

SE3300 Scan Engine

Reduce product development cost and improve your margins

High performance cost-effective enterprise-class scanning. When your products need to capture 1D and 2D barcodes, the SE3300 scan engine delivers the same high-quality performance that drives Zebra's continued leadership in the bar code scanning industry — all in a very affordable package. You get first-time every time scanning of even damaged and poorly printed bar codes; the ability to read bar codes that are printed on paper labels or displayed on the screen of a mobile phone or computer; and the rapid scanning speed that protects worker productivity and the customer experience. With the SE3300, you can create products that will make a difference for your customers — and their customers. Create kiosks and handheld mobile devices that can scan lottery tickets, coupons and loyalty cards displayed on mobile phones that improve customer service quality and self-checkout times. And help reduce errors and improve care quality with bar code-enabled medical equipment, such as insulin meters and blood carousels.



Barcode Scanning Made Easy For Workers and Customers

When workers or customers are scanning bar codes, the SE3300 makes it easy — no training is required. Users do not need a steady hand or to pause between scans. There is no need to align bar code and scanner. The bright LED dot makes it easy to aim. The result is easy first-time every-time capture of bar codes that are near and far.

Simple to Integrate

Numerous features make it easy to integrate the SE3300, from flexible mounting options and thorough documentation to a scan engine development board. With a multitude of software configuration options, you can easily optimize the performance of the SE3300 for your application — from scan timing to the ability to customize the brightness of the aiming pattern and illumination to fit different available light levels.

Decode Options Provide Maximum Integration Flexibility

Hardware and software decode options allow you to choose the decoder strategy that best fits your product designs. Our PL5500 hardware decoder family allows you to choose the form factor that best meets the needs of your product designs — a standalone circuit board that connects to your board or a microchip that is soldered to your main circuit board. Want it already integrated? Choose the SE3307, which comes with the decoder already embedded and ready to go. And if component costs, battery power and product margins are a concern, we offer a purely software decode option — no hardware required.

Features

Captures 1D and 2D barcodes and images

Flexibility to support many applications

Excellent motion tolerance

Patent-pending fast-pulse illumination eliminates hand jitter and enables rapid-fire continual bar code scanning

Three models for application flexibility

The standard model is ideal for handheld use, and offers the longest read range; the wide angle model is designed for fixed-mount and public- facing applications; the high-density model excels at reading the small and very dense bar codes common in component manufacturing and healthcare

Omni-directional scan pattern

No need to align bar code and scanner, ensuring user comfort and protecting worker productivity

Unique LED aiming system

Focused amber-colored crisp 'spot' for accurate aiming and first time barcode capture

Flexible mounting options

Can be mounted from top or bottom

Specifications

Physical Characteristics

Dimensions	SE3300: 0.67 in./17 mm H x 1.18 in./30 mm W x 0.68 in./17.3 mm D SE3307: 0.67 in./17 mm H x 1.18 in./30 mm W x 1.02 in./26 mm D
Weight	SE3300: 0.22 oz./6.1 g SE3307: 0.36 oz./10.2 g
Interface	SE3300: Camera port on 21-pin ZIF connector SE3307: 31-pin ZIF connector (0.3 mm pitch), micro USB B

Performance Characteristics

Sensor Resolution	752 x 480 pixels
Field of View	SR, HD: Horizontal - 40°, Vertical - 25° WA: Horizontal - 46°, Vertical - 30°
Angular Tolerance	Skew: ±60°; Pitch: ±60°; Roll: 360°
Aiming LED	617 nm LED, dot optical power: 0.19 mW typical
Illumination	2x 625 nm LEDs

User Environment

Operating Temperature	-30° to 50° C (-22° F to 122° F) (measured at engine chassis)
Storage Temperature	-40° to 70° C (-40° to 158° F)
Humidity	Operating: 95% RH, non-condensing at 122° F/50° C Storage: 85% RH, non-condensing at 158° F/70° C
Ambient Light	Maximum 86,100 Lux. (direct sunlight)
Power	SE3300: Operational input voltage: Engine: 3.3V ±10%; Current draw with illumination and aiming: 250 mA (WA), 275 mA (SR, HD) SE3307: Operational input voltage: 3.3V +-10% or 5V +/-10%; Current Draw: 280 mA avg. during scanning, 3.3V input)
Shock Rating	2000 G \pm 5% applied via any mounting surface at 0° C, 20° C, and 50° C for a period of 0.85 \pm 0.05 msec; 1000 G \pm 5% applied via any mounting surface at -30° C for a period of 0.85 \pm 0.05 msec

Decode Ranges (Typical)

SR Focus Range	Near/Far
5.0 mil Code 39	1.5 in./3.8 cm to 8.2 in./20.8 cm
6.67 mil PDF417	2.2 in./5.5 cm to 7.5 in./19.1 cm
10 mil Datamatrix	Field of view limited to 8.9 in./22.7 cm
100% UPC-A	1.9 in./4.9 cm to 17.5 in./44.4 cm
15 mil PDF417	Field of view limited to 14.4 in./36.6 cm

WA Focus Range	Near/Far
5.0 mil Code 39	1.7 in./4.3 cm to 7.0 in./17.7 cm
6.67 mil PDF417	2.2 in./5.5 cm to 6.5 in./16.6 cm
10 mil Datamatrix	Field of view limited to 7.6 in./19.3 cm
100% UPC-A	1.6 in./4.2 cm to 13.2 in./33.5 cm
15 mil PDF417	Field of view limited to 10.7 in./27.2 cm

HD Focus Range	Near/Far
3 mil Code 39	1.5 in./3.8 cm to 5.0 in./12.6 cm
4 mil PDF417	1.8 in./4.6 cm to 3.9 in./10.0 cm
5 mil Code 39	1.1 in./2.7 cm to 6.3 in./15.9 cm
5 mil Datamatrix	1.7 in./4.4 cm to 4.0 in./10.3 cm
6.67 mil PDF417	1.3 in./3.4 cm to 4.9 in./12.5 cm

Regulatory

Electrical Safety	UL, VDE, and CU recognized component
Laser Classification	Intended for use in CDRH Class II/IEC 825 Class 1M devices
Environmental	Compliant with RoHS

Warranty

Subject to the terms of Zebra's hardware warranty statement, the SE3300 is 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: www.zebra.com/warranty

Footnotes

* All decode ranges based on Grade A, photographic quality barcodes printed on paper. Specifications are subject to change without notice.

NA and Corporate Headquarters +1 800 423 0442 inquiry4@zebra.com

Asia-Pacific Headquarters +65 6858 0722 contact.apac@zebra.com EMEA Headquarters zebra.com/locations contact.emea@zebra.com **Latin America Headquarters** zebra.com/locations la.contactme@zebra.com

ZEBRA and the stylized Zebra head are trademarks of Zebra Technologies Corp., registered in many jurisdictions worldwide. All other trademarks are the property of their respective owners. ©2025 Zebra Technologies Corp. and/or its affiliates. 07/07/2022 HTML