital devices such as smartphones, tablets, and monitors - delivering fast, accurate, and consistent results. Designed with integration flexibility in mind, the GEA204 supports multiple communication interfaces including USB and TTL232, making it highly adaptable for use in various applications such as self-service terminals, medical devices, smart lockers, and ticketing systems. The built-in warm white illumination provides soft and natural lighting that enhances barcode contrast while minimizing eye strain during prolonged use, making it ideal for intensive scanning environments.

MAIN FEATURES

- Warm White Illumination
- Screen Scanning Capability
- Various Connection Interface





PERFORMANCE CHARACTERISTICS

Imager Sensor	CMOS
Optical Resolution	640*480 pixels
Illumination	Warm White LED
Aiming	Red LED
Readability	≥5mil
Field of View	Horizontal 34°, Virtual 26°
Screw, Pitch, Roll	Skew tolerance: ±55° from normal
	Pitch tolerance: ±55° from normal
	Roll tolerance: 360° from normal
Supported 1D:	Code128(ISBT 128, AIM 128, GS1 128),
Symbologies	EAN-8, EAN-13, UPC-E, UPC-A, ISBN, ISSN,
	Code11, Interleaved 2 of 5, Code39,
	Code32, Code93, Matrix 2 of 5, Industrial 2
	of 5, IATA25, Codabar, MSI Plessey, GS1
	Databar, Plessey
2D:	QR Code, Micro QR Code, Datamatrix,
	PDF417, Micro PDF417, Aztec

PHYSICAL PARAMETER

Dimension	21.5 x 8.5 x 7.1mm
Operation Voltage	DC 3.3V
Operation Current	160mA
Standby Current	40mA(USB), 60mA(UART)
Interfaces	USB(HID-KBW, VCP),
	TTL-VCP

USER ENVIRONMENT

Ambient Light	0 - 100,000 Lux.		
Operating Temperature -20°C~55°C			
Storage Temperature	-40°C~70°C		
Humidity	5%~95% non-condensing		

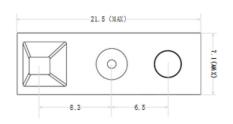
DECODE RANGE

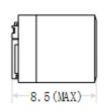
5mil Code39	65 - 120MM
6.67mil PDF417	60 - 155MM
10mil Data Matrix	45 - 155MM
13mil EAN-13	60 - 320MM
13mil Code128	60 - 350MM
15mil QR Code	30 - 250MM

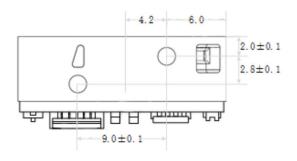
PRODUCT SPEC SHEET

Industrial Scan Engine GEA204

DIMENSIONS







The specific signal definitions for the 13-pin FPC are as follows:

PIN	Definition	I/O	Description
1	GND	-	Power input - Negative
2	nTRIG	_	Trigger key input signal, hold low for more than 5ms to trigger code reading.
3	nRST	_	Reset signal input, active low. Hold low for more than 100us to reset the device.
4	LED	0	Light indicator output, idle output low level
5	BUZZER	0	Passive buzzer output, idle output low level
6	EXT.LED.CTRL	0	External Lighting Control
7	USB_D+	ı	USB_D+
8	USB_D-	ı	USB_D-
9	UART_TX	0	TTL level transmit
10	UART_RX	I	TTL level receive
11	GND	I	Power input - Negative
12	VCC	I	Power input - positive 3.3V
13	VCC	I	Power input - positive 3.3V

GENERALSCAN

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