A TSC Company BLUEBIRD

The Ultimate Performance for Enterprise Mobility based on 5G

S50





Industry & Applications



Retail - Store associates

- · Price/Inventory checks
- Item locator
- Line busting
- · Assisted selling
- · Task management
- rask management
- · Front of store replenishment
- · Price management
- · Inventory/cycle counts



Retail - Store managers

- Fleet Management
 - · Planogram management

 - Promotion compliance
 - Merchandising
 - · Back of store management



Field Service Technicians

- Invoicing & Asset management
- Staff Communication



Postal Carriers/Courier Drivers

- · Location services & Proof of Delivery
- · Asset & Fleet management
- · Packing & Staging & Invoicing
- Work Order Validation



Public Official

- · eCitation & Situational awareness
- · Communication and Collaboration
- · Parking & Traffic Law Enforcement
- · Identification Authentication
- · Patrol Mobile Solution



- BOS[™] Provisioning; Staging; Kiosk;
 Virtual Key; BOS[™] Keyboard
- BOS[™] VoIP
- BOS[™] PTT, PTT Essential
- BOS[™] Wi-Fine[™] (WiFi analyze application)
- BOS[™] EMM
- BOS[™] OTA
- BOS™ OemConfig

3'rd Party Solutions Integration

- EMM: Airwatch, MobileIron, Mobicontrol, IBM Mass360, XenMobile
- PTT: ESChat, Zello, IMPTT, EveryTalk, AirPTT, RealTalk



Meet the all-new next generation device, Bluebird's S50 to experience brilliant specifications, which is the another level upgrade of the previous Bluebird device features. S50 has the best battery capacity of the grade, and the design of blue buttons on the sides of device makes it to be more visible, and various cutting edge technologies are in the device - camera, PTT key, display, etc.

Key Features

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

Fast and Stable Network

Experience fast business progress speed with Wi-Fi 6E & 5G. Even you are working in the large facilities, you can give fast and stable performance by CBRS private LTE networks.

Robust & Slim Design

S50 has the improved durability and ergonomic design which makes it thinner, larger and stronger. If you drop it from a height of 1.5m / 5ft, or drop it 1,000 times from a height of 0.5m / 1.6ft, and it still works. It applied Gorilla Glass on the Touch Pannel and Imager.

Speed upgrade of another level

Increase the efficiency of your work by Qualcomm® 6490 octa-core processor, up to 8GB of RAM and 128GB of Flash, plus a 2TB MicroSD card slot.

6-inch display with best in class outdoor readability

S50 is waterproof & dustproof, and their screen provides clear display view under the bright sunlight. Bluebird's multi-touch technology applies glove and stylus touch.



Key Features

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

Cutting edge Battery technology

Bluebird's BOS™ Power Manager standard 5000 mAh and extended 7000 mAh batteries offer great power supply and long device working hour. S50 has the best battery capacity of the grade.

Scan your data with 2 kind of scanning range

If you want to scan in standard range, you can use SE4720/SE4770 1D/2D scan engine. Meanwhile, you can use SE55 1D/2D scan engine for advanced scan range.

High Solution Camera

Experience a 16 MP integrated camera that delivers high-quality pictures with remarkable clarity

Supportive microphone and speaker

3 microphones and 2 speakers improve your communication with co-workers.

CONVENIENT CONNECTION & COMMUNICATION

Location-Free Two-Way Communication

If you use BOS™ PTT, a subscriptiontype Push-to-Talk (PTT) Essential service, you can communicate regardless of location. BOS™ PTT helps you send and receive calls and messages over a WiFi network.

Simply check your boxes by pressing a button

S50 supports Time of Flight (ToF) sensor to check parcel dimensions quickly and easily to save your working time.

World Class RFID Reader Connection Available

The RFR900, a world-class handheld UHF RFID reader, and the next-generation model, RFR901, enable fast and safe operation. RFR900 can read 900 tags per second and RFR901 can read 1200 tags per second. If you connect Bluebird's adapter mount, Bluetooth, and NFC and use Wi-Fi-6e, you can reliably manage data on the reader connected to your mobile computer.

MANAGE YOUR WORK EFFICIENCY BY BOS™ OF BLUEBIRD

Reliable Security system

BOS™ SecureCare for Android™ can protect your devices safely. With Bos Kiosk, you can restrain apps and device features.

Simply find your lost device

You can find lost device easily & fast with BOS Device Tracker, even the battery is discharged or off.

Manage your device easily

With Bluebird Zero-Touch, you can manage many devices just by scanning. BOS Wi-Fine manage Wi-Fi connection stable. Use Non-GMS OS Control to select Google Services. You can manage the device by BOS Dr.Device without repairing it.

Increase work efficiency with the device

With Terminal Emulation and BOS™ Keyboard, you can get the touchscreen & keybord you need for managing data. BOS onescan can help you select the barcodes, and OCR can help you capture standardized data.

Easy application performance and data management

You can use the BOS SDK, a custom development tool for enterprise applications. This enables rapid application development and provides a custom toolkit that is fast, efficient, and optimized. You can also easily manage bar code data using the Data Wedge API.



Specifications

PERFORMANCE CHARACTERISTICS

CPU

Qualcomm Snapdragon™ QC6490 octa-core, 2.7 GHz

Operating System

Android 12; Upgradeable to Android 16

Memory

6GB RAM/ 64GB UFS Flash 8GB RAM/ 128GB UFS Flash (Optional)

PHYSICAL CHARACTERISTICS

Dimensions (L x W x D)

166.8 × 78.3 (Grip: 77.34) x 16.71 mm

Weight

290 g with standard battery

Display

6" FHD+ (1080×2160), LED back-light

Imager Window

Corning® Gorilla® Glass 5

Touchpanel

Multi-mode capacitive touch with bare or gloved fingertip input or conductive stylus (sold separately), Corning Gorilla Glass; water droplet rejection; fingerprint resistant anti-smudge coating

Backlight

LED backlight

Power

Rechargeable Li-Polymer, BOS™ PowerManager for realtime battery management
Standard capacity 5000mAh / 19.25 Watt hours;
Extended capacity 7000mAh / 26.95 Watt hours;
*Fast charging & Hot Swap battery mode (All SKUs)

(Optional

BLE Beacon Battery 5000mAh

Qi compatible Wireless charging battery 5000mAh

Hot swap

Supported

Expansion Slot

User accessible MicroSD; supports up to 2TB

SIM / SAM

WWAN SKU Only: 1 Nano SIM; 1 eSIM

Interface

Rear: 8-pin communication connector Bottom: USB-C 3.1 OTG w/DP mode 2-pin Charging Connector

Notification

Audible tone; multi-color LEDs; Scan LED; vibration; Haptick Feedback

Keypad & Button

On-screen keypad and BOS™ Keyboard power button; Volume up/down buttons; Dual-action side scan buttons; Dedicated PTT Button; button of trigger handle via Back I/O.

Voice and Audio

Three microphones with noise-cancellation; Vibrate alert; High-quality Dual speaker phone; PTT headset USB-C Type support; Bluetooth wireless headset support, SWB & FB audio cellular circuit switch voice; HD voice; 3.5 mm audio jack only on WLAN SKUs

PTT Hot Key

Support Dedicated PTT Button

WIRELESS WAN DATA AND VOICE COMMUNICATIONS

Radio

Frequency Band Worldwide

- 5G FR1: n1/2/3/5/7/8/12/13/14/20/25/26/28/29/38/ 40/41/48/66/71/77/78/79
- 4G: B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/ 38/39/40/41/42/43/48/66/71
- 3G: B1/B2/B4/B5/B8/B19
- 2G: 900/1800/850/1900

Supports private networking (LTE/5G) Support CBRS (US B48, Private LTE)

Support 5G mmWave n257/258/260/261 (Optional)

GPS

(Only on WWAN SKUs)

GPS, GLONASS, Galileo, BeiDou, QZSS Dual-Band GNSS

 concurrent L1/G1/E1/B1 (GPS/QZSS, GLO, GAL, BeiDou) + L5/E5a/BDSB2a (GPS/QZSS, GAL, BeiDou); a-GPS; supports XTRA

WIRELESS LAN

Radio

IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w/mc/ax; 2×2 Mu-MIMO; Wi-Fi™ 6E (801.11ax); Wi-Fi certified; Wi-Fi™ 6E Certified; Dual Band Simultaneous;

IPv4, IPv6

Data Rates

6GHz. 802.11ax - 20MHz, 40MHz, 80MHz, 160MHz — up to 2402 Mbps;

5GHz: 802.11a/n/ac/ax — 20MHz, 40MHz, 80MHz, 160MHz — up to 2402 Mbps;

2.4GHz: 802.11b/g/n/ax — 20MHz up to 286.8 Mbps

Security and Encryption WEP (40 or 104 bit);

WPA/WPA2 Personal (TKIP, and AES); WPA3 Personal (SAE);

WPA/WPA2 Enterprise (TKIP and AES);

WPA3 Enterprise (AES)

— EAP-TTLS (PAP, MSCHAP, MSCHAPv2); EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC,

LEAP, EAP-PWD; WWAN models only — EAP-SIM, EAP-AKA; WPA3 Enterprise 192-bit mode (GCMP 256) — EAP-TLS; Enhanced Open (OWE)

WIRELESS PAN

Bluetooth

Class 2, Bluetooth v5.2 and Secondary BLE for beaconing within BLE battery

WIRED LAN

Ethernet

Support (w/ Ethernet Cradle - 1GHz)

^{*}Android version is subject to change depending upon Qualcomm's roadmap.

^{*}Please be informed that Bluebird warranty program should be purchased to get Android upgrade service.



Specifications (Continued)

COMMUNICATION AND MESSAGING

VoIP / PTT

DATA CAPTURE

SE4720 1D/2D Scan Engine Scanning SE4770 1D/2D Scan Engine (Optional) SE55 1D/2D Advanced Range Scan Engine (Optional) Camera Rear - 16 MP AutoFocus; flash LED, PDAF, Torch mode+HDR; better low light performance; Time of Flight (ToF) Sensor (Optional) Front - 8MP Fixed focus (Optional) Rear: 50 MP autofocus; flash LED, PDAF; Torch mode+HDR; better low light performance NFC ISO 14443 Type A and B; FeliCa and ISO 15693 cards; Card Emulation via Host; Contactless payment support, (Optional) ECP1.0 and ECP2.0 polling support, Apple VAS certified

SENSOR

Light Sensor	Ambient Light Automatically adjusts display backlight brightness
Other Sensors	Proximity, eCompass, accelerometer. Gyroscope, Pressure

USER ENVIRONMENT

Operating Temp	-20°C to 50°C / -4°F to 122°F
Storage Temp	-40°C to +70°C / -40°F to +158°F
Humidity	5% to 95% non-condensing
Drop Spec	Multiple 5 ft./1.5 m drop to tile over concrete (-10°C to 50°C /14°F to 122°F) per MIL-STD 810H Multiple 8 ft./2.4 m drop to concrete over operating
	temp.(-20°C to 50°C /-4°F to 122°F) with protective boot per MIL-STD 810H
Tumble Spec	1000 1.6 ft./0.5 m tumbles, meets or exceeds IEC tumble specification
	1000 3.2 ft./1.0 m tumbles at room temperature with protective boot, meets or exceeds IEC tumble specification
Sealing	IP68 and IP65 with battery per applicable IEC sealing specifications
Vibration	4 g's PK Sine (5 Hz to 2 kHz); 0.04g2/Hz Random (20 Hz to 2 kHz); 60 minute duration per axis, 3 axis
Thermal Shock	-40°C to 70°C / -40°F to 158°F rapid transition
Electrostatic Discharge (ESD)	+/-15kv air discharge +/-8kc direct discharge +/-8kv indirect discharge

SOFTWARE SOLUTIONS

BOS™	BOS™ • Provisioning; • Staging; • Kiosk; • Virtual Key; • BOS™ Keyboard; • VolP; PTT; PTT Essential • EMM; • Wi-Fine (WIFI analyze application) • Secure ID (Secure management solution)
3'rd Party Solutions	EMM: Airwatch, MobileIron, Mobicontrol, Ma

^{*} Specifications are subject to change upon manufacturer's condition.



Integration

Zapraszamy do kontaktu! Więcej informacji: www.kreski.pl Scan to learn more about S50 >

PTT: ESChat, Zello, IMPTT, EveryTalk, AirPTT