

# MC67NA OPERATING SYSTEM 1.06.02 FIPS RELEASE NOTES

#### INTRODUCTION

MC67 is a ruggedized device based on Android for the enterprise market that blends the capabilities of a smart phone with those of a traditional enterprise PDA. MC67 has a number of enterprise-grade features, including a touch-screen that can be used with gloves, support for stylus input for signatures, barcode capture capability.

It also features MX to make the Android operating system more enterprise ready, with security enhancements and hooks for device management tools, and is designed for a longer lifecycle than the typical smart phone. MC67 is designed in response to customer feedback from using consumer-grade smart phones in the workplace.

With MC67 the workers can capture practically any type of data — from bar codes and signatures to photos and videos — improving on the job efficiency and customer service. The screen is optimized for Enterprise viewing, helping ensure the battery lasts a full shift. And with a drop, tumble and environmental sealing specification you can count on, it has the durability required to serve your field workers for years.

This software is intended to be loaded and run on the MC67NA FIPS SKU devices. MC67NA device with FIPS JB OS can be directly updated to FIPS KK OS using the recovery upgrade package. It is important that care be taken to match the device configuration with the appropriate Recovery update package. If an incorrect Recovery update package is loaded, the device may not boot.

# **DESCRIPTION**

Component	Version
Product Build Number	01-16-02-4AJ22-K-F0-M1-061716
KitKat	4.4.4
Kernel	3.4.48
Android SDK Level	19
Bluetooth Stack	4
DataWedge	3.3.12



Scanning Framework	6.23.0
MSP	7.08.85
DWDemo	2.0.7
Fusion	A_4.01.0.0.011
MX	TI_OSX_4.5-2 , 5.0.1.4
PTT	3.1.20
RxLogger	3.0.0.52
EA	2.56
SPAM	2.19
StageNow	2.2.1.1445
B2M Elemez	1.0.0.287
Data Analytics	1.0.2.1590
App Gallery	2.2.0.1
SOTI	12.2.0 Build 23434
EMDK	4.1.2.0
ZVC	1.1.15
BaseBand	3.320
Changes	

#### Changes

- 1. FIPS
- 2. Update to KK
- 3. Added support for 180 degree rotation.
- 4. Android Security Patch Level 2016-05-01
- 5. Added Auto WWAN Firmware update

#### **SPR fixes**

- 1. Corrected an issue where the device would attempt to obtain an IP address via DHCP before Ethernet was connected.
- 2. SPR28252 Use-after-free vulnerability patch.



- 3. SPR28147 Android Stagefright patch.
- 4. SPR27006 GPS stops reporting a fix after a service thread leak.
- 5. SPR28631 Fix for keyboard Repeating Key Issue.
- 6. SPR27892 Browser cannot capture function keys

#### CONTENTS

- 1. M67N0KXXFRUEN10617.zip MC67 FIPS OS Recovery Update package
- 2. M67N0KXXFAUEN10617.apf MC67 FIPS OS update package file for deployment using MSP
- 3. M67N0KXXFREEN10617.zip Enterprise Reset Recovery Package
- 4. M67N0KXXFAEEN10617.apf Enterprise Reset file for deployment using MSP
- 5. M67N0KXXFRFEN10617.zip Factory Reset Recovery Package
- 6. M67N0KXXFAFEN10617.apf Factory Reset file for deployment using MSP

### DEVICE COMPATIBILITY

This software release has been approved for use with the following Zebra devices.

Device SKU	Operating System
MC67NA- PDADAA0050F	JB,KitKat 4.4.4
MC67NA- PDADAB0050F	JB,KitKat 4.4.4

# **INSTALLATION REQUIREMENTS**

This SW update is intended for the MC67NA FIPS SKU

# INSTALLATION INSTRUCTIONS

- 1. OS Recovery Update
  - 1. Connect the USB cable from your PC to the device.(pls connect to external A/C or make sure battery at least 50% charged )
  - Make sure the device is in MTP Mode. If device is in MTP mode On your PC you should see an Enterprise storage, Internal storage or SD card partitions.
    Copy the recovery update zip file M67N0KXXFRUEN10617.zip and M67N0KXXFREEN10617.zip packages to Internal storage or SD card partition .
  - 3. Press and hold 1+9+Power Key. Unit will reboot at this point.
  - 4. Keep holding down PTT Trigger. (Release 1+9+ Power Button at this point.)
  - 5. The Android logo should appear on screen. Release PTT Trigger.
  - 6. Click on Vol+ or Vol- to navigate and select appropriated storage .Select 'apply update from sdcard' if you copy zip files on SD card partition. Select 'emulated storage' if you copied zip files on Internal storage
  - 7. Click on on PTT Trigger to select the option
  - 8. Click on Vol+ or Vol- to navigate to the recovery update zip file
  - 9. Click on on PTT Trigger to select the recovery update zip file
  - Run M67N0KXXFRUEN10617.zip (OS update) first and then run M67N0KXXFREEN10617.zip (Enterprise Reset must be performed during FIPS update)



- 2. MSP OS package update
  - 1. Upload MSP package to the MSP server
  - 2. Connect Wi-Fi network which is connected to MSP server.
  - 3. Launch the MSP Rapid Deployment App located in the Apps section.
  - 4. Click on Scan Barcodes and scan barcodes
  - 5. make sure to run enterprise reset
- 3. Downgrade procedure recovery

To downgrade from MC67 KK to MC67 JB(030515)

- 1. Copy released MC67 JB OS recovery package & JB EnterpriseReset package to the root folder on internal SD card
- 2. Reset to recovery mode and update the JB OS recovery package followed by EnterpriseReset package using the recovery

#### Known issues:

- 1. Key remapping takes approximately 40 seconds after the first reboot to take effect. There is no delay on subsequent reboots.
- 2. MC67 Numeric Android Keyboard has multi-tap physical key board. If a user needs to input a character 'B', he needs to press orange modifier key + press the numeric key '2' twice. The limitation with multi tap key is, it cannot return unique key codes for multi-taps. Ex: Numeric key '2' returns character 'A' on single tap, return character 'B' on double tap and returns character 'C' on triple tap. But the key code returned by Android for numeric key '2' is KEYCODE\_A ( value=29) regardless of the single tap, double tap or triple tap. This limitation affects those applications which have logic based on the key code value returned by Android. Ex: If an application is designed to open calendar settings on receiving KEYCODE\_B ( value=30), it would not function as intended. Reason: Android would never return KEYCODE\_B (value=30) on double tap. Instead, it would return KEYCODE\_A ( value=29). Since this is a design limitation of Android framework, we cannot fix this issue. Workaround: Using the SIP keyboard, it would return the desired key code and the applications designed on the key code input, would work properly.
  - 3. Cisco any connect VPN client and Open connect VPN client are not supported.
- 4. If Data Partition of the device is encrypted JB to KK Persistence cannot be supported hence a enterprise reset is required before OS upgrade.

# PART NUMBER AND RELEASE DATE

M67N0KXXFRUEN10617.zip

M67N0KXXFAUEN10617.apf

M67N0KXXFRBEN10617.zip



M67N0KXXFABEN10617.apf

M67N0KXXFREEN10617.zip

M67N0KXXFAEEN10617.apf

M67N0KXXFRFEN10617.zip

M67N0KXXFAFEN10617.apf

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