Release Notes –MC40 KK FIPS OPERATING SYSTEM BSP v03.13.0209

Introduction

Today, it's important to provide an experience that will impress demanding and technology savvy customers and end-users. The MC40N0 Mobile Computer is a sleek, customizable device that puts all the needed information at the customers' fingertips.
With an MC40N0, they can scan an item bar code to look up price, inventory availability or item location; ring up the sale; look up product information or a gift registry; present a comparison of multiple products; call others in the store for help with a question; and even complete a loyalty card application — anywhere in the store, without ever leaving the customer. The MC40N0 offers technology with an impressive look that can be customized in almost limitless ways to become an extension of your brand.
Recovery update package v03.13.0209 contains the MC40 KK RevC software.
This software is intended to be loaded and run on the MC40N0 FIPS SKU devices. MC40N0 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

This release contains software packages which is compatible for MC40 product.

Component description and version

Component / Description	Version
Product Build Number	03-13-15-4AJ22-K-F0-M1-020918
Android Version	4.4.4
Linux Kernel	3.4.48

Android SDK Level	19
OSX	TI_OSX_4.5-2
MXMF	7.0.3.0
Android security patch level	February 01, 2016 (Critical Patch Level: February 01, 2018)
Bluetooth Stack	4
Flash Size	8 GB
RAM Size	1 GB
MSP Client	7.08.86
Scanning Framework	6.36.0
Datawedge	6.5.61
DWDemo	2.0.12
PTT	3.1.20
SPAM	0.6 (NA for RevC HW, only for RevA/B HW)
RxLogger	3.0.0.52
MLogManager	06.52
WiFi	FUSION_A_4.01.0.0.017 (Radio Equipment Directive Compliant)
EA	3.65
ZVC	1.1.15
StageNow	2.8.1.1221
B2M Elemez	1.0.0.260
Data Analytics	1.0.2.2091
App Gallery	3.0.1.7
DDT Tool	1.15
SOTI	12.2.0 Build 23434
EMDK	6.6.14.914
Battery Manager	1.2
Diagnostic Tool	1.15
Touch FW	0.14(RevB), 19 (RevC TPK),38(RevB+), 130 (RevB+ TPK_GFF)

SPR Fixes Included

- **SPR 33599:** Resolved an issue wherein number of disabled applications were increasing when whitelist was enabled through StageNow.
- **SPR 30794**: Resolved an issue wherein picklist accuracy issues with the Scanner framework creation.
- **SPR 32365**: Resolved an issue wherein the scanner being enabled throughout the reboot.
- **SPR 32308**: Resolved an issue wherein scanner was unable to scan interleaved 205 types of barcodes
- **SPR 32008**: Resolved an issue wherein scanning PDF417 barcodes which contain embedded 0x0D characters resulted in continuous line of data instead of displaying in different lines.

- **SPR 32126**: Resolved an issue wherein stock browser gets enabled automatically after reboot even though user has disabled the app in settings.
- **SPR 32135**: Resolved an issue wherein changing locale from Arabic to English via EMDK causes settings screen to show an incorrect state.
- **SPR 31650**: Resolved an issue wherein InputMethodService was causing junk character being read out in customer application
- **SPR 31550**: Mspclient.apk has been renamed to com.symbol.msp.apk
- **SPR 32346**: Resolved an issue wherein proximity sensor's sensitivity was very high in RevC hardware as compared to RevB hardware.
- **SPR 32439/SPR 32541**: Resolved an issue wherein certificates were lost randomly though certificates were not expired.
- **SPR 31358/SPR 31071**: Resolved an issue where the WLAN radio disconnects or falls back to "FT over Air" when "FT over DS" option is enabled in 802.11r.
- **SPR 32230**: Resolved an issue wherein AirWatch deployed certs are not accessible/available when it was requested during EAP-TLS authentication.
- **SPR 32193**: Resolved an issue wherein AirWatch was experiencing authentication failures and not able to recover.
- **SPR 30458**: Resolved an issue wherein toggling Wi-Fi ON/OFF repeatedly causes a Kernel Panic and reboot.
- **SPR 31243**: Resolved an issue wherein user was unable to answer incoming VOIP calls and device is unresponsive and screen is black.
- **SPR 31255**: Resolved an issue wherein MC40 reboots intermittently due to deadobjectexception.
- **SPR 30916**: Resolved an issue where the device display would go blank on running customer camera application.
- **SPR 31036**: Resolved an issue wherein MC40 was experiencing high degree of disruption to voice quality during VOIP calls.
- **SPR 31203**: Resolved an issue wherein the audio volume was degraded during VOIP calls.
- **SPR 30259**: Resolved an issue wherein the device reboot was encountered over WLAN on WPA2 Enterprise 802.1X.
- **SPR 29912**: Resolved an issue wherein PFX Cert Install fails and Initialization of keystore also fails.
- **SPR 29945**: Resolved an issue wherein there was a delay in output when scanning larger QR codes (greater than 100 characters) using keystroke output option in DataWedge.
- **SPR 30417**: Resolved an issue wherein MC40 device occasionally get stuck on the splash screen during a reboot / boot up due to unhandled accelerometer interrupt.
- **SPR 30025**: - Resolved an issue wherein the device experience the audio disruption during VOIP call.
- **SPR 30400**: Added support to enable/disable network monitoring notification.
- **SPR 30402**: Resolved an issue where MC40 does not notify the access point about power save while roaming

- **SPR 30401**: Added(swversions.apk) application to read system properties and place them into an XML file.
- **SPR 30472**: Resolved an issue wherein the device was not updated with latest date and time after critical suspend.
- **SPR 30435**: Resolved an issue wherein the device fails sometimes to roam to APs.
- **SPR 30140**: Resolved an issue wherein particular application installation/Uninstallation fails using MX API.
- **SPR 30157**: Resolved an issue wherein the device reboots intermittently during a voip call.
- **SPR 29349/SPR 29390**: Resolved an issue wherein some of the audio packets were missing at the beginning of the call on REV B/REVB+ hardware.
- **SPR 29076**: Resolved an issue wherein the network popup "the network might be monitored by 3rd party" displayed in the device during certificate installation.
- **SPR 29115**: Resolved an issue wherein the device resulting in to factory reset when it fails to unlock after some attempts.
- **SPR 29787**: Added support for Proxy Wildcard.
- **SPR 29232**: Resolved an issue wherein the device display randomly goes off.
- **SPR 29796**: Resolved an issue wherein customer was seeing EGL_BAD_MATCH and "android.os.TransactionTooLargeException" is seen in the logs while using customer app.
- **SPR 29951**: Resolved an issue wherein VPN connection was unstable over WAN.
- **SPR 29735**: Resolved an issue wherein the device reboots continuously after upgrading to KK from JB.

Additional Fixes Included

- Included fix for BlueBorne vulnerability.
- Spectre & Meltdown correction for variant 2.
- Corrections for KRACK vulnerabilities applied.
- Included fix wherein devices with focal touch TP (REVB/REVB+) HW, if a user taps on the touch panel while the device is booting up, the device gets struck upon zebra splash screen.

Contents

M40N0KXXFRUxx30209.zip	FIPS KK Recovery OS update package
M40N0KXXFAUxx30209.apf	FIPS KK AirBEAM OS update package
M40N0KXXFRBxx30209.zip	MC40N0 KK FIPS SKU Recovery Upgrade package for JB to KK OS upgrade.
M40N0KXXFABxx30209.apf	MC40N0 KK FIPS SKU AirBEAM Upgrade package for JB to KK OS upgrade.

Device Compatibility

This software release has been approved for Android MC40 models mentioned below.

Device P/N FIPS SKU	Operating System
MC40N0-HCJ3R01F	
MC40N0-HLK3R01F	Android KitKat 4.4.4
MC40N0-HLK3R02F	

Installation Requirements

1. The Software update requires FIPS SKU hardware device.
2. Enterprise Reset and Factory Reset package files are available on the MC40 Software Download section on Support Central.

Installation Instructions

1. **OS Recovery Update Package:**
   1. Connect the USB cable from your PC to the device
   2. Make sure MTP mode is selected in the USB settings in the device and MTP drivers are installed in your PC
   3. The internal SD card of MC40 will be seen in your PC as mounted drive MC40N0.
   4. Copy the recovery update zip file to the root folder on internal SD card
   5. Press and hold the Power button on the device until the Device options menu appears
   6. Tap on Reset to reboot the device
   7. When the device is rebooting hold the left Scan/Action button to enter Recovery update mode.
   8. When the Recovery Mode home screen (Android logo) appears then release the left Scan/Action button.
   9. Touch Home button to enter Recovery menu screen
   10. Click on Vol+ or Vol to navigate to the "apply update from sdcard" option
   11. Click on PTT key to select the option
   12. Click on Vol+ or Vol to navigate to the recovery update zip file
   13. Click on PTT key to select the recovery update zip file
   14. Click on Vol+ or Vol to navigate "reboot system now" and Click on PTT key to reboot the device

2. **OS AirBEAM Update package**
   a. Please refer Mobility Service Platform deployment guide for instruction.

   Note: Battery must be 30% charged to perform update for update.

Downgrade instruction for MC40 KitKat to Jelly Bean using Recovery

1. Copy released MC40 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 Update procedure
3. Reboot the device

Important Notes

Downgrade to KK RevB SW v02.13.0311 (Build Date 031116) SW Release or earlier releases is not supported on RevB Plus Hardware which contains TPK GFF Touch Panel.

To find out whether the device is a RevB Plus Hardware with TPK GFF, Go to Settings > About device > Hardware config > Touch and Check name of the Touch Panel & HwRev.

If Touch Panel name is shown as "Focaltech FT5X46GFF" & HwRev is "Rev B+", it is a RevB Plus Hardware with TPK GFF.

Do not downgrade the OS to SW v01.12.0720 (Build Date 072015) or earlier OS versions on devices which are manufactured on or after March 2016.

Part Number and Release Date

1. M40N0KXXFRUxx30209
2. M40N0KXXFAUxx30209
3. M40N0KXXFRBxx30209
4. M40N0KXXFABxx30209

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