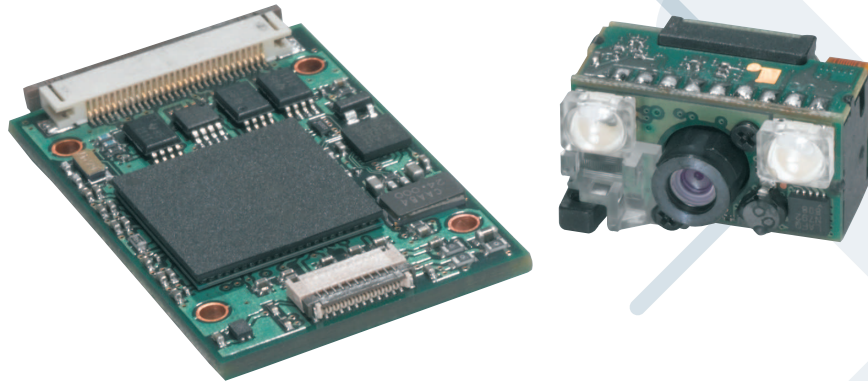




Symbol SE4500/PL4507

OEM imaging engine



FEATURES

Captures virtually all 1D and 2D bar codes as well as still images and video

Provides flexibility for many applications; enables design of devices that offer multiple types of data capture; enables standardization on a single engine to streamline and reduce the cost of product development

Powerful 624 MHz processor, fast sensor shutter speed and patent pending fast-pulse illumination

Superior performance on 1D and 2D bar codes, improving productivity in a wide variety of applications

Exceptional motion tolerance

Enables extraordinary scanning speed for all bar codes, increasing throughput and productivity — regardless of application

Sets the bar for 1D and 2D scanning performance

Until today, businesses were required to choose between a high performance laser engine for 1D bar code scanning or a 2D imager that offered expanded functionality — but reduced performance. The revolutionary Symbol SE4500 from Motorola eliminates this disparity, offering a comprehensive feature set that completely re-defines imaging technology. Stunning performance on 1D and 2D bar codes combines with the ability to capture still images and video, allowing businesses to deploy a world of new applications. The PL4507 decoder board, armed with a powerful 624 MHz microprocessor, decodes 1D and 2D bar codes 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 in many industries — from retail and healthcare to transportation and logistics and public safety.

Easy to use

When your products are powered by the Symbol SE4500, users will enjoy an unparalleled ease of use. Full omnidirectional scanning eliminates the need to precisely align bar code and imager. A unique

aiming pattern with a bright central dot ensures quick, accurate scanning — even in bright sunlight. The result is a highly intuitive scanning function that increases worker productivity, virtually eliminating the need and cost associated with training.

Easy integration into a wide variety of products

Designed for easy integration, the Symbol SE4500 reduces development time and cost, paving the way for highly cost-effective mobility solutions. 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, including mobile computers, handheld scanners, self-service kiosks, medical and diagnostic instruments, lottery terminals and more. Three models offer different focal distances to best meet unique product requirements. The SE4500SR (Standard Range) is designed for 1D intensive applications with medium to large bar codes; the SE4500DL is 'driver's license optimized' — ideal for small to medium bar codes and 2D intensive applications, including U.S. driver's license ID verification; and the SE4500HD (High Density) is tailored to enable the accurate capture of very small bar codes.

SPECIFICATION SHEET

Symbol SE4500
OEM imaging engine

Unique aiming pattern

Bright central dot ensures quick, accurate scanning — even in bright sunlight

Miniature, lightweight form factor

Less than three tenths of an ounce, adds minimal weight and maximum data capture functionality; tiny size fits easily in the most space-constrained designs

Low power consumption

Ideal for battery powered and other mobile devices

Three engine models to meet wide variety of working ranges and applications

SR (Standard Range) designed for 1D intensive applications with medium to large bar codes; DL (Driver's License optimized) ideal for small to medium bar codes and 2D intensive applications, including U.S. driver's license ID verification; HD (High Density) for very small bar codes

Compatible with SSI and SNAP! command interfaces

Expands application flexibility with fast, simple communication and support for advanced features and functionality between imager and host

Optional software developer kit (SDK)

Provides familiar Microsoft Windows 2000 and XP platform support for rapid development of applications that integrate easily into the customer environment

Proven technology you can count on

When you choose the Symbol SE4500, 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 yet cost-effective

Symbol SE4500 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: 752 x 480 pixels

Field of View: Horizontal: 40°, Vertical: 25°
Skew Tolerance: ±60°
Pitch Tolerance: ±60°
Roll Tolerance: 360°

Focal Distance from Front of Engine: SR: 8 in. DL: 5.3 in. HD: 2.9 in.

Aiming LED (VLD): 655 ±10 nm Laser

Illumination Element: 625 ±5 nm LEDs (2x)

Min. Print Contrast: Minimum 25% absolute dark/light reflectance measured at 650 nm

User Environment

Ambient Light: Max 96,900 lux (direct sunlight)

Operating Temperature: -22° F to 131° F / -30° C to 55° C

Storage Temperature: -24° F to 158° F / -40° C to 70° C

Humidity: Operating: 95% RH, non-condensing at 55° C
Storage: 85% RH, non-condensing at 70° C

Shock Rating: 2000 G ±5%, any mounting surface, at -30 and 70° C for 0.85 ±0.05 ms
2500 G ±5%, any mounting surface, at 23° C for 0.85 ±0.05 ms

Power: Operational Input Voltage: Engine: 3.3V ±10%
Current Draw with Illumination and Aiming: 250 mA

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

design of high-quality solutions that not only meet the needs of your customers — but also improve your margins.

For more information on the Symbol SE4500, access our global contact directory at www.motorola.com/enterprisemobility/contactus or visit www.motorola.com/se4500

Symbol PL4507 Specifications

Physical Characteristics

Dimensions: 1.0 in. H x 1.50 in. W x 0.26 in. D
25.3 mm H x 38.0 mm W x 6.6 mm D

Connector: 30-pin ZIF connector, 0.5mm pitch

Host Types: SSI, RS-232 (various modes), SNAP!, USB (various modes)

Performance Characteristics

Symbologies Supported: **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

Power: Input Voltage: 3.3V ±10% or 5.0V ±10%
Current draw (including engine):
450 mA average during scanning, 3.3V input
400 mA average during scanning, 5.0V input

Ranges

SR Focus	Near	Far
5 mil Code 39	2.1 in./53 mm	7.5 in./191 mm
100% UPC/EAN	1.6 in./41 mm	15.5 in./394 mm
6.7 mil PDF417	3.4 in./86 mm	7.1 in./180 mm
DL Focus		
5 mil Code 39	1.4 in./36 mm	7.3 in./185 mm
100% UPC	1.6 in./41 mm	12 in./305 mm
5 mil PDF417	2.8 in./71 mm	4.5 in./114 mm
HD Focus		
3 mil Code 39	1.6 in./41 mm	3.8 in./97 mm
4 mil PDF417	1.8 in./46 mm	3.5 in./89 mm

Warranty

Subject to the terms of Motorola's hardware warranty statement, the SE4500 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>



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