

## L10ax Enterprise Tablet



## **Product Reference Guide** for Microsoft<sup>®</sup> Windows<sup>®</sup> 10

#### Copyright

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

Information in this document is subject to change without notice. The software described in this document is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of those agreements.

For further information regarding legal and proprietary statements, please go to:

SOFTWARE: zebra.com/linkoslegal. COPYRIGHTS: zebra.com/copyright. WARRANTY: zebra.com/warranty. END USER LICENSE AGREEMENT: zebra.com/eula.

## **Terms of Use**

#### **Proprietary Statement**

This manual contains proprietary information of Zebra Technologies Corporation and its subsidiaries ("Zebra Technologies"). It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the express, written permission of Zebra Technologies.

#### **Product Improvements**

Continuous improvement of products is a policy of Zebra Technologies. All specifications and designs are subject to change without notice.

#### **Liability Disclaimer**

Zebra Technologies takes steps to ensure that its published Engineering specifications and manuals are correct; however, errors do occur. Zebra Technologies reserves the right to correct any such errors and disclaims liability resulting therefrom.

#### **Limitation of Liability**

In no event shall Zebra Technologies or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, consequential damages including loss of business profits, business interruption, or loss of business information) arising out of the use of, the results of use of, or inability to use such product, even if Zebra Technologies has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

## Contents

About This Guide	
Configurations	8
Energy Star	8
Notational Conventions	9
Icon Conventions	9
Service Information	10
Determining Software Versions	10

Getting Started	
Unpacking the Device	11
XSLATE L10ax Features	12
XPAD L10ax Features	15
Preparing the Tablet for First Use	
Inserting a SIM Card	
Powering On the Tablet	19
Pens for the Tablets	
Capacitive Pens	
Active Digitizer Pens	21
Optional Setup Tasks	
Attaching the Pen Tether	
Connecting the Tablet to an External Monitor	
Back of Battery Charge Indicators	
Removing and Replacing the Battery	
Removing the Battery	
Replacing the Battery	

Hot Swapping the Battery24
----------------------------

Using the Device	
Start Screen	26
Know Your Tablet	27
Tablet Information	27
Support	27
Battery Management	28
Optimizing Battery Life or Performance	28
Changing the Power Settings	
Manually Changing the Display Brightness	28
Manually Activate Sleep Mode	
Battery Health Monitor	29
Tablet Mode	29
Configuring Tablet Mode	29
Tablet Mode Settings	30
Tablet Mode Start Screen	31
Multi-Touch Gestures	32
Changing Touch Mode	32
On-Screen Keyboard	33
Opening the On-Screen Keyboard	33
Opening the Keyboard and Handwriting Panel	33
Active Stylus	34
Using the Camera	34
Fingerprint Reader	34
Setting Up a PIN	34
Setting Up the Fingerprint Reader	35
Logging In with Your Fingerprint	35
Fingerprint Reader Tips	35
Windows Hello Face	36
Setting Up Windows Hello Face	36
Logging In with Windows Hello Face	

## Contents

Softwar	´e	
	Initial Windows Setup	
	Factory Reset	37
	Windows Reinstallation	38
	Creating an Installation USB Flash Drive	
	Reinstalling Windows	
	Checking Versions	39
	Checking BIOS Version	
	Checking Operating System Version	
	Enter the BIOS	
	Entering the BIOS with a Keyboard	40
	Entering the BIOS without a Keyboard	40
	Entering the BIOS without a Keyboard from Windows	
	Zebra Barcode Scanning Resources	40
	Installing Application	
	Getting Apps from the Windows Store	40

ata Capture	41
- Imaging	41
Digital Camera	
Scanning Considerations	41
Scanning with the Integrated Barcode Scanner (XPAD Only)	

Wireless	
Wireless Local Area Networks	
Connecting to a Wi-Fi Network	
Viewing Network Information	
Configuring Proxy Settings	
Adding a Wi-Fi Network	
Wireless Wide Area Networks	47
Connecting to a Cellular Data Network	47
Adding an Internet APN	48
Setting Up a SIM PIN	

	Removing a SIM PIN	
	Changing a SIM PIN	49
	Unblocking a SIM PIN	49
	Bluetooth	
	Adaptive Frequency Hopping	
	Security	
	Bluetooth Profiles	51
	Pairing with a Bluetooth Device	52
	Unpairing a Bluetooth Device	52
	Turning on Airplane Mode	52
	Near Field Communications	
	Enabling NFC	53
	Reading NFC Cards	53
		54
Accessori	2S	
	es nce and Troubleshooting	
		60
	nce and Troubleshooting	<b>60</b>
	nce and Troubleshooting Maintaining the Device	<b>60</b> 
	<b>nce and Troubleshooting</b> Maintaining the Device Operating the Tablet in Cold Ambient Temperatures	<b>60</b> 60 60 60
	<b>nce and Troubleshooting</b> Maintaining the Device Operating the Tablet in Cold Ambient Temperatures Battery Safety Guidelines	<b>60</b> 
	nce and Troubleshooting Maintaining the Device Operating the Tablet in Cold Ambient Temperatures Battery Safety Guidelines Long-term Battery Storage	<b>60</b> 60 60 60 60 61 61
	nce and Troubleshooting Maintaining the Device Operating the Tablet in Cold Ambient Temperatures Battery Safety Guidelines Long-term Battery Storage Disposing of Used Batteries	<b>60</b> 60 60 61 61 61 62
	Ace and Troubleshooting Maintaining the Device Operating the Tablet in Cold Ambient Temperatures Battery Safety Guidelines Long-term Battery Storage Disposing of Used Batteries Cleaning Instructions	<b>60</b> 60 60 60 60 61 61 61 62 62
	Ace and Troubleshooting Maintaining the Device Operating the Tablet in Cold Ambient Temperatures Battery Safety Guidelines Long-term Battery Storage Disposing of Used Batteries Cleaning Instructions Cleaning Materials Required	<b>60</b> 60 60 61 61 61 62 62 
	Ace and Troubleshooting Maintaining the Device Operating the Tablet in Cold Ambient Temperatures Battery Safety Guidelines Long-term Battery Storage Disposing of Used Batteries Cleaning Instructions Cleaning Materials Required Cleaning the Device	<b>60</b> 60 60 60 60 61 61 61 62 62 62 62 62 63
	Ace and Troubleshooting Maintaining the Device Operating the Tablet in Cold Ambient Temperatures Battery Safety Guidelines Long-term Battery Storage Disposing of Used Batteries Cleaning Instructions Cleaning Materials Required Cleaning the Device Caring for the Display	<b>60</b> 60 60 60 60 61 61 62 62 62 62 62 62 63 63
	Ace and Troubleshooting Maintaining the Device Operating the Tablet in Cold Ambient Temperatures Battery Safety Guidelines Long-term Battery Storage Disposing of Used Batteries Cleaning Instructions Cleaning Instructions Cleaning Materials Required Cleaning the Device Caring for the Display Caring for the Pen	<b>60</b> 60 60 60 60 61 61 62 62 62 62 62 63 64 64 64
	Ace and Troubleshooting Maintaining the Device Operating the Tablet in Cold Ambient Temperatures Battery Safety Guidelines Long-term Battery Storage Disposing of Used Batteries Cleaning Instructions Cleaning Instructions Cleaning Materials Required Cleaning the Device Caring for the Display Caring for the Pen Traveling with the Tablet	<b>60</b> 60 60 60 60 61 61 62 62 62 62 62 62 63 64 64 64 65

pecifications
---------------

## Contents

Data Capture Supported Symbologies	68
SE4107 Decode Distances	68

## **About This Guide**

This guide provides information about using the tablet and accessories.



#### NOTE:

Screens and windows pictured in this guide are samples and can differ from actual screens.

## Configurations

L10ax used in this guide refers to all configurations, except where noted. There are two form factors in the L10ax platform. Each is different from the other.

- XPAD is distinguished by its integrated hard handle. The handle has space for an integrated barcode reader, two programmable buttons and a front facing speaker.
- XSLATE has no handle but is otherwise like the XPAD.

## **Energy Star**

Zebra products that are Energy Star qualified help you save money while improving the quality of the environment. The sleep mode of your tablet is especially adept at saving energy, often up to 80% or more.



ENERGY STAR® is the government-backed symbol for energy efficiency, providing simple, credible, and unbiased information that you can rely on to make well-informed decisions. Thousands of industrial and commercial products deliver cost-saving energy solutions that improve air quality and protect the climate. ENERGY STAR and its partners have helped save families and businesses trillions of kilowatt-hours of electricity and reduced greenhouse gases every year.

You can see more information about Energy Star features at: energystar.gov

This tablet is ENERGY STAR<sup>®</sup> compliant. The power management settings enabled by default on this tablet have been selected for compliance with the current ENERGY STAR<sup>®</sup> Requirements. For optimal energy

savings, ENERGY STAR<sup>®</sup> recommends that sleep mode is entered within 30 minutes of user inactivity and the display is turned off within 15 minutes of user inactivity.

The default power management settings on this tablet are as follows.

Power Settings	On Battery	On AC
Turn off the display	5 minutes	20 minutes
Computer to sleep	5 minutes	20 minutes

## **Notational Conventions**

The following conventions are used in this document:

- **Bold** text is used to highlight the following:
  - Dialog box, window, and screen names
  - Drop-down list and list box names
  - Checkbox and radio button names
  - Icons on a screen
  - Key names on a keypad
  - Button names on a screen
- Bullets (•) indicate:
  - Action items
  - List of alternatives
  - Lists of required steps that are not necessarily sequential.
- Sequential lists (for example, those that describe step-by-step procedures) appear as numbered lists.

## **Icon Conventions**

The documentation set is designed to give the reader more visual clues. The following visual indicators are used throughout the documentation set.



**NOTE:** The text here indicates information that is supplemental for the user to know and that is not required to complete a task.



**IMPORTANT:** The text here indicates information that is important for the user to know.



**CAUTION:** If the precaution is not heeded, the user could receive a minor or moderate injury.



**WARNING:** If danger is not avoided, the user CAN be seriously injured or killed.



**DANGER:** If danger is not avoided, the user WILL be seriously injured or killed.

## **Service Information**

If you have a problem with your equipment, contact Zebra Global Customer Support for your region. Contact information is available at: <u>zebra.com/support</u>.

When contacting support, please have the following information available:

- Serial number of the unit
- Model number or product name
- Software type and version number

Zebra responds to calls by email, telephone, or fax within the time limits set forth in support agreements.

If your problem cannot be solved by Zebra Customer Support, you may need to return your equipment for servicing and will be given specific directions. Zebra is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty.

If you purchased your Zebra business product from a Zebra business partner, contact that business partner for support.

## **Determining Software Versions**

To check the software release information:

- 1. Touch the Start 💷 icon.
- 2. Select Settings > System > About.
  - Device Specifications Displays the device model number followed by the software release date and serial number.
  - Windows Specifications Displays the operating system (OS) version.

# **Getting Started**

This section provides information to get the device up and running for the first time.

## **Unpacking the Device**

- **1.** Carefully remove all protective material from the device and save the shipping container for later storage and shipping.
- 2. Verify the following items are in the box:
  - Tablet
  - Lithium-ion battery
  - Stylus
  - Tether cord
  - Regulatory guide
- **3.** Inspect the equipment for damage. If any equipment is missing or damaged, contact the Global Customer Support Center immediately.

## **XSLATE L10ax Features**

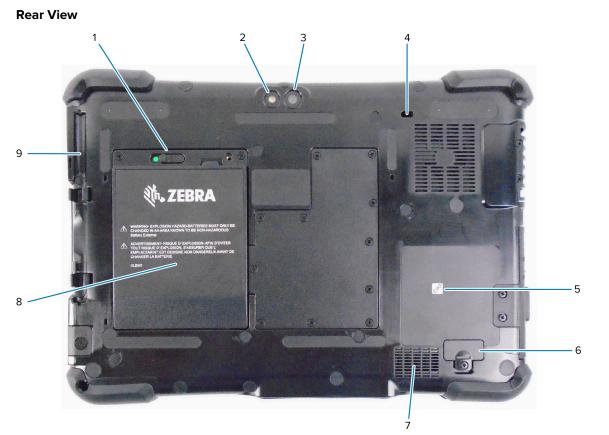
The XSLATE L10ax tablet has two microphones, the ambient light sensor (ALS), a 2-megapixel front camera and a 13-megapixel rear camera, and other features. Most of these features are on the XPAD tablet in the same place, except for the handle of the XPAD tablet.

#### **Front View**



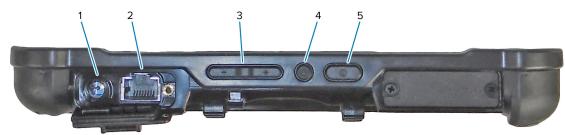
1	Two digital microphones make up the microphone array facing forward.
2	The Windows Hello infrared (IR) illuminator illuminates your face with IR light during Windows Hello face authentication.
3	The front 2-megapixel camera has Full HD resolution if enabled in the settings. You can adjust size and quality of picture.
4	The Camera LED illuminates white when the camera is activated.
5	The optional fingerprint sensor provides biometric authentication.
6	The Power LED indicates the current power state of the tablet.
7	The Battery LED indicates the charging status of the battery.
8	The Reset switch lets you force the tablet to power down. Access with pen tip.
9	The touchscreen is the standard means for interacting with the operating system and software.
10	The Home button displays the Home screen.
11	The ambient light sensor (ALS) detects the amount of ambient light, and the device adjusts the screen brightness.

## Getting Started



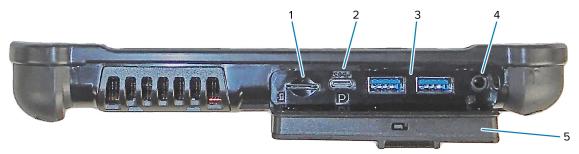
1	The battery latch releases the battery when you slide the latch to the left and see the red circle.
2	This light is a flash for the rear camera and can be used as a flashlight.
3	The rear 13-megapixel camera
4	The Kensington lock slot is a metal-reinforced hole for use with a cable and lock to secure the tablet.
5	Near Field Communication (NFC) allows devices to exchange information by placing them next to one another.
6	The expansion port cover is removed when connecting certain optional accessories to the tablet.
7	This speaker provides sound when no headset or external speakers are in use.
8	The battery powers the tablet when it is not plugged in or docked.
9	Pen holder

#### **Right Side View**

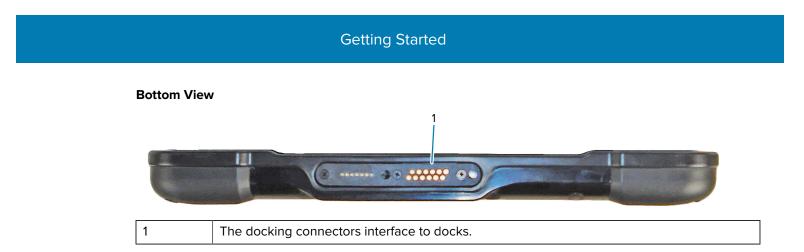


1	Power input connection for the external power adapter	
2	Ethernet jack RJ45 port for LAN connectivity	
3	/olume control button	
4	The round button is the Ctrl-Alt-Del shortcut that shows options such as Task Manager, Lock, and Sign out.	
5	The Power button turns on the tablet. When the tablet is on, press to enter and exit sleep mode.	

### Left Side View



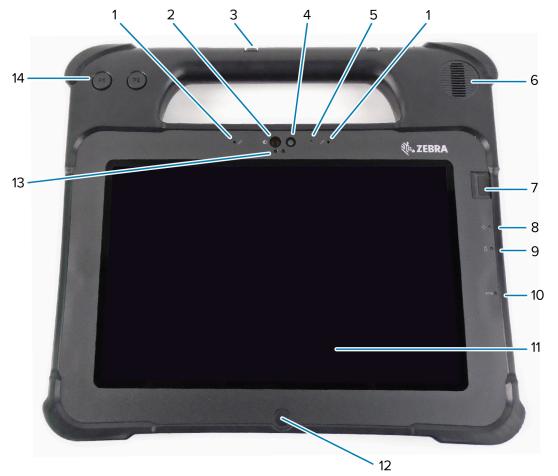
1	The memory card slot reads and writes microSD cards.
2	The USB type-C port provides access to USB 3.1 and Display Port output through a type-C connector.
3	Two USB 3.0 type-A ports let you connect devices such as a mouse, keyboard, or external storage.
4	The 3.5 mm audio jack supports stereo output for headset and mono input for an external microphone.
5	This locking door covers the ports on the L10ax. When the tablet is shipped, the door is locked and the latch shows green. Slide the lock to reveal red and open the door to access the ports. To secure the door for travel or storage, close it firmly and slide the lock until the green appears.



## **XPAD L10ax Features**

The XPAD L10ax tablet has two microphones, the ambient light sensor (ALS), a 2-megapixel front camera and a 13-megapixel rear camera, and other features. Most of these features are on the XPAD tablet in the same place, except for the handle of the XPAD tablet.

#### Front View



1	Two digital microphones make up the microphone array facing forward.
2	The Windows Hello infrared (IR) illuminator illuminates your face with IR light during Windows Hello face authentication.
3	Pen holder

4	The front 2-megapixel camera has Full HD resolution if enabled in the settings. You can adjust size and quality of picture.	
5	The Camera LED illuminates white when the camera is activated.	
6	The built-in speaker provides sound when no headset or external speakers are in use.	
7	The optional fingerprint sensor provides biometric authentication.	
8	The Power LED indicates the current power state of the tablet.	
9	The Battery LED indicates the charging status of the battery.	
10	The Reset switch lets you force the tablet to power down. Access with pen tip.	
11	The touchscreen is the standard means for interacting with the operating system and software.	
12	The Home button displays the Home screen.	
13	The ambient light sensor (ALS) detects the amount of ambient light, and the device adjusts the screen brightness.	
14	Programmable function buttons, P1 and P2	

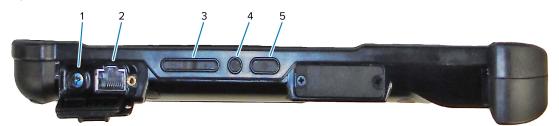
## **Rear View**



1	The tether post for a pen secures the pen to the tablet by a tether.
2	This light is a flash for the rear camera and can be used as a flashlight.
3	The rear 13-megapixel camera

4	The Kensington lock slot is a metal-reinforced hole for use with a cable and lock to secure the tablet.	
5	Near Field Communication (NFC) allows devices to exchange information by placing them next to one another.	
6	The expansion port cover is removed when connecting certain optional accessories to the tablet.	
7	The battery powers the tablet when it is not plugged in or docked.	
8	The battery latch releases the battery when you slide the latch to the left and see the red circle.	

#### **Right Side View**

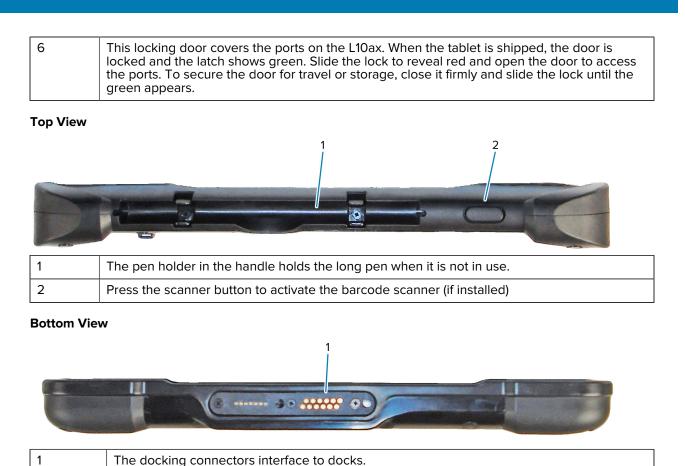


1	Power input connection for the external power adapter	
2	Ethernet jack RJ45 port for LAN connectivity	
3	Volume control button	
4	The round button is the Ctrl-Alt-Del shortcut that shows options such as Task Manager, Lock, and Sign out.	
5	The Power button turns on the tablet. When the tablet is on, press to enter and exit sleep mode.	

#### Left Side View



1	The barcode scanner is the built-in optical interface for reading barcodes.	
2	he memory card slot reads and writes microSD cards.	
3	The USB type-C port provides access to USB 3.1 and Display Port output through a type-C connector.	
4	Two USB 3.0 type-A ports let you connect devices such as a mouse, keyboard, or external storage.	
5	The 3.5 mm audio jack supports stereo output for headset and mono input for an external microphone.	



## **Preparing the Tablet for First Use**

To start using the tablet for the first time, insert the battery and charge the tablet. If your tablet is enabled with Wireless Wide Area Networking (WWAN), insert an activated SIM card in the SIM card holder or use an eSIM to access the cellular data network.

## **Inserting a SIM Card**

A WWAN-enabled L10ax tablet supports a SIM card and an eSIM. Switching between SIMs is done within Windows. Most people need only one SIM.

Before you can connect to a mobile broadband network, you must have an active account with a cellular network provider. You can use a SIM card and enable an eSIM on your tablet for mobile broadband access.

The SIM card holder accommodates a Nano SIM (4FF) card, for use with the mobile broadband option. This SIM card works like the SIM card in your cell phone that connects you to a network provider. Contact your cellular network provider to add a mobile data plan to an eSIM.

- 1. Turn off the tablet.
- 2. Remove the battery if it is in the tablet.

**3.** Gently slide a SIM card into the SIM card slot (1). Make sure that the SIM contact (gold) is facing down and the notched corner is on the left side as shown in the graphic inside the battery bay of the tablet.



4. Install the battery.

## **Powering On the Tablet**

After installing the battery, connect the tablet to external power and power up the tablet. If you have not yet inserted the battery, remove it from the packaging. 1. On the back of the tablet, make sure the battery latch is slid to left and shows the red circle. Insert the bottom of the battery into the bay. Tilt the tray and press it down until it clicks securely into place.



- 2. The external power has two parts: the part that plugs into the power source and the adapter with a cord that plugs into your tablet. Join the two parts by plugging the power cord into the adapter to form one long cord.
- **3.** To connect external power to the tablet, open the port door to expose the **Power Adapter Port** (1). Plug the AC adapter into this port on your tablet.



**4.** Plug the power cord into an outlet.

The battery charging indicator indicates the charge status.

State	Indication
Blinking green	The battery is charging.
Solid green	The battery charging is complete.
Red	The charging temperature is too high.

5. Press and release **Power** (1) in the center of the right side of the tablet to turn it on.



**6.** Keep the tablet on AC power until the battery is fully charged. However, you don't have to wait until the tablet is fully charged to turn it on. The L10ax charges while you use it.

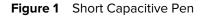
## Pens for the Tablets

All L10ax tablets support touch input with your finger. In addition, a pen or stylus is provided with your tablet, and is compatible with the screen configuration that you order. Many people use a pen for more convenience or precision. The pen is particularly effective for precise data entry and navigation

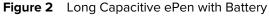
The XSLATE tablet comes with short pens that fit into the pen holder on these devices. The XPAD tablet includes a longer, thicker pen. If you want a longer pen for the tablet, a handle accessory can be ordered along with the longer pen.

## **Capacitive Pens**

Capacitive pens work with the tablet's touchscreen and are sometimes called passive pens. The short capacitive pen does not need a battery. The long capacitive pen uses an AAAA battery. These two pens do not require a pen digitizer in the tablet.







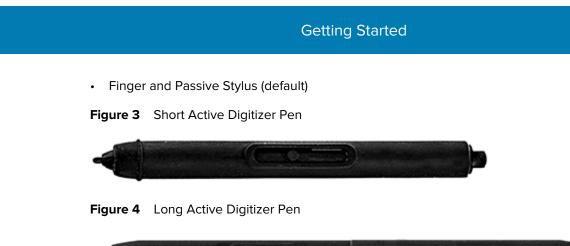


#### **Active Digitizer Pens**

If the tablet is ordered with an active Wacom digitizer built in to the screen, you will receive one of the two pens pictured below. These Wacom-compatible pens allow for a large range of pressure sensitivity, tilt detection, and hover capability. Hover lets you see where the pen is pointing before the tip touches the display.

These pens are frequently called active pens. These active pens use all three modes of the touch screen:

- Finger and Wet
- Finger and Glove



## **Optional Setup Tasks**

This section explains how to attach the pen tether and how to connect the tablet to an external monitor.

## **Attaching the Pen Tether**

The pen comes with a tether so that you can attach it to your tablet to avoid misplacing it.

- **1.** Slip one end of the tether through the hole at the end of the pen, and pull the pen through the loop until it is tight.
- **2.** Slip the other end of the tether through the attach point on the tablet, then pull the pen through the loop until it is tight.

#### **Connecting the Tablet to an External Monitor**

There is no dedicated port for an external monitor on the tablet. The tablet has a USB Type-C connector which includes a Display Port output capability. You need a dongle that supports USB Type-C DisplayPort and converts it to the port necessary to attach the external monitor, which can have one or more of the following ports: HDMI, DVI, DisplayPort, or VGA.

For instance, to connect a monitor with an HDMI port to your tablet, you need a USB Type-C DisplayPort to HDMI output dongle.



**NOTE:** Some dongles use USB to Video conversion and these use software to enable the external display over USB interface. Care must be taken to ensure the USB Type-C dongle specifically supports USB Type-C Display Port input. Look for a dongle that states it is plug-n-play and that no software or drivers are required.

## **Back of Battery Charge Indicators**

You can check the charge of a battery when it is out of the tablet by pressing the battery check button on the rear.



**IMPORTANT:** If you remove the battery while the tablet is running, you only have one minute to replace it to keep the tablet running. If you need to remove it for a longer period, be sure to save your files. Then, shut down or plug into a power source.

If you have a battery out of the tablet, you can check the charge by looking at the rear and pressing the button to the left of the lights to view the charge level.

Figure 5 Battery Check Button



1	Battery charge indicators
2	Battery check button

The five lights on the back of the battery indicate the current level of charge—from one light (20% charged) to five lights (100% charged).

## **Removing and Replacing the Battery**

Before removing the battery, save your files and power off the tablet, or plug in the AC adapter and continue working while the battery charges. However, if you are hot swapping the battery, you can do so while the tablet is on and running only on battery power.

## **Removing the Battery**

1. Save files and shut down the tablet.

**2.** With the back of the tablet facing you, slide the battery latch (1) to the left until the latch stays open and the battery pops out slightly. A red is displayed instead of a green dot.



**3.** Insert your finger under the pull-out battery tab (2) and pull to remove the battery from the battery compartment.

## **Replacing the Battery**

Replace a depleted battery with a fully charged battery if you do not want to charge the tablet.

**1.** Place the tabbed end of the battery into the battery compartment.



2. Press the battery down until it snaps into place.

## Hot Swapping the Battery

Replacing a battery while the tablet is on is called hot swapping. You can hot swap a battery only if you have a second, charged battery to replace it with.



**IMPORTANT:** You have approximately one minute to hot swap the battery. If you have not replaced the battery within one minute, the tablet goes into Sleep mode.

- **1.** Remove the battery.
- 2. Insert the new battery.

While hot swapping the battery, notice the following behaviors:

- The tablet display gets dimmer. When the charged battery is in the tablet, the display brightens again.
- The battery status LED turns blue when the system is on and no main battery is present. When you put a charged battery in the tablet, the LED lights turn green again.
- The power button is disabled. (The power button is disabled at any time the tablet has no battery and is not running on AC power through the power adapter.)

## **Using the Device**

This section explains how to use your device.

## **Start Screen**

By default, the Start screen displays in Desktop mode.

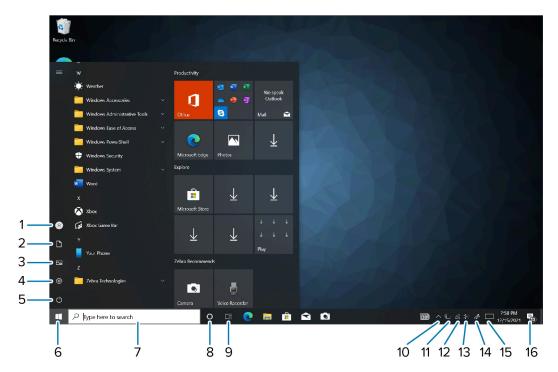


Figure 6	Start Screen in Desktop Mode
----------	------------------------------

1	Users	Opens user account window, locks screen, or logs user off the device.
2	Documents	Opens documents folder.
3	Pictures	Opens pictures folder.
4	Settings	Opens the <b>Settings</b> window.
5	Power	Touch to place the device in sleep mode, shutdown, or restart.

6	Start	Access the Home screen from any window.
7	Search	Search apps, settings, and files on your tablet or perform a web search.
8	Cortana	Opens voice activated search window.
9	Recent applications	Displays all open applications.
10	More settings	Includes Bluetooth, Intel Graphics, and Windows Defender.
11	Battery	Displays current battery status.
12	Network	Opens network settings.
13	Sound	Use to control audio volume level.
14	Windows Ink Workspace	Draws on Microsoft Whiteboard and screenshots with your pen.
15	Keyboard	Opens the virtual keyboard.
16	Action Center	Provides easy access to some frequently used settings and notifications. Touch the icon to open the Action Center. The first row of setting option boxes display and any notifications. Touch Expand to view all setting option boxes.

## **Know Your Tablet**

You can access information about your tablet by touching **Know Your Tablet** on the desktop.

This app has icons that provide access to PC Information and Support. The Support page includes information about drivers, BIOS, accessories, and documentation.

## **Tablet Information**

The System Information window displays information about the BIOS, the battery, the network adapters, the hard disk. This information is stored on the solid-state drive (SSD) in your tablet.

## Support

Select **Support** to open the Zebra website.

You can access these sites and pages:

- Product support
- User documentation
- Software, Firmware/basic input/output system (BIOS), and driver downloads
- Knowledge base articles
- Repair request and status and return merchandise authorization (RMA) status
- Warranty information
- Registration

• Trusted Platform Module (TPM) notification for security advisory.

## **Battery Management**

Observe the recommended battery optimization tips for the device.



**NOTE:** Recommends that you charge the battery regularly for optimal power consumption. If your battery charge is completely depleted, connect the power adapter, turn on your computer, and then restart your computer to reduce the power consumption.

- Set the screen to turn off after a short period of inactivity.
- Set the display to turn off or dim backlight.
- Turn off all wireless radios when not in use.

#### **Optimizing Battery Life or Performance**

Optimize the battery life when running the tablet on battery power, or optimize performance when the tablet is connected to a power source.

- 1. In the taskbar, touch the battery icon and use the slider to adjust for battery life or performance.
- 2. Touch Battery settings to display battery saver options.

#### **Changing the Power Settings**

Set the device or display to turn off after a short period of non-use

- 1. In the taskbar, touch the Action Center icon  $\Box$ .
- 2. Touch <sup>(()</sup> All Settings > System > Power & sleep.
- **3.** Under**Sleep**, choose when you want the device or screen to go to sleep (on battery power and when plugged in).

#### Manually Changing the Display Brightness

Manually change the display brightness to optimize battery life or performance.

- **1.** In the taskbar, touch the **Action Center** icon  $\Box$ .
- **2.** Use the slider at the bottom of the window to decrease or increase the brightness of the screen.

#### Manually Activate Sleep Mode

Manually activate sleep mode to conserve battery power when you are not actively using the tablet.

It is recommended to first save your files.

1. Touch the Start icon 🖪 and then the Power icon 🕲 just above it.

A small menu pops up.

2. Touch Sleep.

The screen goes dark and the computer enters sleep mode.

3. You can wake up the tablet by pressing the **Power** button.

## **Battery Health Monitor**

Use the Battery Health Monitor app to view battery health and information.

- Battery Health The health of the battery
- Manufacture Date The date of manufacture
- Serial Number Serial number of the device.

A warning message appears if the battery is past its useful life and should be replaced.

#### **Viewing Battery Health**

Use the Battery Health Monitor app to view battery health and information.

- 1. In the taskbar, select 🔼
- **2.** Select **(**).

## **Tablet Mode**

You do not have to use a keyboard and mouse in tablet mode.

#### **Configuring Tablet Mode**

Configure the display settings in tablet mode.

- 1. Touch Action center.
- 2. Touch System.
- 3. Touch All Settings.
- 4. Touch Tablet.

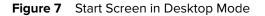
	Setti	ngs			
	ፌ	Home	Tablet		
	Fi	nd a setting $ ho$	When I sign in		
	Syst	tem	Use the appropriate mode for my hardware $\smallsetminus$		
			When I use this device as a tablet		
	Ç	Display	Don't switch to tablet mode $\sim$		
	¢1)	Sound	Change additional tablet settings		
	$\Box$	Notifications & actions			
	Ì	Focus assist			
	0	Power & sleep			
		Battery			
	-	Storage			
l	B	Tablet			
	Ħ	Multitasking			
	Ð	Projecting to this PC			
	×	Shared experiences			
	ſħ	Clipboard			

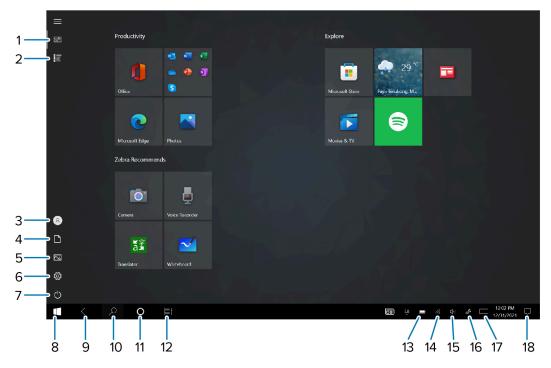
## **Tablet Mode Settings**

You can configure when to use tablet mode, and the settings of application icons, buttons, and virtual keyboard in tablet mode.

- When I sign in:
  - Always use tablet mode set to tablet mode after signing in.
  - Never use desktop mode set to desktop mode after signing in.
  - Use the appropriate mode for my hardware let the tablet determine if it is.
- When I use this device as a tablet:
  - Don't switch to tablet mode
  - Ask me before switching modes
  - Always switch to tablet mode
- Change additional tablet settings
  - **Tablet mode** enable to set to tablet mode.
  - When I'm using tablet mode:
    - · Hide app icons on the taskbar enable to hide application icons in the taskbar
    - Automatically hide the taskbar enable to hide the taskbar when in tablet mode.
  - When I'm not using tablet mode:
    - Make app icons on the taskbar easier to touch
    - Show to search icons without the search box
    - Make buttons in File Explorer easier to touch
    - Show the touch keyboard when not in tablet mode and there's no keyboard attached

## **Tablet Mode Start Screen**





1	Pinned tiles	Places the Home screen in Tile view.
2	All apps	Lists all applications alphabetically.
3	Users	Opens user account window, locks screen, or logs user off the device.
4	Documents	Opens documents folder.
5	Pictures	Opens pictures folder.
6	Settings	Opens the <b>Settings</b> window.
7	Power	Touch to place the device in sleep mode, shutdown, or restart.
8	Start	Access the Home screen from any window.
9	Back	Displays the previous screen.
10	Search	Search apps, settings, and files on your tablet or perform a web search.
11	Cortana	Opens voice activated search window.
12	Recent applications	Displays all open applications.
13	Battery	Displays current battery status.
14	Network	Opens network settings.
15	Sound	Use to control audio volume level.

16	Windows Ink Workspace	Draws on Microsoft Whiteboard and screenshots with your pen.
17	Keyboard	Opens the virtual keyboard.
18	Action Center	Provides easy access to some frequently used settings and notifications. Touch the icon to open the Action Center. The first row of setting option boxes display and any notifications. Touch Expand to view all setting option boxes.

#### **Multi-Touch Gestures**

The tablet supports multiple touch gestures on the touch screen. Depending on the application, some gestures might not be available.

- Touch: Open an application or perform an action on an open application, such as copy, save and delete, depending on the application.
- Touch and hold: Open a menu.
- Slide: Scroll through items, such as lists, pages, and photos.
- Drag: Move an object.
- Move two fingers closer together: Zoom out.
- Move two fingers farther apart: Zoom in.
- Put two or more fingers on an item and then rotate your fingers clockwise or counterclockwise: Rotate an item.
- Swipe in from the right edge: Display the Action Center.
- Swipe in from the left edge: Displays open applications.
- Swipe in from the top edge to the bottom on an open application: Close the current application.

## **Changing Touch Mode**

The tablet display is able to detect touches using a finger, a conductive-tip stylus, or gloved finger.

1. Touch All apps > Zebra Technologies > Touch Mode Switcher.

🕐 Touch Mode	×
Touch Panel Mod	de
<ul> <li>Finger and V</li> </ul>	Vet
<ul> <li>Finger and C</li> </ul>	Glove
· Finger and F	Passive Stylus
ОК	Cancel

The Touch Mode window displays with the current mode indicated.

2. Touch the desired option to change the mode, then touch OK.

## **On-Screen Keyboard**

Use the On-Screen Keyboard to type text, numbers, symbols, and other characters. The touch keyboard and handwriting panel also can be used to perform handwriting.

When you rotate the device the On-Screen Keyboard or the touch keyboard and handwriting panel automatically rotates to the corresponding portrait or landscape view.

#### **Opening the On-Screen Keyboard**

You can enable the On-Screen Keyboard if you do not have an external keyboard plugs into the tablet.

- 1. Touch the Search icon to search for Keyboard.
- 2. Touch the **Keyboard** icon in the taskbar.

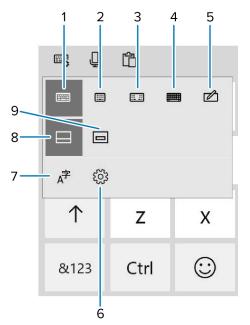
#### **Opening the Keyboard and Handwriting Panel**

You can switch between four touch keyboard layouts and a handwriting panel.

1. Touch the Keyboard icon in the taskbar.

The Keyboard displays.

- 2. In the top left of the keyboard tap the **Keyboard** icon to display a **Keyboard and Handwriting Options** window.
- **3.** Select from desired options.



1	Standard keyboard	
2	Small keyboard	
3	Split keyboard	
4	Expanded standard keyboard	
5	Handwriting panel	

6	All settings	
7	Region and language	
8	Select this to dock the touch keyboard.	
9	Select this to undock the touch keyboard.	

## **Active Stylus**

The tablet supports stylus pens with Microsoft pen protocol MPP 2.0 technology, including the L10ax active stylus.

## **Using the Camera**

You can take photos using the front and rear cameras.

1. Open the camera application.

The Camera Indicator LED illuminates.

- 2. Point the camera at an object.
- **3.** Touch the on-screen shutter button to take a photo or record a video.

## **Fingerprint Reader**

You can use the optional fingerprint reader to log on to the tablet by reading your fingerprint instead of entering a password. This feature provides an additional level of security for the tablet.

These instructions assume that you have a password for logging into your tablet.

## **Setting Up a PIN**

Set a PIN to protect access to data on the device.



**IMPORTANT:** To use the fingerprint reader, you need to set up a PIN. If you already have a PIN, then you can skip these steps and go to Setting Up the Fingerprint Reader on page 35.

1. Touch the Windows Start icon  $\blacksquare$  and touch the Settings icon  $\blacksquare$  above it.

The Settings window appears.

- 2. Touch the Accounts icon.
- 3. In the left pane, touch Sign-in options.
- 4. In the right pane of the Sign-in options, under Windows Hello PIN, touch Add.
- 5. Enter your PIN and touch OK.

Now you can set up the fingerprint reader.

## **Setting Up the Fingerprint Reader**

Set the fingerprint to protect access to data on the device.

After you have a PIN, the Windows Hello section of the Sign-in Options is enabled and you can set up your fingerprint.

1. Touch the Windows Start icon 🗳 and touch the Settings icon 🛛 above it.

The Settings window appears.

- 2. Touch the Accounts icon.
- **3.** In the left pane, touch **Sign-in options**.
- In the right pane of the Sign-in options, under Windows Hello Fingerprint, touch Set up.
   A welcome window appears.
- 5. Touch Get started.
- 6. Enter your PIN.
- 7. Decide which finger to use.
- 8. The setup asks you to place your finger on the fingerprint reader a few times for it to map your finger.
- **9.** It prompts you to touch the sensor multiple times and from different angles. Follow the instructions as you are registering your fingerprint.
- **10.** When successful, touch Close.

Next time you log in, you can use your PIN or you can use your finger on the fingerprint reader.



**NOTE:** You can register more than one finger to use with this reader. Keep in mind which fingers you have established with the reader and use only those fingers.

#### Logging In with Your Fingerprint

When you start the tablet or wake it up from sleep mode, put your finger on the fingerprint scanner and press it for a brief time.

It either recognizes your print and opens up Windows or it asks you to try again.

## **Fingerprint Reader Tips**

Be sure to press your finger to the scanner in the same way each time.

- Be consistent. Press the finger to the scanner and hold it there for a moment and scan at the same angle each time. For example, if you register your finger with your hand open, hold your hand the same way each time you scan.
- Read the prompts carefully and ensure that you wait for the prompt before you swipe.
- When scanning, press hard enough to fully contact the sensor.
- Wipe dirt or debris off your finger before scanning it so nothing interferes with the scan. Rub your fingers together to stimulate the natural skin oils so your fingerprint is easier to detect.
- If you are having trouble registering a specific finger, try to register a different finger.
- If you are repeatedly having trouble getting a good scan, you might need to clean the sensor. See Fingerprint Reader on page 63.

## **Windows Hello Face**

You can use the front camera to log on to your tablet using Windows Hello Face Authentication instead of entering a password.

## **Setting Up Windows Hello Face**

Set Windows Hello Face to protect access to data on the device.

To use Windows Hello Face, you need to set up a PIN. For steps on how to set up a PIN, see Setting Up a PIN on page 34.

1. Touch the Windows Start icon 🗳 and touch the Settings icon 🛽

The Settings window appears.

- 2. Touch the Accounts icon.
- 3. In the left pane, touch Sign-in options.
- 4. In the right pane of the Sign-in options, under Windows Hello Face, touch Set up.
- 5. Touch Get Started.
- 6. Enter your PIN.
- 7. Hold your face steady until the image is captured.

#### Logging In with Windows Hello Face

When you start the tablet or wake it up from sleep mode, make sure your face is in view of the front camera.

If your face is not recognized, the Sign-in screen displays. Log in with your PIN or touch **Sign-in options** for more options.

# Software

This chapter provides instructions on initial setup, how to reset the tablet, and how to reinstall Windows.

# **Initial Windows Setup**

After performing a factory reset or updating the tablet firmware or operating system, the Windows setup process begins.

The welcome screen appears and then a series of windows prompt you for information regarding your preferences including Keyboard Layout, Network Setup, Account Name, Security, and Privacy.

Next, a short configuration process occurs after which the Windows home screen displays.

Any apps that you installed from the Windows Store prior to reset, are automatically reinstalled using your mobile broadband or Wi-Fi internet connection when connected; apps installed from other sources are not. After the process is complete a list of apps removed during reset is created on the desktop.

# **Factory Reset**

Performing factory reset restores Windows to original factory settings.

- 1. Connect the tablet to a power source.
- 2. Touch Settings > Update and security > Recovery.
- 3. Under Reset this PC, touch Get started.
- 4. In the **Reset this PC** window, choose an option.
  - Touch Keep my files to remove all apps and settings but keep all personal files.
  - Touch Remove everything to remove all personal files, apps, and settings.



**CAUTION:** Removing everything erases all data, including your account configuration, applications, music, pictures and files. Make sure that you back up all the required data before you proceed.

5. Touch Next until the reset process begins.

The process can take an hour or longer.

6. When the reset is complete the Windows setup process begins.

# **Windows Reinstallation**

You can install Windows operating system on the tablet using a USB flash drive with installation files.

#### **Creating an Installation USB Flash Drive**

Create an installation USB flash drive before starting the installation of a new system on the tablet.

Before you begin, request software for your tablet by visiting Zebra Support and Downloads at <u>zebra.com/</u> <u>support</u> and download the software to a host computer.



**NOTE:** Make sure the entire file downloads completely. Partial downloads may corrupt the device.

- **1.** Insert a 16 GB or larger USB flash drive into a host computer.
- 2. From Windows Explorer right-click on the USB flash drive and select Format.

Format USB Drive (D:)	×
Capacity:	
8 GB	$\sim$
File system	
FAT32	$\sim$
Allocation unit size	
4096 bytes	~
Volume label BOOTME	
Format options	
Quick Format	
Start Clo	se



**CAUTION:** Only FAT32 format is recognized by the system BIOS.

- 3. In the File system drop down menu, select FAT32.
- 4. In the Volume label text box, enter BOOTME.
- 5. Click Start. A warning appears; click OK to proceed.
- 6. Click OK when the format is complete and confirmation dialogs appear.
- 7. Using Windows Explorer, extract the software file you downloaded into a folder.

- 8. Copy the entire contents of the folder to the formatted flash drive.
- 9. Ensure that all the files are copied successfully and then safely unmount the USB drive.

#### **Reinstalling Windows**

Use a USB flash drive with the Windows OS installation files to begin the installation.

Before you begin, connect a standard USB keyboard to the tablet. A physical keyboard is required to complete the setup.

- **1.** Connect the tablet to a power source.
- 2. Plug the bootable USB flash drive into the tablet USB port.
- **3.** Re-boot the device.
- 4. When the Zebra loading screen appears, select BBS from the top right corner.
- 5. Select USB.

The tablet boots to WinPE and installs the operating system and BIOS updates. Installation takes approximately 9 minutes.

6. When complete, press Alt + F4 on the keyboard.

The device reboots and the Windows setup process initiates. See Initial Windows Setup on page 37.

7. After Windows setup is complete, in the taskbar, touch More settings, then touch **More settings** icon in the taskbar, then touch **Eject (drive name)**.

After the Safe To Remove Hardware message appears, remove the flash drive from the tablet.

# **Checking Versions**

You may check the versions for BIOS and operating system.

## **Checking BIOS Version**

To check the current version of the BIOS:

- 1. In the search field, type cmd, then touch Command Prompt Desktop App to open.
- 2. In the Command window, type msinfo32.
- 3. Press Enter key.

The System Information window appears. The BIOS version displays in the BIOS Version/Date field.

#### **Checking Operating System Version**

To check the current operating system version, see Determining Software Versions on page 10.

# **Enter the BIOS**

Enter the BIOS to make system changes such as managing your hardware and changing the boot sequence.

#### **Entering the BIOS with a Keyboard**

- **1.** Connect a keyboard to the tablet.
- **2.** Start or restart the tablet.
- 3. Before the boot screen appears, repeatedly press the F2 key on the keyboard.

#### **Entering the BIOS without a Keyboard**

- **1.** Start or restart the tablet.
- 2. When the boot screen appears, repeatedly tap the screen above the Zebra logo.

## Entering the BIOS without a Keyboard from Windows

- 1. From Windows, touch the Start icon 🖪.
- 2. Touch @ All Settings > Update & Security > Recovery.
- 3. Under Advanced startup, touch Restart now.

Windows shuts down.

- 4. Touch Troubleshoot.
- 5. Touch Advanced options.
- 6. Touch UEFI Firmware Settings.
- 7. Touch Restart.

# Zebra Barcode Scanning Resources

To obtain Zebra scanning resources such as applications, SDKs, drivers, and RFID software see the Zebra Barcode Scanning Software web page at: <u>zebra.com/us/en/products/software/scanning-systems.html</u>.

## **Installing Application**

Install programs and apps from the Internet, or a local network. Make sure you trust the publisher of the app and the website.

- 1. In your web browser, tap or click the link to the app.
- 2. Tap Open or Run, and then follow the instructions on your screen.

To install the app later, tap Save or Save as to download it.

#### **Getting Apps from the Windows Store**

To obtain apps from the Windows Store, select the **Store** tile **a** from the Start menu or taskbar.

# **Data Capture**

The device supports data capture using an integrated scanner and Windows compatible Zebra Bluetooth and USB scanners.

For information on pairing and scanning using Zebra scanners, go to the Product Reference Guide for your scanner.

Internal scanner (XPAD model only, built-in)

# Imaging

The device with an integrated 2D imager has the following features:

- Omnidirectional reading of a variety of barcode symbologies, including the most popular linear, postal, PDF417, Digimarc, and 2D matrix code types.
- Advanced intuitive laser aiming cross-hair and dot aiming for easy point-and-shoot operation.

The imager uses imaging technology to take a picture of a barcode, stores the resulting image in memory, and executes state-of-the-art software decoding algorithms to extract the barcode data from the image.

# **Digital Camera**

The device with an integrated camera based barcode scanning solution has the following features:

- Omnidirectional reading of a variety of barcode symbologies, including the most popular linear, postal, QR, PDF417, and 2D matrix code types.
- Cross-hair reticle for easy point-and-shoot operation.
- Picklist mode to decode a particular barcode from many in the field of view.

The solution uses the advanced camera technology to take a digital picture of a barcode, and executes state-of-the-art software decoding algorithms to extract the data from the image.

## **Scanning Considerations**

Typically, scanning is a simple matter of aim, scan, and decode, with a few quick trial efforts to master it.

However, consider the following to optimize scanning performance:

 Range — Scanners decode best over a particular working range — minimum and maximum distances from the barcode. This range varies according to barcode density and scanning device optics. Scan within range for quick and constant decodes; scanning too close or too far away prevents decodes. Move the scanner closer and further away to find the right working range for the barcodes being scanned.

- Angle Scanning angle is important for quick decodes. When the illumination/flash reflects directly back into the imager, the specular reflection can blind/saturate the imager. To avoid this, scan the barcode so that the beam does not bounce directly back. Do not scan at too sharp an angle; the scanner needs to collect scattered reflections from the scan to make a successful decode. Practice quickly shows what tolerances to work within.
- Hold the device farther away for larger symbols.
- Move the device closer for symbols with bars that are close together.



**NOTE:** Scanning procedures depend on the app and device configuration. An app may use different scanning procedures from the one listed above.

# Scanning with the Integrated Barcode Scanner (XPAD Only)

Use the Barcode Scanner to capture barcode data.

The optional XPAD L10ax scanner is a factory-installed device consisting of a barcode optical image reader and hardware decoder. The SE4107 scanner is built in to the handle of the XPAD L10ax tablet.



- 1. On the tablet, open the application software that is going to receive the barcode data and put the active
- 2. Aim the scanner lens at the barcode.

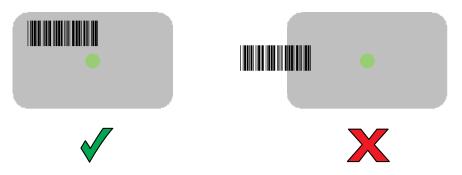
cursor in the appropriate field of that software.

**3.** Press and hold the Barcode Scanning button (1) on top of the handle.



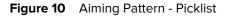
**4.** Ensure the barcode is within the area formed by the aiming pattern. The aiming dot is used for increased visibility in bright lighting conditions.

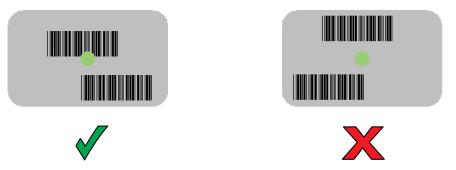






**NOTE:** When the device is in Pick List Mode, the device does not decode the barcode until the center of the crosshair touches the barcode.





The Data Capture LED light green and a beep sounds, by default, to indicate the barcode was decoded successfully.

5. Release the scan button.

The barcode content data appears in the text field.

# Wireless

This section provides information on the wireless features of the device

- Wireless Local Area Network (WLAN)
- Wireless Wide Area Network (WWAN)
- Bluetooth
- Near Field Communications (NFC)

# **Wireless Local Area Networks**

Wireless local area networks (WLANs) allow the device to communicate wirelessly inside a building that has the appropriate WLAN infrastructure. Both the infrastructure and the device must both configured properly to enable this communication.

Once the infrastructure is set up to enforce the chosen WLAN security scheme, use the **Wireless & networks** settings to configure the device to match the security scheme.

The tablet supports the following WLAN security options:

Security Type	Encryption	EAP Method	Authentication Method
Open Network	None/WEP	N/A	N/A
WPA2- Personal	AES	N/A	N/A
WPA2- Enterprise	AES	Smart Card or other certificate	N/A
		Protected EAP (PEAP)	Smart card or other certificate
			Secured password (EAP-MSCHAP v2)
		EAP-SIM	N/A

Table 1	WLAN Security Options
---------	-----------------------

Security Type	Encryption	EAP Method	Authentication Method
		EAP-TTLS	Unencrypted password (PAP)
			Challenge Handshake Authentication Protocol (CHAP)
			Microsoft CHAP (MS-CHAP)
			Microsoft CHAP Version 2 (MS-CHAP v2)
			Smart Card or other certificate
			Secured password (EAP-MSCHAP v2)
		EAP-AKA	N/A
		EAP-AKA'	N/A
WPA3- Personal	AES	N/A	N/A
WPA3- Enterprise	AES	Smart Card or other certificate	N/A
		Protected EAP (PEAP)	Smart card or other certificate
			Secured password (EAP-MSCHAP v2)
		EAP-SIM	N/A
		EAP-TTLS	Unencrypted password (PAP)
			Challenge Handshake Authentication Protocol (CHAP)
			Microsoft CHAP (MS-CHAP)
			Microsoft CHAP Version 2 (MS-CHAP v2)
			Smart Card or other certificate
			Secured password (EAP-MSCHAP v2)
		EAP-AKA	N/A
		EAP-AKA'	N/A
802.1x V	WEP	Smart Card or other certificate	N/A
		Protected EAP (PEAP)	Smart card or other certificate
			Secured password (EAP-MSCHAP v2)
		EAP-SIM	N/A
		EAP-TTLS	Unencrypted password (PAP)
			Challenge Handshake Authentication Protocol (CHAP)
			Microsoft CHAP (MS-CHAP)
			Microsoft CHAP Version 2 (MS-CHAP v2)
			Smart Card or other certificate
			Secured password (EAP-MSCHAP v2)

Table 1 WLAN Security Options (Continued)
---

Security Ty	be Encryption	EAP Method	Authentication Method
		EAP-AKA	N/A
		EAP-AKA'	N/A



NOTE: To extend the battery, turn off Wi-Fi when not in use.

#### **Connecting to a Wi-Fi Network**

Establish a Wi-Fi network to access the WLAN infrastructure inside a building.

1. In the taskbar, touch the **Network** icon.

A list of available Wi-Fi networks displays.

- 2. Touch the network to connect.
- **3.** Touch the **Connect automatically** checkbox to allow the tablet to connect automatically to this network whenever the device is on.
- 4. Touch Connect.
- 5. If required, enter the security key and then touch Next.
- 6. Touch Yes to find PCs and devices on the network or No to not find these devices.

Once connected, Connected appears under the network name.

#### **Viewing Network Information**

You can view the security, address, and other information about the connected Wi-Fi network.

1. In the taskbar, touch the **Network** icon.

A list of available Wi-Fi networks displays.

- **2.** Touch the Wi-Fi network name.
- 3. Touch Properties.

## **Configuring Proxy Settings**

The device supports the proxy feature for Wi-Fi connections. The proxy feature enables access to more Web-based source and browse the Internet more securely.

- 1. In the taskbar, touch the Action Center icon.
- 2. Touch All Settings > Network & Internet > Proxy.
- 3. Under Manual proxy setup, touch the Use proxy server switch to turn on.
- 4. In the Address text box, enter the address of the proxy server.
- 5. In the **Port** text box, enter the port number for the proxy server.
- **6.** In the text box, enter addresses for web sites that do not require to go through the proxy server. Use the semicolons between addresses but no spaces and do not use the carriage return.

7. Touch Save.

# Adding a Wi-Fi Network

To access a Wi-Fi network that does not broadcast its network name (SSID), you must add that Wi-Fi network before you can connect to it.

1. In the taskbar, touch the **Network** icon.

A list of available Wi-Fi networks displays.

- 2. Scroll to the bottom of the list and touch Hidden Network.
- **3.** Follow the instructions on the screen to add a Wi-Fi network.

# **Wireless Wide Area Networks**

A Wireless wide area network (WWAN) is a mobile cellular network that allows you to browse the Internet, check email, or connect to a virtual private network (VPN) from anywhere within the regional boundaries of the cellular service. A micro SIM card is required to connect to a mobile network.



**NOTE:** WWAN is available for select configuration only.

## **Connecting to a Cellular Data Network**

Use WWANs to access data over a cellular network.

Ensure that an activated SIM card is installed.

- 1. In the taskbar, touch the **Network** icon.
- 2. Touch the Cellular option to turn on the WAN radio if required.
- 3. Touch the Cellular network in the list.
- **4.** Touch **Connect automatically** to automatically connect to the cellular data network when it is available. Clear the check box to manually connect each time you want to use the cellular data connection.
- **5.** Touch **Allow roaming** to allow the cellular data connection to stay on when outside of the mobile operator's network. Leaving the check box cleared can help prevent data roaming charges.
- 6. Touch Connect.

The name of the mobile operator appears next to the Cellular network icon.

7. If prompted, type your user name and password and the access point name (APN).



**NOTE:** If the Cellular quick action is turned off, select it to turn it on. When off, the cellular radio is turned off, and you cannot connect to a cellular network.

#### Adding an Internet APN

The Internet access point name (APN) is the address the tablet uses to connect to the Internet when using a cellular data connection. Usually, the Internet APN is set automatically. If your cellular data connection is not working, try entering a new Internet APN based on the mobile operator.

The Internet access point name (APN) is the address the tablet uses to connect to the Internet when using a cellular data connection. Usually, the Internet APN is set automatically. If your cellular data connection is not working, try entering a new Internet APN based on the mobile operator.

- 1. Touch Settings > Network & Internet > Cellular.
- 2. Touch Advanced options.
- 3. Under the APN settings section, touch Add an APN.
- **4.** Update one or more of the following.
  - In the **Profile name** box, type a name for the APN profile.
  - In the **APN** box, type the address for the APN to use.
  - In the **User name** box, type the user name for your mobile account.
  - In the **Password** box, type the password for your mobile account.
  - Select Type of sign-in info drop-down list and then select the authentication method.
  - Select IP type drop-down list and then select the type of IP address.
- 5. Touch the Apply this profile check box if you want the APN profile to be used right after you save it.
- 6. Touch Save > OK.

#### Setting Up a SIM PIN

A SIM PIN helps prevent other people from using your cellular data connection.

- 1. Touch Settings > Network & Internet > Cellular.
- 2. Touch the cellular connection name.
- 3. Touch Advanced options.
- 4. Under the Security section, touch Use SIM PIN.
- 5. Enter the SIM PIN.

If this is the first time using it, type the default SIM PIN. If you don't know the default SIM PIN, visit your mobile operator's website to see if it is listed. Restart the tablet to lock the cellular data connection with the SIM PIN.

If you already set up a PIN for the SIM, type the SIM PIN when prompted, and then select **OK**.

#### **Removing a SIM PIN**

- 1. Touch Settings > Network & Internet > Cellular.
- **2.** Touch the cellular connection name.
- 3. Touch Advanced options.
- 4. Under the Security section, touch Remove SIM PIN.

#### Wireless

- **5.** Enter the current SIM PIN.
- 6. Touch OK.

#### **Changing a SIM PIN**

- 1. Touch Settings > Network & Internet > Cellular.
- **2.** Touch the cellular connection name.
- 3. Touch Advanced options.
- 4. Under the Security section, touch Change SIM PIN.
- 5. In the Current SIM PIN box, enter the current SIM PIN.
- 6. In the New SIM PIN box, enter a new SIM PIN.
- 7. In the Confirm new SIM PIN box, enter the same new SIM PIN.
- 8. Touch OK.

#### Unblocking a SIM PIN

If you enter an incorrect SIM PIN, the SIM is blocked and cannot be used until you unblock it. Contact your mobile operator for the PIN Unblocking Key (PUK), then select proceed to unblock the SIM PIN.

- 1. Touch Settings > Network & Internet > Cellular.
- 2. Touch the cellular connection name.
- 3. Touch Advanced options.
- 4. Under the Security section, touch Unblock SIM PIN.
- 5. Type the Personal Unlocking Key (PUK) code.

If an incorrect PUK code is entered too many times, your SIM card will be blocked permanently, and you will need to obtain a new SIM card from your mobile operator.

# Bluetooth

Bluetooth-equipped devices can communicate without wires, using frequency-hopping spread spectrum (FHSS) radio frequency (RF) to transmit and receive data in the 2.4 GHz Industry Scientific and Medical (ISM) band (802.15.1). Bluetooth wireless technology is specifically designed for short-range (100 meters (328 feet)) communication and low power consumption.

Devices with Bluetooth capabilities can exchange information (such as files, appointments, and tasks) with other Bluetooth enabled devices such as printers, access points, and other mobile devices.

# **Adaptive Frequency Hopping**

Adaptive Frequency Hopping (AFH) is a method of avoiding fixed frequency interferers, and can be used with Bluetooth voice. All devices in the Bluetooth network (piconet) must be AFH-capable in order for AFH to work. There is no AFH when connecting and discovering devices. Avoid making Bluetooth connections and discoveries during critical 802.11b and other 2.4G WLAN communications.

AFH for Bluetooth consists of four main sections:

- Channel Classification A method of detecting an interference on a channel-by-channel basis, or predefined channel mask.
- Link Management Coordinates and distributes the AFH information to the rest of the Bluetooth network.
- Hop Sequence Modification Avoids interference by selectively reducing the number of hopping channels.
- Channel Maintenance A method for periodically re-evaluating the channels.

When AFH is enabled, the Bluetooth radio "hops around" (instead of through) the 802.11b and other 2.4G WLAN high-rate channels. AFH coexistence allows Enterprise devices to operate in any infrastructure.

The Bluetooth radio in this device operates as a Class 1 device power class. The maximum output power is 9mW and the expected range is 100 meters (328 feet). A definition of ranges based on power class is difficult to obtain due to power and device differences, and whether one measures open space or closed office space.



**NOTE:** Use of Bluetooth wireless technology is not recommended when high rate 802.11b operation using 2.4G channel is required.

#### Security

The current Bluetooth specification defines security at the link level. Application-level security is not specified. This allows application developers to define security mechanisms tailored to their specific need. Link-level security occurs between devices, not users, while application-level security can be implemented on a per-user basis. The Bluetooth specification defines security algorithms and procedures required to authenticate devices, and if needed, encrypt the data flowing on the link between the devices. Device authentication is a mandatory feature of Bluetooth while link encryption is optional.

Pairing of Bluetooth devices is accomplished by creating an initialization key used to authenticate the devices and create a link key for them. Entering a common personal identification number (PIN) in the devices being paired generates the initialization key. The PIN is never sent over the air. By default, the Bluetooth stack responds with no key when a key is requested (it is up to user to respond to the key request event). Authentication of Bluetooth devices is based-upon a challenge-response transaction. Bluetooth allows for a PIN or passkey used to create other 128-bit keys used for security and encryption. The encryption key is derived from the link key used to authenticate the pairing devices. Also worthy of note is the limited range and fast frequency hopping of the Bluetooth radios that makes long-distance eavesdropping difficult.

Recommendations are:

- Perform pairing in a secure environment
- Keep PIN codes private and do not store the PIN codes in the device
- Implement application-level security.

# **Bluetooth Profiles**

The device supports the Bluetooth services listed.

#### Table 2Bluetooth Profiles

Profile	Description	
Advanced Audio Distribution Profile (A2DP)	Allows the device to stream stereo-quality audio to a wireless headset or wireless stereo speakers.	
Audio/Video Remote Control Profile (AVRCP)	Allows the device to control A/V equipment to which a user has access. It may be used in concert with A2DP.	
Device ID Profile (DIP)	Allows a device to be identified above and beyond the limitations of the Device Class already available in Bluetooth. It enables identification of the manufacturer, product id, product version, and the version of the Device ID specification being met.	
Generic Access Profile (GAP)	Use for device discovery and authentication.	
Generic Attribute Profile (GATT)	Provides profile discovery and description services for Bluetooth Low Energy protocol. It defines how attributes are grouped together into sets to form services.	
Hands-Free Profile (HFP)	Allows car hands-free kits to communicate with the device in the car.	
Hard Copy Cable Replacement Profile (HCRP)	Provides a simple wireless alternative to a cable connection between a device and a printer.	
Headset Profile (HSP)	Allows a hands-free device, such as a Bluetooth headset, to place and receive calls on the device.	
HID Over GATT Profile (HOGP)	Defines the procedures and features used by Bluetooth low energy HID Devices using GATT and Bluetooth HID Hosts using GATT.	
Human Interface Device Profile (HID)	Allows Bluetooth keyboards, pointing devices, gaming devices and remote monitoring devices to connect to the device.	
Object Push Profile (OPP)	Allows the device to push and pull objects to and from a push server.	
Out of Band (OOB)	Allows exchange of information used in the pairing process. Pairing is completed using the Bluetooth radio, but requires information from the OOB mechanism. Using OOB with NFC enables pairing when devices simply get close, rather than requiring a lengthy discovery process.	
Personal Area Network User (PANU)	Allows the use of Bluetooth Network Encapsulation Protocol to provide L3 networking capabilities over a Bluetooth link. Only PANU role is supported.	
Radio Frequency (RF) Kill	All RF activities are terminated and device goes into low power mode.	
Serial Port Profile (SPP)	Allows use of RFCOMM protocol to emulate serial cable connection between two Bluetooth peer devices. For example, connecting the device to a printer.	
Service Discovery Protocol (SDP)	Handles the search for known and specific services as well as general services.	

#### Pairing with a Bluetooth Device

To connect and exchange data with another Bluetooth device, pair the tablet with another Bluetooth device.

- **1.** In the taskbar, touch the **Action Center** icon.
- 2. Touch All Settings > Devices > Bluetooth & other devices.
- 3. Slide the Bluetooth control to the right to turn it on.
- 4. Touch the plus sign to select Add Bluetooth or other device.
- 5. In the Add a Device window, touch Bluetooth.

Discoverable Bluetooth devices populate the window.

**6.** When the scanner you want to pair is found, touch the ID. After a few minutes a notification appears that the devices are paired.

#### **Unpairing a Bluetooth Device**

- 1. In the taskbar, touch the Action Center icon.
- 2. Touch All Settings > Devices > Bluetooth & other devices.
- 3. Touch the ID of the Bluetooth device to unpair.
- 4. Touch Remove device.

A notification prompt displays.

5. Touch Yes.

# **Turning on Airplane Mode**

When Airplane mode is on, the Wi-Fi, Bluetooth, Global Navigation Satellite System (GNSS) and Near-field communication (NFC) radios are turned off. This is useful when traveling on an airplane or when you don't need Wi-Fi or Bluetooth for a while. Airplane mode extends the amount of time before the battery needs recharging.

- 1. In the taskbar, touch the **Network** icon.
- 2. Touch the Airplane mode option.

The airplane icon appears in the taskbar.

- 3. To turn on radios in Airplane Mode (without turning on WAN):
  - a) In the taskbar, touch the airplane icon.
  - b) Touch Wi-Fi option.

# **Near Field Communications**

The device supports reading NFC cards. The NFC antenna is located on the back of the device under the NFC logo.

# **Enabling NFC**

NFC is disabled by default. Before using NFC, you must enable it in the BIOS and then in Windows.

**1.** Enter the BIOS setup.

See Enter the BIOS on page 39.

- 2. From the BIOS setup screen, select the Advanced tab.
- 3. Select NFC Controller > Enabled.
- 4. Select the Save & Exit tab.
- 5. Select Exit Saving Changes > Yes.
- 6. After Windows loads, go to Settings > Network & Internet > Airplane mode. Under Wireless devices, select the NFC slider to turn it on.

# **Reading NFC Cards**

The tablet supports reading NFC cards.

With an NFC enabled application open, bring the NFC card toward the antenna (1). Depending upon the application, an audio or visual indication indicates successful reading of the card.



# Accessories

The accessories provide a variety of product support capabilities. This table lists the available accessories.

Accessory	Part Number	Description
Docking Solutions		
L10 Vehicle Dock– Cradle	300142 (L10 Vehicle Dock–Cradle, xDIM, CLA) 300144 (L10 Vehicle Dock–Cradle, RF Pass Through, xDIM, CLA)	<ul> <li>The L10ax Vehicle Dock protects and secures the L10ax tablet under heavy shock and vibration.</li> <li>Holds tablet in place under extreme vibration and stress.</li> <li>Barrel-style keylock to lock tablet into place for secure vehicle docking. Easy one-hand release allows graband-go" transitions between vehicle, field, and office.</li> <li>Resistant to water and dust.</li> </ul>
xDIM G3 Docking Interface Module	300140 (xDIM Module G3, Cigarette Lighter Adapter)	Built for demanding environments. The xDIM G3 docking interface module provides power and connectivity to the vehicle dock and the tablet.
Vehicle Dock	CRD-L10W- XVEHCOMS11-01	Provides tablet charging, USB communication, Ethernet communication, headset, and speaker.
Vehicle Dock	CRD-L10W- XVEHCOMS21-01	Provides tablet charging, USB communication, Ethernet communication, headset, speaker, and five (5) RF-SubMiniature version A (SMA).
Power Adapter	PWRS- L10GJ-12.16VDC-1-01	Provides power to the vehicle dock for vehicles providing 12V to 16V.
Isolated Power Adapter	PWRS- L10GJ-12.32VDC-1-01	Provides power to the vehicle dock for vehicles providing 12V to 32V.
Isolated Power Adapter	PWRS- L10GJ-20.60VDC-1-01	Provides power to the vehicle dock for vehicles providing 20V to 60V.

#### Table 3 L10ax Accessories

Accessory	Part Number	Description
L10 Industrial Dock	CRD-L10-IND02 (NA PWR) CRD-L10-IND03 (ANZ PWR) CRD-L10-IND04 (EU PWR) CRD-L10-IND05 (UK PWR) CRD-L10-IND05 (TW PWR) CRD-L10-IND07 (JP PWR)	<ul> <li>The Industrial Dock combines the L10 Vehicle Cradle and a sturdy desk stand to hold your Zebra rugged tablet in place. Perfect for touch applications in the plant, warehouse, or office. The dock provides power to the tablet and has two USB ports for expanded connectivity.</li> <li>Sturdy industrial dock holds the rugged tablet in place while protecting it against drops and other tough usage.</li> <li>Includes xDIM G3 Docking Interface Module, which provides power to the tablet, and two USB ports for attaching a keyboard or other peripherals.</li> </ul>
Office Dock	300148 (NA AC line cord) 300162 (ANZ AC line cord) 300163 (EU AC line cord) 300164 (UK AC line cord)	Provides tablet charging, USB communication, Ethernet communication, and HDMI. Includes stand. Requires power supply with country-specific AC line cord.
Office Dock	300147 (NA AC line cord) 300159 (ANZ AC line cord) 300160 (EU AC line cord) 300161 (UK AC line cord)	Provides tablet charging, USB communication, Ethernet communication, and HDMI. Includes stand. Includes power adapter. Requires power supply with country- specific AC line cord.
Power	l.	
L10 Standard Battery: 36 Whr	450148	<ul> <li>This battery can be charged while in the rugged tablet or while in the battery charging slot in the docking station. The power meter reports the available battery life. The hot-swappable battery capability allows you to swap the battery without shutting down the tablet.</li> <li>This lithium-ion battery has 36 Whr capacity and can power the tablet up to 10 hours (Mobilemark 14).</li> <li>The external LED indicates the approximate remaining battery life. The battery without having to power down the tablet.</li> </ul>

Accessory	Part Number	Description
L10 Extended Life Battery: 98 Whr	450149	The extended life battery is ideal for working in the field for long periods of time, or for rugged tablets used around the clock for shift work. It powers L10ax rugged tablets up to 27 hours on a single charge. This battery attaches to the tablet using the battery bracket kickstand. Large 98 Whr lithium-ion battery keeps the tablet powered for up to 27 hours. The external LED indicates the remaining battery life. It is hot swappable. Requires battery bracket kickstand. Its dimensions are contained within the kickstand; kickstand increases thickness by 0.78 in (0.2cm).
L10 Kickstand and Extended Battery Bracket	410056 (kit)	The kickstand holds your Zebra L10ax rugged tablet upright for easy reading and touch while in the field and when using the companion keyboard. When you are ready work while walking, the kickstand folds away. An integrated battery bracket holds the extended battery for up to 27 hours of battery life. You do not need to remove the kickstand and bracket when docking in the Vehicle, office, or industrial docks. It can also be used in combination with the optional soft handle and stylus pen accessory set. Compatible with extended battery and companion keyboard.
L10 Single Bay Battery Charger	450150 (L10 Battery Charger with AC Adapter, US) 450170 (L10 Battery Charger with AC Adapter, AU) 450171 (L10 Battery Charger with AC Adapter, EU) 450172 (L10 Battery Charger with AC Adapter, UK)	<ul> <li>Provides maximum power and uptime for your Zebra L10ax rugged tablet. This charger keeps your battery powered for maximum performance and industrial use.</li> <li>Can be integrated into the office dock or used as a standalone charger.</li> <li>Charges either Standard 36 Whr or Extended Life 98 Whr</li> <li>Standard battery charge time: 2.75 hours; extended battery charge time: 3.25 hours</li> <li>Includes power adapter</li> <li>LED Indicator light for charging status</li> </ul>

#### Table 3 L10ax Accessories (Continued)

Accessory	Part Number	Description
Power Adapter	450154 (US line cord) 450047 (ANZ AC line cord) 450042 (EU AC line cord) 450041 (UK AC line cord) ACC-L10LINECORD-xx where xx: CN = China TW = Taiwan JP = Japan IN = India	A second AC power adapter lets you keep one adapter in a different location without carrying one with you. Requires power supply with country-specific AC line cord.
Input Devices		
L10 Back-lit Rugged IP65 Companion Keyboard Available in these languages: US English UK English German French Spanish	420095 (Companion Keyboard, US) 420096 (Companion Keyboard, UK) 420097 (Companion Keyboard, DE) 420098 (Companion Keyboard, FR) 420099 (Companion Keyboard, ES)	<ul> <li>This keyboard provides a full-travel tactile feedback feel and is spill-resistant. The touch pad supports two-finger and three-finger gestures. This keyboard offers a 2-in-1 laptop/tablet experience for the mobility of a tablet and a notebook-style support for data-intensive tasks.</li> <li>The keyboard is easily removable when docked.</li> <li>There is no need to charge it, because it is powered by the tablet.</li> <li>The keyboard closes to cover the display glass for added protection.</li> </ul>
Long Active Pen	Pen: 440036 Stylus tip kit: 440042	This active digitizer pen provides precision for writing and annotating on your Zebra L10ax tablet. This active digitizer pen provides a range of pressure sensitivity, tilt detection, and hover capability. Hover lets you see where the pen is pointing before the tip touches the display. The attached tether keeps the pen and rugged tablet together. The digitizer pen stores easily in the integrated garage of the XPAD L10ax or the soft handle garage of the XSLATE L10ax.
Short Active Pen	Pen: 440037 Stylus tip kit: 440042	This compact, active digitizer pen offers precision and comfort when you need to write and annotate on your L10ax tablet. This active digitizer pen provides a range of pressure sensitivity, tilt detection, and hover capability. Hover lets you see where the pen is pointing before the tip touches the display. The attached tether keeps the pen and tablet together to prevent loss.
Active Stylus	SG-ET8X-STYLUS1-01	Provides easy writing, drawing, navigation and accuracy with the thin tip and hovering capabilities.

#### Table 3 L10ax Accessories (Continued)

Table 3	L10ax Accessories (Continued)
---------	-------------------------------

Accessory	Part Number	Description	
Short Capacitive Pen	440007	This compact capacitive pen provides accuracy for easy writing and annotation on your tablet. This pen fits in the handle of your XPAD L10ax tablet.	
Input Devices: Optic	onal Modules		
Serial, RS232 (optional module)		This module adds true serial capability to your Zebra L10ax rugged tablet. It connects from the multifunction port to your legacy serial equipment using a DB9 adapter. This module requires a mounting bracket, which is included with the Extended Battery Kickstand or KickStrap. Note: Must be ordered at the time of tablet purchase. (factory installed)	
UHF RFID Reader (AEI) (optional module)		The UHF RFID Reader is a mobile solution designed specifically for Zebra L10 rugged tablets. This solution delivers the mobility and productivity of a hand-held RFID Reader device with the flexibility and functionality of a powerful computer. The UHF RFID (AEI) reader meets safe distance requirements for rail while adding mobility advantages over fixed readers. Note: Must be ordered at the time of tablet purchase. (factory installed)	
Carrying Accessorie	25		
L10 KickStrap	410055	This combined kickstand and rotating hand strap provides working comfort for all Zebra L10ax rugged tablet models in the field and at a desk. The kickstand closes tightly when you are on the move, and it provides great ergonomics when the tablet is on flat surfaces or when the companion keyboard is attached.	
L10 Kickstand	410056	The kickstand holds your Zebra L10ax rugged tablet upright when in the field and when using the companion keyboard. The kickstand folds away when you are on the move. You do not need to remove the kickstand/bracket when docking in the vehicle, office, or industrial docks. You can also use it in combination with the soft handle and stylus pen accessory set. An integrated battery bracket holds the extended battery for up to 27 hours of battery life. It can also be used in combination with the optional Soft Handle and Stylus pen accessory set.	
		<ul> <li>Holds tablet upright for tablet interactions and for using the companion keyboard. Compatible with all L10ax docks.</li> </ul>	
		Easily stored away while on the move.	
		Excludes standard on-board stylus.	
		Compatible with top handle and top handle stylus accessory options.	

Accessory	Part Number	Description
L10 Soft Handle	410052 (L10 Soft Handle w/Coiled tether, without Pen) 410061 (L10 Soft Handle Kit – Active Stylus) 410062 (L10 Soft Handle Kit – ePen)	This handle is available separately. This integrated handle attaches to the top of the tablet, allowing you to carry the tablet easily. The soft handle is made with smooth durable rubber, for a comfortable grip. The handle has a storage slot for either of the long L10ax pens. A detachable shoulder strap attaches to the handle for carrying long distances and freeing your hands.
L10 Shoulder Strap	410057	<ul> <li>The shoulder strap attaches to the optional top handle It is ideal for handsfree, long-distance carrying, and is adjustable for height. The wide strap attaches and detaches with clips.</li> <li>It Increases your comfort and endurance while standing and walking.</li> <li>It frees up both hands while carrying the tablet.</li> <li>Length: Adjustable to a maximum length of 4.1 ft (1.28 m)</li> </ul>
L10 Carry Case	410059 (L10 Carry Case - XPAD) 410058 (L10 Carry Case - XSLATE)	<ul> <li>This is a professional-grade carrying case designed specifically for your L10ax tablet. The integrated handle and optional attachable shoulder strap provide a variety of carrying options. Provides convenient storage for digitizer pens. The carry case lets you work in the field and access the tablet while standing or walking, even when you keep it in the case. Professional Quality</li> <li>Integrated handle for enhanced portability</li> <li>Lightweight</li> <li>Support for attachable shoulder strap (sold separately)</li> <li>Digitizer pen holders (2) for easy storage</li> <li>Easy access to power button, both cameras and ports</li> </ul>
Display Maintenance	<u> </u>	
L10 Screen Protector (3 pack)	Contact Zebra for product availability	The L10ax Shatter-Resistant Screen Protector Film is an anti-glare, thin protective film with a coating that reduces reflections and gives a clear, sharp display even in brightly-lit conditions. The screen protector works with touch screen and digitizer pen displays to offer additional protection against everyday scratches. Available in a 3-pack for replacement of originally-installed screen protector.
Screen Cleaning Cloth	400000	Keeps your display clean with an approved wiping cloth. These cloths are especially designed to remove dirt and skin oils without damaging the display surface.

#### Table 3 L10ax Accessories (Continued)

# Maintenance and Troubleshooting

This section explains how to maintain and troubleshoot the device.

# **Maintaining the Device**

This section provides information on maintaining the tablet.

For trouble-free service, observe the following tips when using the device:

- Protect the tablet from temperature extremes, shock, liquids, and strong magnetic fields.
- Do not store or use the tablet in any location that is extremely dusty, damp, or wet.
- Use a soft lens cloth to clean the screen. If the surface of the screen becomes soiled, clean it with a soft cloth moistened with a diluted window-cleaning solution. Do not use bleach or ammonia.
- Take care not to scratch the screen.
- The display of the tablet contains glass. Take care not to drop the tablet or subject it to strong impact.
- Do not place heavy objects on top of the tablet.
- If you are storing the tablet for a long time, unplug the power adapter and remove the battery after partially discharging it.
- Do not open the housing that encloses the tablet. There are no user-serviceable components inside. Opening the housing will void your warranty

# **Operating the Tablet in Cold Ambient Temperatures**

When the tablet is on external power, such as an AC adapter or a powered vehicle dock, performance within the full operating range -20 $^{\circ}$ C to 60 $^{\circ}$ C (-4 $^{\circ}$ F to 140 $^{\circ}$ F) is assured.

However, when the tablet is NOT on external power AND is in temperatures lower than -15°C (5°F), the cold can affect the startup of the tablet and the reporting of the battery capacity.

# **Battery Safety Guidelines**

To use the device safely, you must follow the battery guidelines.

 The area in which the units are charged should be clear of debris and combustible materials or chemicals. Particular care should be taken where the device is charged in a non-commercial environment.

- Follow battery usage, storage, and charging guidelines found in this guide.
- Improper battery use may result in a fire, explosion, or other hazard.
- To charge the mobile device battery, the ambient battery and charger temperatures must be between -20°C and 40°C (-4°F and 104°F).
- Do not use incompatible batteries and chargers, including non-Zebra batteries and chargers. Use of an incompatible battery or charger may present a risk of fire, explosion, leakage, or other hazard. If you have any questions about the compatibility of a battery or a charger, contact the Global Customer Support Center.
- For devices that utilize a USB port as a charging source, the device shall only be connected to products that bear the USB-IF logo or have completed the USB-IF compliance program.
- Do not disassemble or open, crush, bend or deform, puncture, or shred the battery.
- Severe impact from dropping any battery-operated device on a hard surface could cause the battery to overheat.
- Do not short circuit a battery or allow metallic or conductive objects to contact the battery terminals.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, or expose to fire, explosion, or other hazard.
- Do not leave or store the equipment in or near areas that might get very hot, such as in a parked vehicle or near a radiator or other heat source. Do not place battery into a microwave oven or dryer.
- Battery usage by children should be supervised.
- Please follow local regulations to properly dispose of used rechargeable batteries.
- Do not dispose of batteries in fire.
- In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with water for 15 minutes, and seek medical advice.
- If you suspect damage to your equipment or battery, contact Customer Support to arrange for inspection.

#### Long-term Battery Storage

Do not store any batteries with a full charge, because this can cause a permanent loss of charging capacity. For long-term storage, ensure that the charge level is between 20% and 40% (two LEDs illuminated), and remove the battery from the tablet. Store the battery in a cool, dry environment in the temperature range 0°C to 30°C (32°F to 86°F).

Check stored batteries every 90 days to determine the charge status. If only one LED or no LED is illuminated, recharge the batteries to a level between 20% and 40%. In storage, the batteries will discharge at a rate of 10% of the total capacity per month.

## **Disposing of Used Batteries**

Dispose of a Lithium-ion (Li-ion) battery at a hazardous materials recycling center when it is no longer serviceable. Do not throw it away, because the battery might be put into landfill.

# **Cleaning Instructions**

Use a short description in a reference topic to briefly describe what the reference item does, what it is, or what it is used for.



**CAUTION:** Always wear eye protection. Read the warning label on alcohol product before using. If you have to use any other solution for medical reasons please contact the Global Customer Support Center for more information.



**WARNING:** Avoid exposing this product to contact with hot oil or other flammable liquids. If such exposure occurs, unplug the device and clean the product immediately in accordance with these guidelines.

#### **Cleaning Materials Required**

Use a short description in a reference topic to briefly describe what the reference item does, what it is, or what it is used for.

- Alcohol wipes
- Lens tissue
- Cotton-tipped applicators
- Isopropyl alcohol
- Can of compressed air with a tube.

#### **Cleaning the Device**

This section describes how to clean the housing, display, and camera for the device.

#### Housing

Thoroughly wipe the housing, including all buttons and triggers, using an approved alcohol wipe.

#### Display

The display can be wiped down with an approved alcohol wipe, but care should be taken not to allow any pooling of liquid around the edges of the display. Immediately dry the display with a soft, non-abrasive cloth to prevent streaking.

#### **Cleaning Cradle Connectors**

- 1. Remove the DC power cable from the cradle.
- 2. Dip the cotton portion of the cotton-tipped applicator in isopropyl alcohol.
- **3.** Rub the cotton portion of the cotton-tipped applicator along the pins of the connector. Slowly move the applicator back-and-forth from one side of the connector to the other. Do not leave any cotton residue on the connector.
- 4. All sides of the connector should also be rubbed with the cotton-tipped applicator.
- **5.** Remove any lint left by the cotton-tipped applicator.

- **6.** If grease and other dirt can be found on other areas of the cradle, use a lint-free cloth and alcohol to remove.
- **7.** Allow at least 10 to 30 minutes (depending on ambient temperature and humidity) for the alcohol to air dry before applying power to cradle.

If the temperature is low and humidity is high, longer drying time is required. Warm temperature and low humidity requires less drying time.



**CAUTION:** After cleaning the cradle connectors with bleach-based chemicals, follow the Cleaning Cradle Connectors instructions to remove bleach from the connectors.

#### **Power Connector**

Use only the recommended materials for cleaning the power connector.

- **1.** Remove the main battery from the tablet.
- 2. Dip the cotton portion of the cotton tipped applicator in isopropyl alcohol.
- **3.** Use the cotton tipped applicator dipped in alcohol to remove any grease and dirt near the connector area.
- 4. Repeat steps 2 and 3 a total of three times.
- **5.** Spray compressed air on the connector area by pointing the tube/nozzle about  $\frac{1}{2}$  inch away from the surface.

Do not point nozzle at yourself and others, ensure the nozzle or tube is pointed away from your face.

6. Inspect the area for any grease or dirt, repeat if required.

#### **Fingerprint Reader**

Under normal circumstances, you should clean the fingerprint reader once a month, or whenever necessary.

To clean the fingerprint reader, gently rub the sensor surface with the cloth that is included with the tablet or any microfiber cloth.

You can use a small amount of alcohol or warm soapy water from time to time to clean the reader surface. Dry it off after cleaning.



CAUTION: Do not use bleach, solvents, or abrasives to clean the reader.

#### Caring for the Display

Follow these suggestions to keep your display clean.

- Clean fingerprints and smudges from the display surface by wiping it with a microfiber cloth.
- If liquid is spilled on the display, wipe it up immediately with a soft microfiber cloth.
- Use only the L10ax pen or your finger to write on the display. Any other object could damage the display surface.
- Protect the display surface from unnecessary contact by using a carry case when transporting the tablet.
- Avoid exposing the display to direct sunlight for long periods of time.

• Every L10ax ships from factory with a protective display film.



**NOTE:** There are a range of products specifically for your L10ax tablet. Refer to the accessories online at <u>zebra.com/support</u>.

## **Caring for the Pen**

If you use an active (digitizer) pen with your tablet, avoid storing it vertically on its tip and keep it away from any liquid.

- Store the active (digitizer) pen in the pen holder when not in use.
- Avoid storing the pen vertically on its tip. It can damage the pen-to-digitizer function.
- Keep the pen away from any liquid, because the pen contains electronic components that can be damaged when wet.
- In certain environments, particles or debris can stick to the pen tip or the tablet display. Make sure you wipe off the pen with a soft cloth to avoid scratching the display.

# **Traveling with the Tablet**

Use the following tips when you travel with the tablet.

- Put the tablet in a case to protect the display. Zebra sells a variety of cases for the L10ax tablet.
- Store the pen in the pen bay located on the tablet.
- Pack the tablet securely in a briefcase or hand-carried luggage and keep it separate from toiletries, liquids, and food. Don't pack it in checked luggage.
- Before extended use in the field or long trips away from AC power, adjust the power properties to maximize battery conservation.
- For international travel, you need either a travel plug adapter or the AC power cord that is appropriate for the country that you are visiting. The travel plug adapter can be found in most airports and travel stores. The regional AC power cord can be purchased from an Zebra Authorized Reseller.
- You don't need to buy a voltage converter; the AC adapter will automatically adjust to different voltages.
- You might want to carry proof of ownership or a merchandise passport when traveling internationally.
- Consult your insurance and credit card companies to learn about emergency travel assistance in case your tablet becomes lost or disabled.
- Turn off the tablet or place it in airplane mode for takeoff and landing. Check with the airline for rules on using your tablet and Wi-Fi while traveling. You can turn off all of your wireless devices temporarily with airplane mode.



**CAUTION:** Don't carry your tablet through a metal detector.



**DANGER:** Don't transport Li-ion batteries in checked baggage. The baggage hold can get very hot, which can cause the Li-ion battery to overheat and result in a possible explosion.

# Troubleshooting

In rare circumstances, to troubleshoot the device, you may need to reset the device.

## **Resetting the Device**

This section describes options to reset the device.

- Restart
- Hard reset.

#### **Restarting the Device**

If the device is running slow or some applications are not functioning properly, restart the device.

- 1. Touch Start **I**.
- 2. Touch Power 🖒 > Update and restart.
- 3. If software updates are pending, touch install, and then the device restarts.

#### **Performing Hard Reset**

If the device is not responsive, use the reset switch on the front of the tablet. This switch turns the power off immediately.



**CAUTION:** Performing a hard reset with a microSD card installed in the device can cause damage or data corruption to the memory card, causing all data on the microSD card to be lost.

1. If a microSD card is installed in the device, remove it before you use the reset switch. To access the microSD card, open the port cover on the left side of the tablet and remove the microSD card from the slot (1). This removal will preserve the data on the memory card.



2. Use the stylus tip on the tablet pen and insert it into the reset hole to press the **Hard Reset** button (1) until the tablet shuts down. (You can also use a paper clip and unbend it to form a pin.)



- **3.** Replace the microSD card to the slot in the device.
- 4. Press **Power** to restart the device.

# **Troubleshooting the Tablet**

Problem	Cause	Solution	
Tablet does not	Battery not charged.	Charge the battery in the device.	
turn on.	Battery not installed properly.	Ensure battery is installed properly.	
	System crash.	Perform a soft reset. If the device still does not turn on, perform a hard reset. See Resetting the Device on page 65.	
Battery did not charge.	Battery failed.	Replace battery. If the device still does not operate, try a soft reset, then a hard reset. See Resetting the Device on page 65.	
	Device removed from cradle before charging completed.	Insert the device into the cradle and begin charging. The battery fully charges in approximately four hours.	
	Ambient temperature of the cradle is too warm or too cold.	The ambient temperature must be between 0°C and 40°C (32°F and 104°F).	
Unable to connect to the wireless network.	SIM card is valid.	Ensure that the micro SIM card is valid and workable if using a mobile network.	
	Not within range of network.	Move within the network's service range and the signal strength is good.	
	Device is in airplane mode.	Turn the Airplane mode off.	
The multi- touch screen responds slowly or improperly.	Finger or screen is wet.	Ensure that your hands are clean and dry when touching the screen. Restart the tablet to try again.	

# Maintenance and Troubleshooting

Problem	Cause	Solution
Tablet turns itself off.	Device is inactive.	The device turns off after a period of inactivity. If the device is running on battery power.
	Battery is depleted.	Place the device in the cradle to re- charge the battery.
	The battery is low and it powers down to protect memory content.	Place the device in a cradle to charge the battery.

# **Specifications**

For device technical specifications, go to zebra.com.

# **Data Capture Supported Symbologies**

Item	Description
1D Bar Codes	Chinese 2 of 5, Codabar, Code 11, Code 128, Code 39, Code 93, Discrete 2 of 5, EAN-13, EAN-8, Interleaved 2 of 5, MSI, UPCA, UPCE, UPCE1, ISBN/ Bookland, ISSN, Coupon Code, Matrix 2 of 5
2D Bar Codes	Australian Post, Aztec Code, Canada Postal, Composite AB, Composite C, DataMatrix, Dutch Postal, GS1 DataBar, GS1 Expanded, GS1 Limited, GS1 Datamatrix, Han Xin, Japan Postal, Maxicode, Micro PDF, Micro QR Code, PDF-417, QR Code, TLC-39, PDF-417, UK Postal, US4state, US4State FICS, US Planet, US Postnet

# SE4107 Decode Distances

The table lists the typical distances for selected bar code densities. The minimum element width (or "symbol density") is the width in mils of the narrowest element (bar or space) in the symbol.

Bar Code Type	Near Distance	Far Distance
	Typical	Typical
5 mil Code 39	2.4 in.	9.5 in.
	6.1 cm	24.1 cm
5.0 mil Code 128	2.8 in.	9.0 in.
	7.1 cm	22.9 cm
6.6 mil PDF417	2.4 in.	8.0 in.
	6.1 cm	20.3 cm
10 mil Data Matrix	2.9 in.	9.0 in.
	7.49 cm	22.9 cm

#### Table 5 SE4107 Decode Distances

#### Table 5 SE4107 Decode Distances (Continued)

Bar Code Type	Near Distance	Far Distance
	Typical	Typical
100% UPCA	1.8 in.	19.5 in.
	5.1 cm	26.2 cm
15 mil QR Code	1.2 in.	12 in.
	4.6 cm	30.5 cm
20 mil QR Code	1.2 in.	14 in.
	4.6 cm	35.6 cm
20 mil Code 39	2.0 in.	26.0 in.
	5.1 cm	66.0 cm

\*Limited by width of barcode in field of view.

# NOTE:

Photographic quality barcode at  $15^{\circ}$  tilt pitch angle under 30 fcd ambient illumination.

Distances measured from front edge of scan engine chassis.



www.zebra.com