PL5000 Series Decoders

Advanced Decoding and Data Capture for All Zebra 1D/2D Imagers

Maximize the value of the Zebra scan engines in your products with the PL5000 Series of decoders. No matter which engine you choose for your designs, there's a PL5000 decoder that will meet your needs. The PL5000 family boosts worker productivity with unmatched decode times, superior motion tolerance, plus advanced barcode and data capture processing features, plus support for the newest barcode symbologies. There is a model that will fit in every product design. With support for MIPI or parallel interfaces, you get the flexibility to choose any Zebra 1D/2D imager. New cloud-based licensing allows you to add features without the cost of replacing your decoder. And since the PL5000 Series decoders are the same size as their predecessors, you can easily and cost-effectively upgrade to the latest decoder technology. Empower your designs with flexible, advanced decoding features that maximize the value of Zebra scan engines for you and your customers with the PL5000 Series decoders.



Unmatched flexibility

An advanced hardware decoder family for all your product designs

There is a PL5000 Series decoder that will fit in your product designs in any available space. The PL5000A miniature decoder board is designed for the most space-constrained products. The PL5000B standard size decoder board is for products with more room, and the PL5000C Ball Grid Array (BGA) module can be soldered directly onto your circuit board, allowing you to deeply embed our data capture technology into your products with a near zero footprint.

New firmware update utility

New sample code makes it easy to build firmware update capabilities into your devices.

Hardware decoder options for every Zebra scan engine

No matter which Zebra scan engine you choose, there's a compatible hardware decoder option. The PL5000A and PL5000C are available in parallel and MIPI — providing support for Zebra's SE2100 valuepriced imaging engine and the SE4850, Zebra's unparalleled long-range imaging engine.

Easily add new features — without buying new hardware

A new integrated licensing client enables you to instantly access licensed features, such as Drivers' License parsing. Now, you no longer need to purchase a different scan engine model to add the features of today and tomorrow to your designs, reducing product development time and cost.

Backwards compatibility

Since the PL5000 decoders are the same size as their PL3307 predecessors, you can upgrade to the latest decoding technologyeasily and cost-effectively. To get the latest in decoding power, feature flexibility and symbology support, just drop the PL5000A,PL5000B or PL5000C into the space allocated for their respective PL3307 models — no need to modify your product designs.

Maximize the value of the Zebra scan engines in your product designs with the PL5000 Series.

For more information, visit www.zebra.com/pl5000-series

Superior data capture technology

More power for a faster time to decode — even in challenging conditions

With a new dual-core processor, more memory and a new advanced ASIC, the PL5000 decoders decode in record time, even on damaged, poorly printed and low contrast barcodes — or in poor lighting.

Support for Digimarc

The PL5000 Series supports Digimarc, the 'wallpaper-style' invisible barcode symbology designed to enable the fastest and easiest barcode scanning for cashiers and more.

Capture and process multiple barcodes with one press of the scan trigger

With support for Multi-Code Data Formatting, a DataCapture DNA tool, a single trigger pull can capture all or only the desired barcodes on a single label, format the data properly for the host application and output the barcodes in the order required by the application.

Capture photos, documents and more

Since the PL5000 Series also captures photos, videos, signatures, OCR and documents, you can easily enable your designs to capture more value-add information for your customers. Zebra's integrated Intelligent Document Capture technology enables the capture of documents that are highly legible and searchable — ideal for electronic recordkeeping. With the single press of a button, this intelligent software determines when conditions are ideal to capture the highest quality image, taking the guesswork away from users. Captured images are automatically analyzed and up to eight functions are performed instantly as needed in a fraction of a second, without any user intervention: shadows and noise are removed; and images are de-skewed, rotated, brightened, sharpened and cropped.

PL5000 Series Decoders Specifications

Physical Characteristics

Dimensions	PL5000A-Parallel/PL5000A-MIPI: 0.65 in. H x 1.19 in. W x 0.33 in. D 16.40 mm H x 30.12 mm W x 8.4 mm D PL5000B: 1.05 in. H x 1.53 in. W x 0.25 in. D 26.6 mm H x 38.74 mm W x 6.23 mm D PL5000B-USB: 1.05 in. H x 1.53 in. W x 0.29 in. D 26.6 mm H x 38.74 mm W x 7.35 mm D PL5000C-Parallel / PL5000C-MIPI: 0.47 in. H x 0.75 in. W x 0.11 in. D 12.0 mm H x 19.0 mm W x 2.82 mm D
Weight	PL5000A-Parallel/PL5000A-MIPI: 0.119 oz/0.121 oz; 3.40 g/3.44 g PL5000B: 0.20 oz/5.61 g PL5000B-USB: 0.22 oz/6.17 g PL5000C: 0.04 oz/1.0 g
Physical Host Interface	PL5000A-Parallel: 31-pin ZIF host connector (0.3 mm pitch), micro USB B PL5000A-MIPI: 31-pin ZIF host connector (0.3 mm pitch), micro USB B PL5000B: 30-pin ZIF host connector (0.5 mm pitch), micro USB B PL5000B-USB: 30-pin ZIF host connector (0.5 mm pitch), micro USB B PL5000C-Parallel / PL5000C-MIPI: 104-ball BGA component

Performance Characteristics

Symbologies	1D: All major 1D, Digimarc 2D: PDF417, MicroPDF417, Datamatrix, QR Code, Micro QR Code, Aztec, Composite, TLC-39, MaxiCode, Dotcode; Grid Matrix Postal: US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal, Dutch Postal (KIX), Mailmark
Image File Formats	BMP, TIFF, JPEG
Imager Engine Support	PL5000A-Parallel: SE3300, SE4710, SE4720, SE4750, SE4770 PL5000A-MIPI: SE2100, SE4850 PL5000B: SE3300, SE4710, SE4720, SE4750, SE4770 PL5000B-USB: SE4720, SE4770 PL5000C-Parallel: SE3300, SE4710, SE4720, SE4750, SE4770 PL5000C-MIPI: SE2100, SE4850
Host Interfaces	Serial, USB

User Environment

Operating Temp.	-22° F to 140° F / -30° C to 60° C
Storage Temp.	-40° F to 158° F / -40° C to 70° C
Humidity	Operating: 95% RH, non-condensing at 140° F / 60° C Storage: 85% RH, non-condensing at 158° F / 70° C
Shock Rating	2500 G ±5%, any mounting surface, at 73° F/23° C for 0.7 ±0.05 ms 2000 G ±5%, any mounting surface, at -22° F/-30° C and 140° F/60° C for 0.85 ±0.05 ms
Power	Operational Input Voltage: Engine: 3.3V ±10% or 5V ±10% Current Draw (with PL5000B-Parallel with SE4750 engine):• 455 mA RMS operating current, 3.3V input • 320 mA RMS operating current, 5.0V input

Regulatory

Environmental	RoHS Compliant

Warranty

Subject to the terms of Zebra's hardware warranty statement, PL5000 Series decoders are warranted against defects in workmanship and materials for a period of 15 months from the date of shipment. For the complete Zebra hardware product warranty statement, go to: http://www.zebra.com/warranty

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