ZEBRA
CAPTURE
YOUR EDGE

SE58 Extended Range Scan Engine

Extend your reach for compact and industrial form factors

In today's on-demand economy, there's pressure to fulfill more orders, ship faster and execute flawlessly from the warehouse to the retail store. The SE58 Extended Range Scan Engine with IntelliFocus™ technology is more than ready to meet the challenge. As the next evolution in Zebra's extended range scanning, the SE58 enables workers to scan faster, farther and more accurately than ever before. This versatile scan engine seamlessly reads barcodes from less than 2 in./5 cm to over 105 ft./32 m – the widest working range in the industry. You can bring to market a single scanner capable of reading barcodes in hand, on stacked cargo containers or on the uppermost warehouse shelf. A high-visibility green laser aimer makes aiming easy and more accurate at a variety of distances and lighting conditions. And the compact design integrates into both sleek, enterprise-style mobile computers and ultra-rugged industrial devices – enabling you to bring new levels of productivity to virtually every worker and workflow in the supply chain.

Take Your Reach to the Next Level

Scan farther with an unprecedented extra-long range
With the industry's widest working range for both 1D and 2D barcodes, the SE58 captures 100 mil Code 39 in hand to over 105 ft./32 m and 55 mil QR out to 24 ft./7.3 m. A 1 MP fixed focus near sensor and a 2 MP variable focus far sensor deliver flawless barcode capture over the entire scanning range. Forklift operators can reach more codes without getting out of their vehicle. Retail associates can scan items on the top shelf without climbing a ladder. Warehouse workers can reach ground level barcodes without crouching. And yard operators can reach barcodes on the highest cargo container.

Instant, intelligent barcode capture near and far
Zebra's exclusive IntelliFocus technology quickly determines barcode distance and captures it, whether the barcode is in hand or across the room. Advanced illumination smartly adapts to the ambient light conditions, enabling peak performance for both indoor and outdoor scanning. Users get instant decodes and optimal performance across the entire scanning range and in a variety of lighting conditions. And one device can meet the needs of virtually any data capture application.

Compact design built for the new generation of workflows
Today's retail associates may need to perform many traditional warehouse and distribution center tasks. Devices are becoming slimmer, while needing to do more than ever. Weighing only 0.37 oz./10.6 g and measuring only 0.42 in./10.6 mm high, the SE58 is over 50% lighter and 18% smaller[1] than the competition. You can expand extended range scanning to a variety of form factors, including slim, pocketable handhelds that today's workers want.

Green laser with highest visibility for indoor and outdoor scanning
The SE58's green laser aimer with a wide cross hair pattern is up to 7x more visible than a red aiming dot and can be seen across the entire decode range indoors and an extraordinary range of up to 10 ft./3 m in direct sunlight. The result is easier aiming across a variety of distances and lighting conditions, whether workers are scanning in the dimmest corners of the warehouse or out in bright sunlight on the loading dock or yard.

The SE58 Extended Range Scan Engine with IntelliFocus™ technology — Reach new heights in scan performance. For more information, please visit **www.zebra.com/se58** and **www.zebra.com/intellifocus**

Performance That Elevates the End User Experience

Capture every barcode the first time, every time
With high-resolution megapixel sensors and Zebra's exclusive PRZM Intelligent Imaging technology, the SE58 can capture virtually any type of barcode in any condition, the first time, every time — and do so at record speeds. From barcodes printed on paper, to barcodes on reflective surfaces and LCD screens such as cell phones and warehouse computers, the SE58 can capture them all with flawless performance that changes what users think is possible from a barcode scanner.

Effortless scanning with the industry's widest field of view
The SE58 offers the widest field of view for extended range scanning on the market. The result? Less precise aiming is required for a successful scan at both near and far distances — making the scanning experience a breeze, even for novice users.

Rugged construction built for every environment
You and your customers can count on durability in demanding conditions — from drops and tumbles of the host device to operation in the freezer and extreme outdoor environments. With rugged construction, 2500G shock rating and wide operating temperature range, the SE58 is built to withstand the most ultra-rugged industrial applications.

Design Better Products and Lower Costs with Software-Based Decoding

Zebra software decode — save space, power and costs
Zebra's Software Decode Library (SDL) connects the SE58 directly to your host device CPU, eliminating the need for decode hardware. There's no hardware to purchase and integrate, improving product margins and profitability. Since there's less hardware to power, you get longer battery cycle times in most cases. And SDL uses the same industry-leading algorithms used in Zebra hardware decoders, so you're not sacrificing performance.

Flexible solutions to meet your business' needs
Zebra's flexible SDL supports multiple host platforms, including Qualcomm, MediaTek and NXP and both Android and Linux operating systems. Since SDL leverages standard Android Camera Native APIs, it can support future versions of Android.

Support you can count on
Zebra provides an expansive list of tools and documentation for a faster time to market, such as API libraries and reference drivers based on sample applications. Zebra's engineering resources are available in every region and ready to support your development and integration questions and other support needs.

Zebra — An Industry-leading OEM Partner

Superior reliability
The SE58 is backed by a 15-month warranty and has less failure points than some competitive scan engines. And since Zebra data capture products are proven to have less than 0.5% failure rates, you can be confident in the long-term reliability of the engine integrated in your design.

The most trusted OEM scan engine provider
For over 50 years, Zebra has been helping OEMs successfully implement enterprise-class barcode scanning. We are regularly ranked as the world's #1 OEM scan engine provider, including in 2023. Get the peace of mind that comes from choosing superior, well-tested technology from a partner that has a proven track record in powering millions of OEM devices across a range of industries.

Specifications

Physical Characteristics

Dimensions	0.42 in. H x 1.19 in. W x 0.87 in. D 10.6 mm H x 30.1 mm W x 22.1 mm D
Weight	0.37 ± 0.02 oz./10.6 ± 0.5 g
Interface	24-pin 0.4 mm pitch board-to-board connector, MIPI (2 data lanes)

Performance Characteristics

Shutter Type	Global
Sensor Resolution	Far: 1920 horizontal x 1080 vertical pixels Near: 1280 horizontal x 800 vertical pixels
Field of View	Far: Horizontal: 14.0°, Vertical: 7.9° Near: Horizontal: 42.1°, Vertical: 27°
Skew Tolerance	±60°
Pitch Tolerance	±60°
Specular Dead Zone	±18°
Roll Tolerance	360°
Focal Distance	Near camera: 8 in./20.3 cm fixed focus Far camera: from 8 in./20.3 cm to infinity
Aiming	Green Laser 520 nm
Illumination	2 warm-white LEDs 2700K
Min. Print Contrast Minimum	25%

User Environment

Ambient Light	Max 107,639 lux (direct sunlight)
Operating Temperature	-4° F to 140° F/-20° C to 60° C
Storage Temperature	-40° F to 158° F/-40° C to 70° C
Humidity	5% to 95% (non-condensing), not intended for exposed operation
Shock Rating	2500 ± 100 g, any mounting surface, at 20° C for 0.70 ±0.10 ms 2000 ± 100g, any mounting surface, at -20° C and 60° C for 0.85 ±0.1 ms
Power	**Operational Input Voltage** VCC = 3.3 +0.3 /- 0.165 V VDD_IO_HOST: 1.71 to 3.6V VCC_ILLUM: 3.0 to 5.5V **Current Draw** Total VCC=VDD_IO_HOST =3.3V, VCC_ILLUM=5V 340mA RMS, 750mA Peak Total VCC=VDD_IO_HOST=VCC_ILLUM =3.3V,475mA RMS, 1000mA Peak VCC_ILLUM=5V, 215mA RMS, 670mA Peak VCC_ILLUM=3.3V 360mA RMS,900mA Peak VCC= VDD_IO_HOST=3.3V, 150mA RMS, 255mA Peak **Current Draw in Low-Power Modes** Idle = 75mA RMS Low Power=3mA RMS

Regulatory

Laser/LED Classification	Class 2 laser per IEC/EN 60825-1 Class II laser per FDA CDRH Risk Group 1 LEDs per IEC/EN 62471
Electrical Safety	Complies with IEC/EN 62368-1 and UL 62368-1 and CAN/CSA C22.2 No. 62368-1-14
Environmental	RoHS compliant

Decode Ranges (Typical Working Ranges)[2]

Symbology/Resolution	Distance
5 mil Code 39	Near: 2.1 in./5.3 cm Far: 4.8 ft./1.45 m
10 mil Code 39	Near: *[3] Far: 9.6 ft./2.92 m
100% UPCA	Near: 2.2 in./5.6 cm Far: 12.2 ft./3.71 m
15 mil Code 128	Near: *[3] Far: 13.7 ft./4.17 m
20 mil Code 39	Near: *[3] Far: 19.7 ft./5.99 m
40 mil Code 39	Near: *[3] Far: 41.2 ft./12.55 m
55 mil Code 39 RFL	Near: *[3] Far: 61.2 ft./18.64 m
100 mil Code 39 (paper)	Near: *[3] Far: 107.1 ft./32.64 m
100 mil Code 39 RFL	Near: *[3] Far: 105.2 ft./32.05 m
100 mil Code 128 RFL	Near: *[3] Far: 87.1 ft./26.54 m
10 mil DataMatrix	Near: 2.4 in./6.1 cm Far: 5.2 ft./1.58 m
10 mil QR	Near: 2.4 in./6.1 cm Far: 4.6 ft./1.39 m
55 mil QR	Near: *[3] Far: 24 ft./7.32 m

Warranty

Subject to terms of Zebra's hardware warranty statement, the SE58 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, please visit: www.zebra.com/warranty

Footnotes

1. Measured in total volume
2. Distance dependent on symbology type and size; range is reduced under lower ambient light level.
3. Dependent on the width of the barcode (shorter barcodes can be read even closer, and wider barcodes farther)
Specifications are subject to change without notice.

Markets and Applications

- Warehousing
- Transportation and Logistics
- Retail