



11.8 mm H x 21.5 mm W x 16.3 mm D

## Features & Benefits:

- Flexibility for Variety of Application, with Design of Devices Over Multiple Types of Data Capture
- Powerful 624 MHz Processor, Fast Sensor Shutter Speed, and Fast-Pulse Illumination
- Exceptional Motion Tolerance
- Unique Aiming Pattern with Bright Central Dot for Quick, Accurate Scanning, Even in Bright Sunlight
- Miniature Lightweight Form Factor, Tiny Size Fits into Space-Constrained Designs
- Low Power Consumption for Battery-Powered and Mobile Devices

## Mid-Range, Wide, VGA Imager

The JE-209 is a high performance laser engine for 1D/ 2D scanning, providing expanded functionality with a comprehensive feature set. The JE-209 combines outstanding 1D barcode scanning with a 2D imager that captures still images and video for a variety of applications.

The PL4507 decoder board, armed with a powerful 624 MHz microprocessor, decodes 1D and 2D barcodes in milliseconds. The patent-pending fast-pulse illumination and fast sensor shutter speed enable image capture at a full 60 frames per second, delivering outstanding motion tolerance. The result is the extraordinary scanning speed required to boost productivity.

JE-209 provides ease of use with full omnidirectional scanning, eliminating the need for precise alignment. A unique aiming pattern with a bright central dot ensures quick, accurate scanning — even in bright sunlight.

Designed for easy integration into a wide variety of products, the JE-209 reduces development time and cost. Low power requirements help preserve ample battery power for a full shift. At less than three tenths of an ounce and approximately a quarter cubic inch, this small, lightweight device can be easily integrated into even the most space-constrained products. Three models offer different focal distances: JE-209SR (Standard Range) is designed for 1D intensive applications with medium to large bar codes; the JE-209DL is 'driver's license optimized' for small to medium bar codes and 2D intensive applications, including U.S. driver's license ID verification; and the JE-209HD (High Density) is tailored to enable the accurate capture of very small bar codes.

## Applications:

- Healthcare, incl. Medical and Diagnostic Instruments,
- Retail
- Transportation
- Logistics
- Public Safety
- Mobile Computers
- Handheld Scanners
- Self-service Kiosks
- Lottery Terminals



# JADAK

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<b>Performance</b>	
Sensor:	752 x 480 pixel field
Illumination & Aiming:	625 +/- 5nm LEDs (2x); 655 +/- 10nm Laser (VLD)
Field of View:	Horizontal: 40° Vertical: 25°
Scan Angle Tolerance:	Roll: 360°, Pitch: ± 60°, Skew: ± 60°
Focal Distance:	SR: 203 mm (8 in.) from Front of Engine; DL: 135 mm (5.3 in.); HD: 74 mm (2.9 in.)
Min. Print Contrast:	Minimum 25% absolute dark/light reflectance measured at 650 nm
<b>Regulatory:</b>	
Laser Classification:	Intended for Use in CDRH Class II/IEC 825 Class 2 devices
Electrical Safety:	UL, VDE and CU recognized laser component
Environmental:	RoHS Compliant
<b>Mechanical / Electrical</b>	
Dimensions:	(HxWxD): 11.8 mm x 21.5 mm x 16.3 mm (.46" x .85" x .64")
Weight:	8.22 g (.29 oz.)
Interface:	Camera Port on 21-pin ZIF connector
Input Voltage:	Operational Engine: 3.3V +/- 10%
Total Current Draw:	With Illumination and Aiming: 250 mA
<b>Environmental / Other</b>	
Operating Temperature:	-30°C to 55°C (-22°F to 131° F)
Storage Temperature:	-40°C to 70°C (-24°F to 158°F)
Humidity:	Operating: 95% relative humidity, non-condensing, at 55°C Storage: 85% relative humidity, non-condensing at 70°C
Shock Rating:	2000 G +/- 5%, any mounting surface, at -30°C and 70°C for .85 +/- .05 ms 2500 G +/- 5%, any mounting surface, at 23°C for .85 +/- .05 ms
<b>Standard Range (SR) Focus</b>	
<b>Symbology / X-DIM</b>	<b>Near / Far</b>
5 mil Code 39	53 mm (2.1 in.) / 191 mm (7.5 in.)
100% UPCA/EAN	41 mm (1.6 in.) / 394 mm (15.5 in.)
6.7 mil PDF417	86 mm (3.4 in.) / 180 mm (7.1 in.)
<b>DL Focus</b>	
5 mil Code 39	36 mm (1.4 in.) / 185 mm (7.3 in.)
100% UPC	41 mm (1.6 in.) / 305 mm (12 in.)
5 mil PDF417	71 mm (2.8 in.) / 114 mm (4.5 in.)
<b>HD Focus</b>	
3 mil Code 39	41 mm (1.6 in.) / 97 mm (3.8 in.)
4 mil PDF417	46 mm (1.8 in.) / 89 mm (3.5 in.)

PL4507 SPECIFICATIONS	
<b>Mechanical / Electrical</b>	
Dimensions:	(HxWxD): 25.3 mm x 38 mm x 6.6 mm (1.0" x 1.5" x .26")
Connector:	30-pin ZIF connector, .5 mm pitch
Host Types:	RS-232 (various modes) USB (various modes)
Total Current Draw:	With Illumination and Aiming: 250 mA
<b>Power</b>	
Input Voltage	3.3V +/- 10% or 5.0 V +/- 10%
Current Draw	(including engine:) 450 mA
Average During Scanning	3.3V input 400 mA 5.0V input
<b>Performance</b>	
<b>Symbologies Supported</b>	
1D	All major codes
2D	PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode
Postal Codes	US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal Dutch Postal (KIX)
Image File Formats	BMP, TIFF, and JPEG

## ABOUT JADAK:

JADAK, a business unit of Novanta, is a market leader in machine vision, RFID, barcode, printing, and color and light measurement products and services for original equipment manufacturers. The company designs and manufactures embedded detection and analysis solutions that help customers solve unique inspection, tracking, scanning and documenting. The company is ISO 9001 and ISO 13485 registered.

Novanta is a trusted technology partner to OEMs in the medical and advanced industrial technology markets, with deep proprietary expertise in photonics, vision and precision motion technologies.

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