



NEXT GENERATION INTELLIGENT IMAGING

MOTOROLA SE4750

RESET THE BAR ON IMAGING PERFORMANCE AND FLEXIBILITY

The Motorola SE4750 represents a new generation of imagers that provide unparalleled performance on just about any type of data imaginable — from 1D and 2D bar codes to photos and fully searchable and editable legal, letter, A4 and A5 documents. Motorola's proprietary PRZM (pronounced "prism") Intelligent Imaging technology, megapixel sensor and advanced optics work together to set the SE4750 in a class of its own.

While competitive systems rely on decode software to perform all image processing, PRZM changes the game by offloading a portion of that processing to the source of the image — the scan engine itself — reducing unnecessary delay and delivering a faster data capture experience. This unique approach helps businesses in just about any industry improve user productivity and business efficiency.

SUPPORT FOR THE NEXT GENERATION MIPI INTERFACE

Unlike its major competitors, the SE4750 supports the emerging MIPI interface as well as traditional parallel interfaces. Now, you can utilize the latest processors in your designs without sacrificing cost, integration time, or precious space for incremental hardware components. The result? Faster time to market and reduced costs.

EXTRAORDINARY WORKING RANGE

The standard scanning range on the SE4750 is anything but standard. Users can capture data that is farther than 36 in./92 cm away — over 30 percent farther than its

predecessors. With a wide field of view, the SE4750 also enables reading of larger bar codes, as well as simultaneous capture of multiple bar codes.

ADVANCED DOCUMENT CAPTURE

Motorola's integrated Intelligent Document Capture technology makes it easy to capture documents that are highly legible—and searchable. 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. Once the image is captured, it is automatically analyzed and up to eight functions are performed 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.

SUPERIOR INTEGRATION FLEXIBILITY

At less than nine grams (three tenths of an ounce) and approximately a quarter cubic inch, this small, lightweight imager can be easily integrated into even the most space-constrained products, from mobile computers, handheld scanners and self-service kiosks to medical and diagnostic instruments and lottery terminals. In addition, you have the flexibility to choose the decoder strategy that best fits your product designs — software or hardware. Our software decode option reduces system power requirements and integration space in your OEM device. Hardware options include a standalone circuit board that connects to your board, a microchip you can solder directly to your mother board, or an SE4750 and attached decoder board for a plug-and-play imaging solution.

FEATURES

Motorola-exclusive PRZM Intelligent Imaging technology

Offloads a portion of the processing from the decode software to the scan engine, reducing processing time and enabling faster data capture

Support for MIPI and parallel interfaces

Reduces integration time and cost by eliminating components

Comprehensive data capture capabilities

Capture 1D and 2D bar codes in milliseconds, from high-resolution photos, to letter, legal, A4 and A5 documents that are fully searchable and editable

Extraordinary working range

Capture data farther than 36 in./92 cm away

Extra wide field of view

Easy close-up reading of large bar codes as well as multiple bar codes

Exceptional motion tolerance

Delivers extraordinary scanning speed on all bar codes, increasing throughput and productivity in virtually any application

EASILY UPGRADE YOUR EXISTING DESIGNS TO THE LATEST IMAGING TECHNOLOGY

Since the SE4750 uses the same form factor and mounting pattern as our standard-setting SE4500 imager, you can easily migrate your existing equipment to this next generation imaging technology, infusing your designs with the ability to capture more types of data, faster than ever.

Empower your designs with next generation imaging. For more information on the Motorola SE4750, visit www.motorolasolutions.com/se4750 or access our global contact directory at www.motorolasolutions.com/contactus

SPECIFICATIONS

PHYSICAL CHARACTERISTICS

Dimensions	0.46 in. H x 0.85 in. W x 0.64 in. D 11.8 mm H x 21.5 mm W x 16.3 mm D
Weight	0.29 oz./8.22 grams
Interface	Camera Port on 21 pin ZIF connector

PERFORMANCE CHARACTERISTICS

Sensor Resolution	1280 x 960 pixels
Field of View	Horizontal: 48°, Vertical: 36.7°
Skew, Pitch & Roll	Skew Tolerance: ±60° Pitch Tolerance: ±60° Roll Tolerance: 360°
Focal Distance	From front of engine: 7.38 in.
Aiming LED (VLD)	655nm Laser
Illumination	2X Warm white LEDs

USER ENVIRONMENT

Ambient Light	Max 96,900 lux (direct sunlight)
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/Storage: 95% RH, non-condensing at 60° C
Shock Rating	2000 G ±5%, any mounting surface, at -30 and 60° C for 0.85 ± ms 2500 G ±5%, any mounting surface, at 23° C for 0.70 ±0.10 ms

PROVEN TECHNOLOGY YOU CAN COUNT ON

When you choose the SE4750, you get the peace of mind that comes from choosing superior, well-tested technology. Every day, all around the world, our OEM products power millions of devices in thousands of applications across industries. You enjoy award-winning data capture technology, ease of integration, high reliability and superior performance, enabling the rapid, cost-effective design of more profitable high-quality data capture solutions.

USER ENVIRONMENT (CONTINUED)

Power	Operational input voltage Engine: VCC=3.3 +/-0.3V; VCC_ILLUM= 3.0 to 5.5V; VDD_IO_HOST= 1.7 to 3.6V Total Current Draw (VCC=VCC_ILLUM=VDD_IO_HOST=3.3V) with Illumination and aiming on, = 580mA pk, 440maRMS Current draw in low power (hibernate mode)=360uA (standby mode)=15uA
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DECODE RANGES

	Near	Far
3 mil Code 39	2.8 in./7.1 cm	6.2 in./15.8 cm
5 mil Code 128	2.3 in./5.8 cm	8.7 in./22.1 cm
5 mil PDF417	3.0 in./7.6 cm	8.1 in./20.6 cm
6.67 mil PDF417	2.2 in./5.6 cm	10.6 in./26.9 cm
10 mil DataMatix	2.4 in./6.1 cm	10.6 in./26.9 cm
100% UPCA	1.6* in./4.1* cm	23.0 in./58.4 cm
15 mil Code 128	2.4* in./6.1* cm	25.2 in./64.0 cm
20 mil Code 39	1.6* in./4.1* cm	36.3 in./92.2 cm

* Field of View limited

REGULATORY

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

WARRANTY

Subject to the terms of Motorola's hardware warranty statement, the SE4750 is warranted against defects in workmanship and materials for a period of 15 months from the date of shipment. For the complete Motorola hardware product warranty statement, go to: <http://www.motorola.com/warranty>

Superior document processing

With the press of the shutter button, Motorola's Intelligent Document Capture software ensures the capture of the highest quality electronic documents; automatically identifies and corrects image quality issues; creates the smallest possible file size without impacting legibility; and attaches the image to the appropriate record

Miniature, lightweight form factor

Adds minimal weight and maximum data capture functionality; tiny size fits easily in the most space-constrained designs

Omnidirectional scanning for unparalleled ease of use

No need to ever align the bar code and imager for highly intuitive and rapid bar code capture

Multiple decode options with the same great Motorola scanning performance

Increase design flexibility with your choice of software only or hardware decode — available on a separate circuit board, a microchip or an all-in-one plug-and-play solution with SE4750 and attached decoder board

Pick list mode

Enables users to easily select a single bar code to capture on a field of bar codes