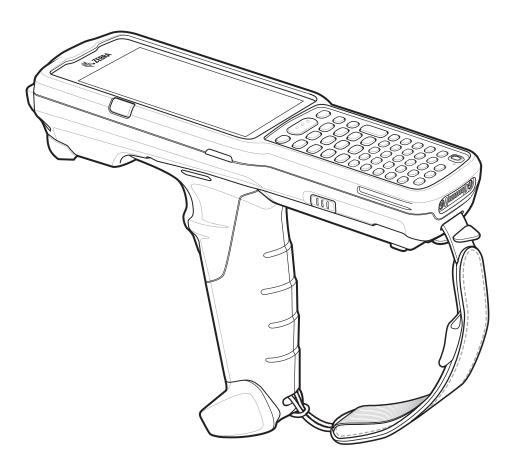
# MC33XX Mobile Computer





Quick Start Guide for Android ™ 7.1.2 Nougat

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# **MC33XX-G Features**

Figure 1 Front View

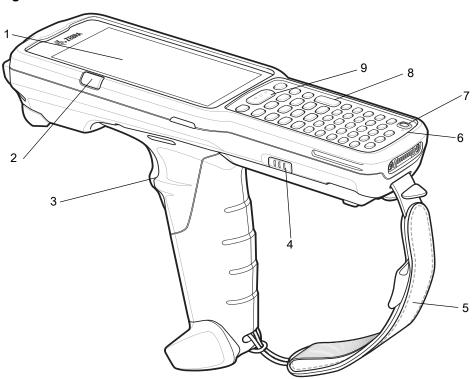


Table 1 Features - Front View

Number	Item	Function
1	Display	Displays all information needed to operate the MC33XX.
2	Charge LED Scan/Decode Status	Indicates the battery charge state while charging or the scan/decode status.
3	Trigger	Initiates data capture when a scan application is enabled.
4	Battery Release Latch	Release the battery from the device.
5	Hand Strap	Use for securely holding the device.
6	Microphone	Use for communications in Handset mode.
7	Power Button	Press and hold to turn on the MC33XX. Press to turn on or off the screen. Press and hold to select one of these options:
		Power off - Turn off the MC33XX.
		Reboot - Reboot the MC33XX when software stops responding.
		Airplane mode - Disable all wireless connections.
		Silent mode - All notifications are disabled except for alarms.

Table 1 Features - Front View (Continued)

Number	ltem	Function
8	Keypad	Use to enter data and navigate on screen functions.
9	Scan Button	Initiates data capture when a scan application is enabled.

Figure 2 Back View

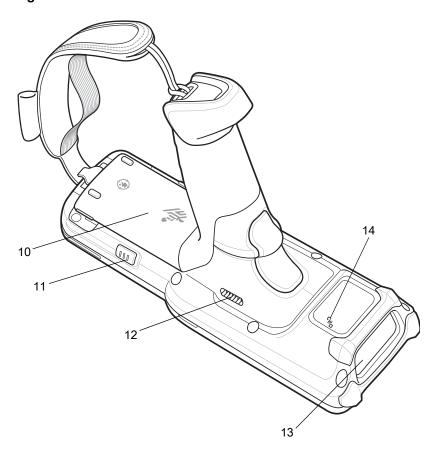


Table 2 Features - Back View

Number	Item	Function
10	Battery	Provides power for operating the device.
11	Battery Release Latch	Release the battery from the device.
12	Speaker	Provides audio output for video and music playback.
13	Scanner Exit Window	Provides data capture using the scanner.
14	NFC Antenna	Provides communication with other NFC-enabled devices.

## Setup

To start using the MC33XX for the first time:

- Install a microSD card (optional)
- Install the battery
- Charge the MC33XX
- Power on the MC33XX.

#### Installing a microSD Card

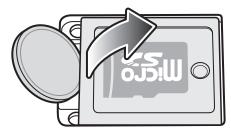
The microSD card slot provides secondary non-volatile storage. The slot is located under the battery pack. Refer to the documentation provided with the card for more information, and follow the manufacturer's recommendations for use.



**CAUTION** Follow proper electrostatic discharge (ESD) precautions to avoid damaging the microSD card. Proper ESD precautions include, but are not limited to, working on an ESD mat and ensuring that the operator is properly grounded.

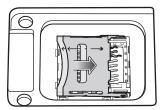
Using a coin or finger, remove the microSD card cover.

Figure 3 Remove microSD Card Cover



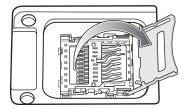
2. Slide the microSD card holder to the Open position.

Figure 4 Unlock microSD Card Holder



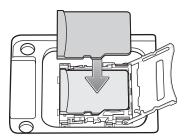
3. Lift the microSD card holder.

Figure 5 Lift microSD Card Holder



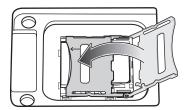
4. Place the microSD card into the contact area with the contacts facing down.

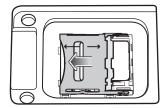
Figure 6 Install microSD Card



5. Close the microSD card holder and slide the microSD card holder to the Lock position.

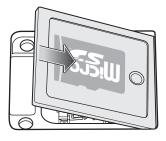
Figure 7 Lock microSD Card Holder

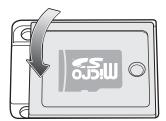




6. Replace the microSD card cover and ensure that it is installed properly.

Figure 8 Replace Cover



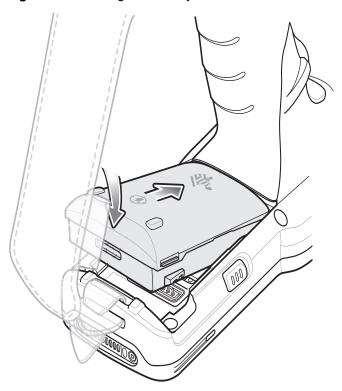


# Installing the MC33XX Battery

To install the battery:

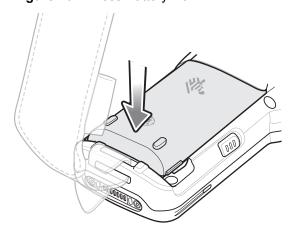
1. Align the battery into the battery compartment.

Figure 9 Inserting the Battery



- 2. Rotate the bottom of the battery into the battery compartment.
- 3. Press battery down firmly. Ensure that both battery release buttons on the sides of the MC33XX-G return to the home position.

Figure 10 Press Battery Down



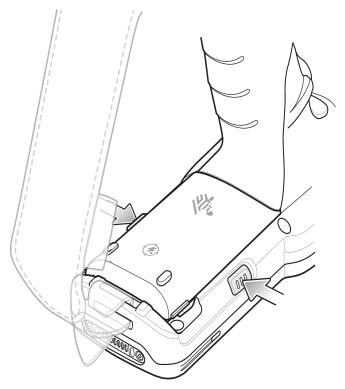
4. Press the Power button to turn on the device.

## **Replacing the Battery**

1. Push in the two Battery Release buttons.

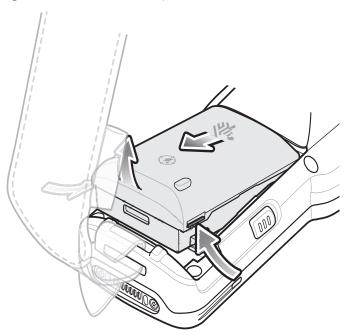
The battery ejects slightly. With Hot Swap mode, when the user removes the battery, the display turns off and the device enters a low power state. The MC33XX retains RAM data for approximately five minutes. Replace the battery within five minutes to preserve memory persistence.

Figure 11 Release Battery



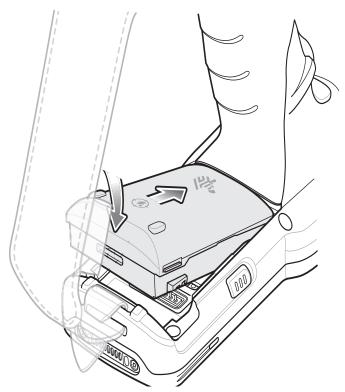
2. Remove the battery from the battery compartment.

Figure 12 Remove Battery



3. Align the battery into the battery compartment.

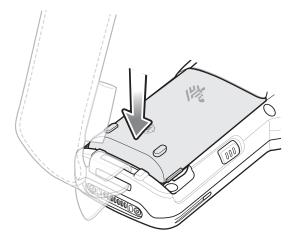
Figure 13 Inserting the Battery



**4.** Rotate the bottom of the battery into the battery compartment.

**5.** Press battery down firmly. Ensure that both battery release buttons on the sides of the MC33XX-G return to the home position.

Figure 14 Press Battery Down



6. Press the Power button to turn on the device.

#### Compatibility

The table below displays compatibility between MC33XX and MC32N0 mobile computers and accessories.

Table 3 Compatibility

	MC33XX PP+ Batteries	MC32N0 PP Batteries	MC33XX Cradles	MC32N0 Cradles	MC33XX Battery Charger	MC32N0 Battery Charger
MC33XX mobile computer	Yes	Yes	Yes	Yes w/adapter	N/A	N/A
MC32N0 mobile computer	No	Yes	No	Yes	N/A	N/A
MC33XX PP+ Battery	N/A	N/A	Yes	No	Yes	No
MC32N0 PP Battery	N/A	N/A	Yes	Yes	Yes	Yes

- MC33XX mobile computers are compatible with all batteries (MC33XX PowerPrecision+ and MC32N0 PowerPrecision).
- MC33XX mobile computer is compatible with all cradles.
   An additional adapter is needed to use any MC32N0 cradle slot, which provides charge only, no communication.
- MC33XX battery charger slots are compatible with all batteries (MC33XX PowerPrecision+ and MC32N0 PowerPrecision).
- MC32N0 mobile computers are not compatible with MC33XX cradles.

## **Battery Comparison**

The table below displays a comparison of the MC33XX batteries with the MC32N0 batteries.

Table 4 Battery Comparison

Feature	MC32N0	MC33XX
Battery Type	PowerPrecision	PowerPrecision+
Includes Zebra and PowerPrecision+ recessed logos	No	Yes
Back Label	Grey	Blue

#### **Battery Compatibility**

- MC33XX PowerPrecision+ batteries are compatible with all MC33XX mobile computers and accessories.
- MC33XX PowerPrecision+ batteries are not compatible with MC32N0 mobile computers and accessories.
- MC32N0 PowerPrecision batteries are compatible with all MC32N0 mobile computers and accessories.
- MC32N0 PowerPrecision batteries are compatible with all MC33XX mobile computers and accessories.

#### **Charging the MC33XX**

Use one of the following accessories to charge the MC33XX and/or spare battery.

 Table 5
 Charging and Communication

		Charging		Communication	
Description	Part Number	Battery (In Device)	Spare Battery	USB	Ethernet
1-Slot USB Charge Cradle with Spare Battery Charger	CRD-MC33-2SUCHG-01	Yes	Yes	Yes	No
5-Slot Charge Only ShareCradle	CRD-MC33-5SCHG-01	Yes	No	No	No
5-Slot Ethernet ShareCradle	CRD-MC33-5SETH-01	Yes	No	No	Yes
5-Slot Charge ShareCradle with 4-Slot Battery Charger	CRD-MC33-4SC4BC-01	Yes	Yes	No	No
5-Slot Ethernet ShareCradle with 4-Slot Battery Charger	CRD-MC33-4SE4BC-01	Yes	Yes	No	Yes
4-Slot Spare Battery Charger	SAC-MC33-4SCHG-01	No	Yes	No	No
20-Slot Spare Battery Charger	SAC-MC33-20SCHG-01	No	Yes	No	No
USB Charge Cable	CBL-MC33-USBCHG-01	Yes	No	Yes	No
MC32N0 1-Slot Cradle with MC33XX Cradle Adapter	CRD3000-1001RR ADP-MC33-CRDCUP-01	Yes	Yes (Only charges MC32N0 batteries in the spare battery slot)	Yes	No



NOTE Ensure that you follow the guidelines for battery safety described in the MC33XX User Guide.

- 1. To charge the main battery, connect the charging accessory to the appropriate power source.
- 2. Insert the MC33XX into a cradle or attach to a cable. The MC33XX turns on and begins charging. The Charging/Notification LED remains amber while charging, then turns solid green when fully charged.

#### **Charging Temperature**

Charge batteries in temperatures from 0°C to 40°C (32°F to 104°F). The device or cradle always performs battery charging in a safe and intelligent manner. At higher temperatures (e.g. approximately +37°C (+98°F)) the device or cradle may for small periods of time alternately enable and disable battery charging to keep the battery at acceptable temperatures. The device and cradle indicates when charging is disabled due to abnormal temperatures via its LED.

#### **Charging the Spare Battery**

- 1. Insert a spare battery into the spare battery slot.
- Ensure the battery is seated properly.
   The Spare Battery Charging LED blinks indicating charging. See Table 6 for charging indicators.

Table 6 Charging/Notification LED Charging Indicators

State	Indication		
Off	<ul> <li>The battery is not charging.</li> <li>The battery is not inserted correctly in the cradle or connected to a power source.</li> <li>Cradle is not powered.</li> </ul>		
Slow Blinking Amber Every 3 seconds	Battery is charging, but the battery is fully depleted and does not yet have sufficient charge to power the device.		
Solid Amber	Battery is charging.		
Solid Green	Battery charging is complete.		
Fast Blinking Red	Charging error, e.g.:		
2 blinks/second	Temperature is too low or too high.		
	Charging has gone on too long without completion (typically eight hours).		
Solid Red	Spare battery is charging and battery is at the end of useful life.		
	Charging complete and battery is at the end of useful life.		

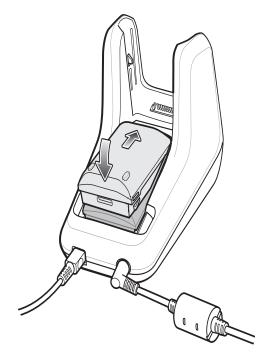
#### 1-Slot USB Charge Cradle

The 1-Slot USB Charge Cradle:

- Provides 9 VDC power for charging the mobile computer and charging the battery.
- Provides 4.2 VDC power to charge the spare battery.
- Provides a USB port for data communication between the mobile computer and a host computer or other USB devices (e.g., a printer).
- Synchronizes information between the mobile computer and a host computer. With customized or third party software, it can also synchronize the mobile computer with corporate databases.
- Compatible with the following batteries:
  - MC33XX 5200 mAh PowerPrecision+ extended battery.
  - MC32N0 5200 mAh PowerPrecision extended battery.

Figure 15 1-Slot USB Charge Cradle



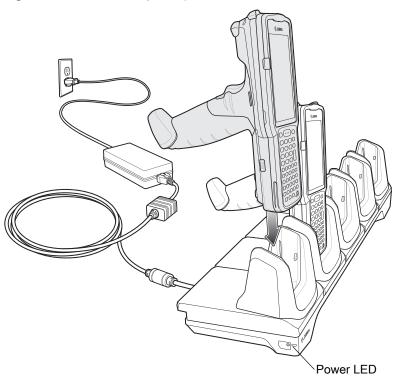


#### 5-Slot Charge Only ShareCradle

The 5-Slot Charge Only ShareCradle:

- Provides 9 VDC power for operating the mobile computer and charging the battery.
- Simultaneously charges up to five mobile computers.
- Compatible with devices using the following batteries:
  - MC33XX 5200 mAh PowerPrecision+ extended battery.
  - MC32N0 5200 mAh PowerPrecision extended battery.

Figure 16 5-Slot Charge Only ShareCradle

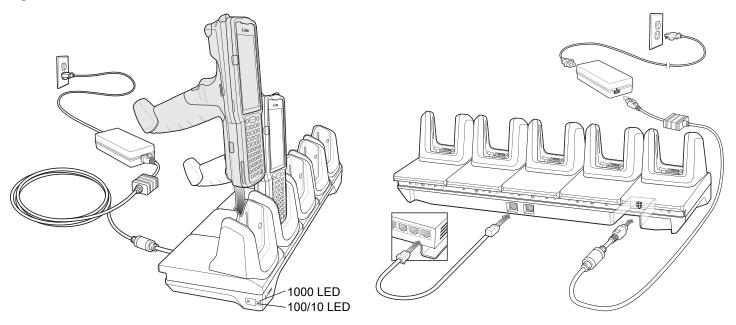


#### 5-Slot Ethernet ShareCradle

The 5-Slot Ethernet ShareCradle:

- Provides 9 VDC power for operating the mobile computer and charging the battery.
- Simultaneously charges up to five mobile computers.
- Compatible with devices using the following batteries:
  - MC33XX 5200 mAh PowerPrecision+ extended battery.
  - MC32N0 5200 mAh PowerPrecision extended battery.

Figure 17 5-Slot Ethernet ShareCradle

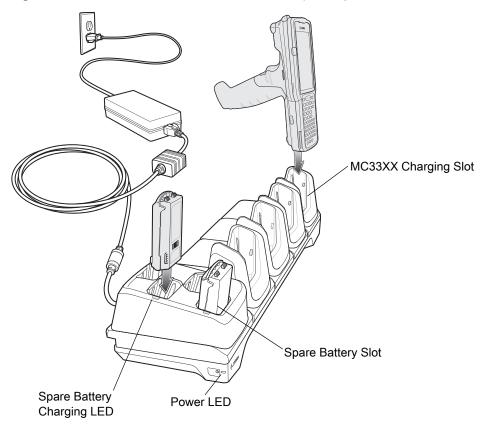


# 5-Slot ShareCradle with 4-Slot Battery Charger

The 5-Slot ShareCradle with 4-Slot Battery Charger:

- Provides 9 VDC power for operating the mobile computer and charging the battery.
- Provides 4.2 VDC power for charging spare batteries.
- Simultaneously charges up to five mobile computers and four spare batteries.
- Compatible with the following batteries:
  - MC33XX 5200 mAh PowerPrecision+ extended battery.
  - MC32N0 5200 mAh PowerPrecision extended battery.

Figure 18 5-Slot ShareCradle with 4-Slot Battery Charger

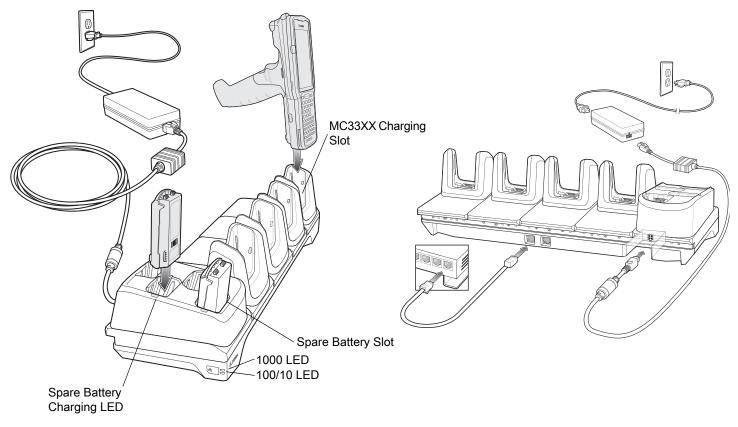


#### 5-Slot Ethernet ShareCradle with 4-Slot Battery Charger

The 5-Slot Ethernet ShareCradle with 4-Slot Battery Charger:

- Provides 9 VDC power for operating the mobile computer and charging the battery.
- Provides 4.2 VDC power for charging spare batteries.
- Simultaneously charges up to five mobile computers and four spare batteries.
- Compatible with the following batteries:
  - MC33XX 5200 mAh PowerPrecision+ extended battery.
  - MC32N0 5200 mAh PowerPrecision extended battery.

Figure 19 5-Slot Ethernet ShareCradle with 4-Slot Battery Charger

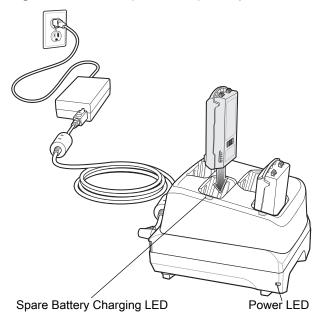


## **4-Slot Spare Battery Charger**

The 4-Slot Battery Charger:

- Charges up to four MC33XX spare batteries.
- Provides 4.2 VDC power to charge the spare battery.
- Compatible with the following batteries:
  - MC33XX 5200 mAh PowerPrecision+ extended battery.
  - MC32N0 5200 mAh PowerPrecision extended battery.

Figure 20 4-Slot Spare Battery Charger

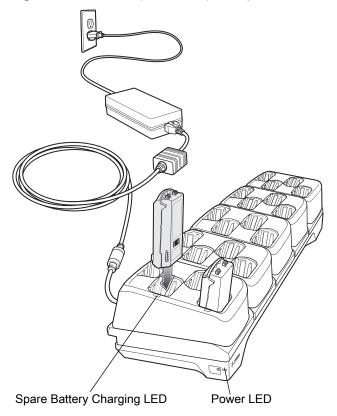


## **20-Slot Spare Battery Charger**

The 20-Slot Battery Charger:

- Charges up to twenty MC33XX spare batteries.
- Provides 4.2 VDC power to charge the spare battery.
- Compatible with the following batteries:
  - MC33XX 5200 mAh PowerPrecision+ extended battery.
  - MC32N0 5200 mAh PowerPrecision extended battery.

Figure 21 20-Slot Spare Battery Charger

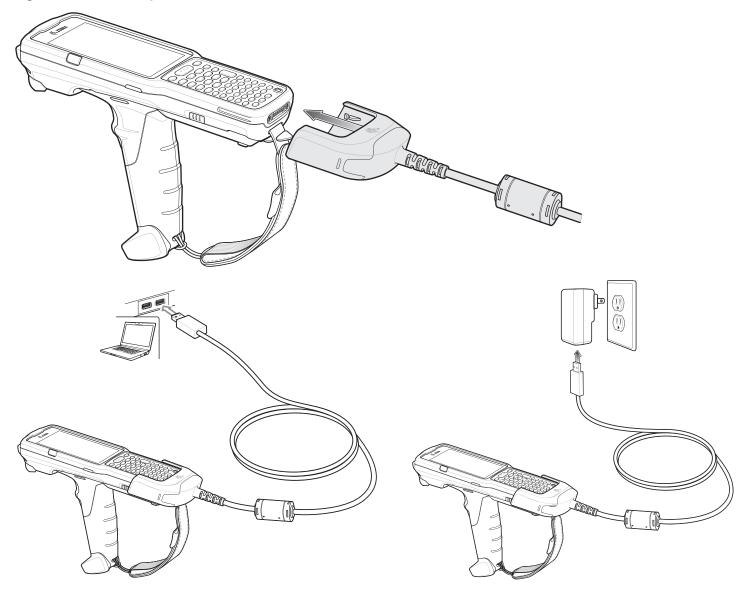


#### **USB Charge Cable**

The USB Charge Cable:

- Provides 5 VDC power to charge the battery.
- Provides power and/or communication with the host computer over USB to the device.
- Compatible with devices using the following batteries:
  - MC33XX 5200 mAh PowerPrecision+ extended battery.
  - MC32N0 5200 mAh PowerPrecision extended battery.

Figure 22 USB Charge Cable



#### MC33XX Charge Only Adapter

Use the MC33XX Charge Only Adapter for backwards compatibility with the MC32N0 cradles and the MC33XX mobile computer.

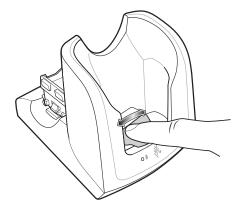
- MC33XX Charge Only Adapter supports the MC32N0 1-Slot USB Cradle, MC32N0 4-Slot Charge Only Cradle, and MC32N0 4-Slot Ethernet Cradle.
- MC33XX Charge Only Adapter provides charge only; no communication when used with the MC32N0 cradles.
- MC32N0 1-Slot USB Cradle provides 5.4 VDC to charge the device.
- MC32N0 1-Slot USB Cradle (with the MC33XX Charge Only Adapter) is compatible with an MC33XX mobile
  computer charging either an MC33XX PowerPrecision+ extended battery or an MC32N0 PowerPrecision extended
  battery, but the MC32N0 1-Slot USB Cradle spare battery slot is only compatible with the MC32N0 PowerPrecision
  batteries.

#### MC33XX Charge Only Adapter Installation

To install the MC33XX Charge Only Adapter:

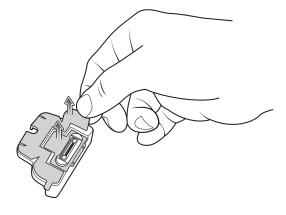
Clean the MC32N0 cradle and contacts with an alcohol wipe, using a back and forth motion with your finger.
 For more information about cleaning, refer to the Maintenance and Troubleshooting chapter of the MC33XX Mobile Computer User Guide.

Figure 23 Clean MC32N0 Cradle



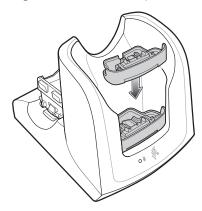
2. Peel and remove the adhesive from the back of the adapter.

Figure 24 Peel and Remove Adhesive



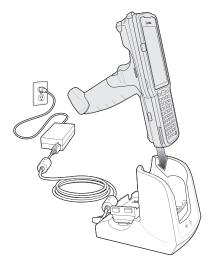
3. Insert the adapter into the MC32N0 cradle and adhere to the bottom of the cradle.

Figure 25 Insert Adapter into Cradle and Adhere



4. Insert the MC33XX device into the MC32N0 cradle.

Figure 26 Insert MC33XX Device into MC32N0 Cradle



## **Scanning**

The MC33XX offers the following data capture options:

- Imager:
  - SE4750-SR 2D
  - SE4850-ER 2D.
- Laser Scanner:
  - SE965 1D.

Refer to the MC33XX Mobile Computer User Guide for other scanning options.

#### **Barcode Capture with Imager**

To capture barcode data:

- 1. Ensure that an application is open on the device and a text field is in focus (text cursor in text field).
- 2. Point the top of the device at a barcode.
- 3. Press and hold the Scan button or Trigger.

The red laser aiming pattern turns on to assist in aiming.

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

The Scan LEDs light green and a beep sounds, by default, to indicate the barcode was decoded successfully. Note that when the device is in Pick List Mode, the device does not decode the barcode until the center of the crosshair touches the barcode.

Figure 27 Aiming Pattern: Standard and Extended Range



Figure 28 Pick List Mode with Multiple Barcodes in Aiming Pattern: Standard and Extended Range



- 5. Release the scan button or Trigger.
- The barcode content data appears in the text field.

#### **Barcode Capture with Laser Scanner**

To capture barcode data:

- Ensure that an application is open on the device and a text field is in focus (text cursor in text field).
- 2. Point the top of the device at a barcode.
- 3. Point the scan exit window at a bar code.
- 4. Press and hold the Scan button.

The red scan line turns on to assist in aiming. Ensure that the scan line crosses every bar and space of the barcode. The Scan LEDs light green and a beep sounds, by default, to indicate the barcode was decoded successfully.

Figure 29 Laser Scanner Aiming Pattern



- 5. Release the scan button.
- **6.** The captured data appears in the text field.

# **Ergonomic Considerations**

Taking breaks and task rotation is recommended.

## **Optimize Body Posture for Low Scanning**

Figure 30 Low Scanning



Alternate left and right knees.

# **Optimize Body Posture for High Scanning**

Figure 31 High Scanning



Alternate left and right hand.

# **Avoid Bending**

Figure 32 Avoid Bending



# **Avoid Reaching**

Figure 33 Avoid Reaching



# **Avoid Extreme Wrist Angles**

Figure 34 Avoid Extreme Wrist Angles

