

1 Release Description

i.MX android-10.0.0_2.5.0 is a release for Android 10 on NXP's i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8QuadMax, i.MX 8QuadXPlus, and i.MX 7ULP applications processors.

i.MX android-10.0.0_2.5.0 release includes all necessary codes, documents, and tools to assist users in building and running Android 10 on the i.MX 8M Mini EVK, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad EVK, i.MX 8QuadMax MEK, i.MX 8QuadXPlus MEK, and i.MX 7ULP EVKB Board. Their corresponding release quality is listed in the following table.

Platform name	Release quality
i.MX 8M Mini EVK	GA (RFP)
i.MX 8M Nano EVK	GA (RFP)
i.MX 8M Plus EVK	Beta2 (RPC)
i.MX 8M Quad EVK	GA (RFP)
i.MX 8QuadMax MEK	GA (RFP)
i.MX 8QuadXPlus MEK	GA (RFP)
i.MX 7ULP EVKB	GA (RFP)

The prebuilt images are also included for a quick trial on NXP i.MX 8M Mini EVK, i.MX 8M Nano, i.MX 8M Plus EVK, i.MX 8M Quad EVK, i.MX 8QuadMax MEK, i.MX 8QuadXPlus MEK, and i.MX 7ULP EVKB Board and Platforms.

This release includes all NXP porting and enhancements based on the Android open source code.

Most of the deliveries in this release are provided in source code with the exception of some proprietary modules/libraries from third parties.

2 Supported Hardware SoC/Boards

The supported hardware system-on-chip (SoCs)/boards are listed as follows:

- i.MX 8M Mini EVK DDR4/LPDDR4 REV C Board and Platform
- i.MX 8M Nano EVK DDR4/LPDDR4 Board and Platform
- i.MX 8M Plus EVK Board and Platform
- i.MX 8M Quad EVK Rev. A Board and Platform
- i.MX 8QuadMax (Silicon Revision B0) MEK Board and Platform
- i.MX 8QuadXPlus (Silicon Revision B0 and C0) MEK Board and Platform
- i.MX 7ULP EVKB Board and Platform

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3 Release Package Contents

The android10.0.0_2.5.0 release package includes the following software and documents.

Table 1. Release package contents

i.MX Android proprietary source code package	<ul style="list-style-type: none"> • imx-android-10.0.0_2.5.0.tar.gz: i.MX Android proprietary source code package to enable Android on i.MX boards. For example, Hardware Abstraction Layer implementation, hardware codec acceleration, etc.
Documents	<p>The following documents are included in android-10.0.0_2.5.0_docs.zip:</p> <ul style="list-style-type: none"> • <i>Android™ Quick Start Guide</i> (AQSUG): A document that describes how to run the Android platform on an i.MX board using prebuilt images. • <i>Android™ User's Guide</i> (AUG): A document that describes procedures for configuring and building this release package. • <i>Android™ Release Notes</i> (ARN): A document that describes key updates and known issues in this release. • <i>i.MX Android™ Security User's Guide</i> (ASUG): A document that describes how to do customization work on security features supported by i.MX Android software. • <i>i.MX TensorFlow Lite on Android User's Guide</i> (IMXTFLUG): A document that describes the TensorFlow Lite on Android platform. • <i>i.MX Graphics User's Guide</i> (IMXGRAPHICUG): A document that describes GPU 2D API, Tools, Memory, and Application programming guidelines.
Prebuilt images	<p>You can test the Android platform with a prebuilt image on i.MX reference board before building any code:</p> <ul style="list-style-type: none"> • android-10.0.0_2.5.0_image_8mmevk.tar.gz: Prebuilt images with NXP extended features for the i.MX 8M Mini EVK board. • android-10.0.0_2.5.0_image_8mnevk.tar.gz: Prebuilt images with NXP extended features for the i.MX 8M Mini EVK DDR4 board. • android-10.0.0_2.5.0_image_8mpevk.tar.gz: Prebuilt images with NXP extended features for the i.MX 8M Plus EVK board. • android-10.0.0_2.5.0_image_8mqevk.tar.gz: Prebuilt images with NXP extended features for the i.MX 8M Quad EVK board. • android-10.0.0_2.5.0_image_8qmek.tar.gz: Prebuilt images with NXP extended features for the i.MX 8QuadMax/8QuadXPlus MEK board. • android-10.0.0_2.5.0_image_7ulpevk.tar.gz: Prebuilt images with NXP extended features for the i.MX 7ULP EVKB board. <p>All prebuilt images are in a separate package. See the <i>Android™ Quick Start Guide</i> (AQSUG) and <i>Android™ User's Guide</i> (AUG) to choose the appropriate image.</p>

4 Features

This section describes features in this package.

Table 2. Features

Feature	i.MX 8M Mini EVK	i.MX 8M Nano EVK	i.MX 8M Plus EVK	i.MX 8M Quad EVK	i.MX 8QuadMax MEK	i.MX 8QuadX Plus MEK	i.MX 7ULP EVKB	Remarks
Google Android 10 release	Y	Y	Y	Y	Y	Y	Y	Based on android-10.0.0_r41 release
Linux 5.4.3 kernel (merge with AOSP kernel)	Y	Y	Y	Y	Y	Y	Y	Based on Linux® OS BSP L5.4.47_2.2.0 release.
U-Boot	Y	Y	Y	Y	Y	Y	Y	v2020.04.
Trusty OS	Y	Y	Y	Y	Y	Y	Y	-
Graphic-HW	Y	Y	Y	Y	Y	Y	Y	VeriSilicon GC7000NanoUltr GPU with the 6.4.3.p0 driver for i.MX 8M Mini and i.MX 7ULP. VeriSilicon GC7000UL GPU with 6.4.3.p0 driver for i.MX 8M Nano EVK and i.MX 8M Plus EVK. VeriSilicon GC7000L GPU with 6.4.3.p0 driver for i.MX 8M Quad. VeriSilicon GC7000XSVX GPU with 6.4.3.p0 driver for i.MX 8QuadMax. VeriSilicon GC7000L GPU with 6.4.3.p0 driver for i.MX 8QuadXPlus.
Graphic-HW 3D acceleration	Y	Y	Y	Y	Y	Y	Y	OpenGL ES1.1/2.0 through GC7000NanoUltra for i.MX 8M Mini and i.MX 7ULP. OpenGL ES1.1/2.0/3.1 through GC7000UL for i.MX 8M Nano EVK and i.MX 8M Plus EVK. OpenGL ES1.1/2.0/3.1 through GC7000L for i.MX 8M Quad. OpenGL ES 1.1/2.0/3.1/3.2 through GC7000XSVX for i.MX 8QuadMax.

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Table 2. Features (continued)

Feature	i.MX 8M Mini EVK	i.MX 8M Nano EVK	i.MX 8M Plus EVK	i.MX 8M Quad EVK	i.MX 8QuadMax MEK	i.MX 8QuadX Plus MEK	i.MX 7ULP EVKB	Remarks
								OpenGL ES 1.1/2.0/3.1 via GC7000L for i.MX 8QuadXPlus.
Graphic-HW accelerated UI surface composition	Y	Y	Y	Y	Y	Y	Y	OpenGL ES2.0 through GC7000NanoUltra for i.MX 8M Mini. OpenGL ES3.1 through GC7000UL for i.MX 8M Nano EVK and i.MX 8M Plus EVK. OpenGL ES3.1 through GC7000L for i.MX 8M Quad. OpenGL ES 3.2 through GC7000XSVX for i.MX 8QuadMax. OpenGL ES 3.1 through GC7000L for i.MX 8QuadXPlus. HWC through GPU 2D for i.MX 7ULP.
Boot source	SD/eMMC	SD/eMMC	SD/eMMC	SD/eMMC	SD/eMMC	SD/eMMC	SD	-
SCFW	N	N	N	N	Y	Y	N	Version 1.6.0
SECO firmware	N	N	N	N	Y	Y	N	Version 3.7.0 for i.MX 8QuadMax and i.MX 8QuadXPlus silicon revision B0. Version 3.7.1 for i.MX 8QuadXPlus silicon revision C0.
Splash Screen	Y	Y	Y	Y	Y	Y	Y	-
UI (input)	Y	Y	Y	Y	Y	Y	Y	i.MX 8M Mini EVK, i.MX 8M Nano EVK, i.MX 8M Plus EVK, i.MX 8M Quad EVK, and i.MX7ULP EVKB support USB Mouse and Multi-touch on the MIPI panel display.

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Table 2. Features (continued)

Feature	i.MX 8M Mini EVK	i.MX 8M Nano EVK	i.MX 8M Plus EVK	i.MX 8M Quad EVK	i.MX 8QuadMax MEK	i.MX 8QuadX Plus MEK	i.MX 7ULP EVKB	Remarks
								i.MX 8QuadMax MEK and i.MX 8QuadXPlus MEK support USB Mouse.
UI (display)	MIPI-DSI-to-HDMI/MIPI panel display	MIPI-DSI-to-HDMI/MIPI panel display	HDMI/MIPI-to-HDMI/MIPI panel/LVDS-to-HDMI/LVDS panel display	HDMI/MIPI-DSI-to-HDMI/MIPI panel display	HDMI/MIPI-to-HDMI/MIPI-panel/LVDS-to-HDMI	HDMI display	HDMI/MIPI display	<p>i.MX 8M Mini supports MIPI-DSI to HDMI display and MIPI Panel display.</p> <p>i.MX 8M Nano EVK supports MIPI-DSI-to-HDMI display and MIPI panel display.</p> <p>i.MX 8M Plus EVK supports physical HDMI display, MIPI-to-HDMI display, MIPI panel Display, LVDS-to-HDMI display, and LVDS panel display.</p> <p>i.MX 8M Quad supports physical HDMI display, MIPI-DSI to HDMI display, and MIPI panel display.</p> <p>i.MX 8QuadMax supports LVDS-to-HDMI/MIPI-DSI-to-HDMI and physical HDMI display.</p>
UI (dual displays, UI mirror displayed on second device)	N	N	Y	Y	Y	Y	N	<p>i.MX 8M Quad EVK supports on MIPI-DSI-to-HDMI and HDMI dual displays.</p> <p>i.MX 8QuadMax MEK and i.MX 8QuadXPlus MEK support dual LVDS-to-HDMI displays.</p>
UI (brightness control)	N	N	N	N	N	N	N	-
Storage - External Media	Y	Y	Y	Y	Y	Y	Y	For i.MX 8QuadMax MEK and i.MX 8QuadXPlus MEK, USB 2.0 port supports udisk, but USB 3.0 port does not support udisk.

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Table 2. Features (continued)

Feature	i.MX 8M Mini EVK	i.MX 8M Nano EVK	i.MX 8M Plus EVK	i.MX 8M Quad EVK	i.MX 8QuadMax MEK	i.MX 8QuadX Plus MEK	i.MX 7ULP EVKB	Remarks
Connectivity - Ethernet	Y	Y	Y	Y	Y	Y	N	-
Connectivity - Bluetooth [®] wireless technology	Y	Y	Y	Y	Y	Y	Y	Hardware: <ul style="list-style-type: none"> • Qualcomm 1PJ QCA9377 for i.MX 8M Mini EVK LPDDR4 board • Azurewave CM358 (NXP 88W8987) for i.MX 8M Nano EVK LPDDR4 board and i.MX 7ULP EVKB board • Azurewave CM276 (NXP 88W8997) for i.MX 8M Plus EVK, i.MX 8MQuad EVK Rev. A, i.MX 8QuadMax MEK and i.MX 8QuadXPlus MEK Profiles: <ul style="list-style-type: none"> • A2DP Source • AVRCP • BLE Host • HSP • HID Host • HID Device • PAN • OPP
Connectivity - Wi-Fi	Y	Y	Y	Y	Y	Y	Y	Hardware: <ul style="list-style-type: none"> • Azurewave CM358 (NXP 88W8987) for i.MX 8M Mini EVK LPDDR4 board, i.MX 8M Nano EVK LPDDR4 board and

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Table 2. Features (continued)

Feature	i.MX 8M Mini EVK	i.MX 8M Nano EVK	i.MX 8M Plus EVK	i.MX 8M Quad EVK	i.MX 8QuadMax MEK	i.MX 8QuadX Plus MEK	i.MX 7ULP EVKB	Remarks
								i.MX 7ULP EVKB board • Azurewave CM276 (NXP 88W8997) for i.MX 8M Plus EVK, i.MX 8MQuad EVK Rev. A, i.MX 8QuadMax MEK, i.MX 8QuadXPlus MEK Features: • STA mode • AP mode • Wi-Fi Direct • AP/STA Concurrency (This feature is not supported on i.MX 7ULP EVKB) • MAC randomization
Connectivity - USB Tethering	Y	Y	Y	Y	Y	Y	Y	Supports Wi-Fi and Ethernet as upstream.
Power - CPU Freq	Y	Y	Y	Y	Y	Y	Y	-
Power - Bus Freq	Y	Y	Y	Y	Y	Y	Y	-
Media - Music Play	Y	Y	Y	Y	Y	Y	Y	SSI+WM8524 for i.MX 8M Mini, i.MX 8M Nano EVK, and i.MX 8M Quad. SSI+WM8960 for i.MX 8M Plus EVK. WM8960+CS42888+HDMI for i.MX 8QuadMax (not support multichannel). ESAI+CS42888 for i.MX 8QuadXPlus (supports multichannel).
Media - Sound Record	Y	Y	Y	Y	Y	Y	Y	SSI+WM8524 for i.MX 8M Mini EVK, i.MX 8M Nano

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Table 2. Features (continued)

Feature	i.MX 8M Mini EVK	i.MX 8M Nano EVK	i.MX 8M Plus EVK	i.MX 8M Quad EVK	i.MX 8QuadMax MEK	i.MX 8QuadX Plus MEK	i.MX 7ULP EVKB	Remarks
								EVK, and i.MX 8M Quad EVK. SSI+WM8960+PDM for i.MX 8M Plus EVK. ESAI+CS42888 for i.MX 8QuadMax MEK and i.MX 8QuadXPlus MEK.
Media - Video Play	Y	Y	Y	Y	Y	Y	Y	-
Media - Camera	Y	Y	Y	Y	Y	Y	N	OV5640 MIPI CSI camera for i.MX 8M Mini EVK, i.MX 8M Nano EVK, and i.MX 8M Quad EVK. OV5640 MIPI CSI camera and Basler MIPI CSI camera for i.MX 8M Plus EVK. Dual OV5640 MIPI CSI cameras for i.MX 8QuadMax MEK. OV5640 MIPI CSI camera and OV5640 CPI camera for i.MX 8QuadXPlus MEK. For i.MX 8M Quad, the camera cannot co-work with MIPI Display due to the I2C address conflict.
Media - TVIN	N	N	N	N	N	N	N	-
Media - Dual Camera	Y	Y	Y	Y	Y	Y	N	OV5640 MIPI CSI camera and Basler MIPI CSI camera for i.MX 8M Plus EVK. Dual OV5640 MIPI CSI cameras for i.MX 8QuadMax MEK. OV5640 MIPI CSI camera and OV5640 CPI camera for i.MX 8QuadXPlus MEK.
Media - Camcorder	Y	Y	Y	Y	Y	Y	N	-

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Table 2. Features (continued)

Feature	i.MX 8M Mini EVK	i.MX 8M Nano EVK	i.MX 8M Plus EVK	i.MX 8M Quad EVK	i.MX 8QuadMax MEK	i.MX 8QuadX Plus MEK	i.MX 7ULP EVKB	Remarks
Media - USB Camera	Y	Y	N	Y	N	N	N	USB camera supports C920, C270, and C525.
Media - USB Mic	Y	Y	Y	Y	Y	Y	Y	-
Media - HDMI audio output	N	N	Y	Y	Y	N	N	-
Media-DSD Playback	N	N	N	N	N	N	N	-
Media-PlayReady DRM	N	N	N	Y	N	N	N	Moderated download for licensees
Media-WideVine DRM	Y	N	N	Y	N	N	N	Supports WideVine DRM Level 3.
Media-M4 Playback	Y	N	Y	N	N	N	N	Audio playback based on FreeRTOS on the Cortex-M4 core for i.MX 8M Mini.
Media-Hi-Res audio output	Y	N	N	Y	Y	Y	N	<p>High resolution audio output from Audio Expansion Board for i.MX 8M Mini EVK and i.MX 8M Quad EVK.</p> <ul style="list-style-type: none"> • 2 channel: 384000, 768000 sampling rate • 4 channel: 48000, 96000, 192000, 384000, 768000 sampling rate • 6 channel: 48000, 96000, 192000, 384000 sampling rate • 8 channel: 48000, 96000, 192000, 384000 sampling rate <p>High resolution audio output from Audio Expansion Board for i.MX</p>

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Table 2. Features (continued)

Feature	i.MX 8M Mini EVK	i.MX 8M Nano EVK	i.MX 8M Plus EVK	i.MX 8M Quad EVK	i.MX 8QuadMax MEK	i.MX 8QuadX Plus MEK	i.MX 7ULP EVKB	Remarks
								8QuadMax MEK and i.MX 8QuadXPlus MEK: <ul style="list-style-type: none"> • 4 channel: 48000, 96000, 192000 sampling rate • 6 channel: 48000, 96000, 192000 sampling rate • 8 channel: 48000, 96000, 192000 sampling rate
Misc - ADB over USB	Y	Y	Y	Y	Y	Y	Y	-
Misc - Fastboot utility	Y	Y	Y	Y	Y	Y	Y	-
Misc - SW update and factory reset	Y	Y	Y	Y	Y	Y	Y	-
Sensor - Magnetometer	N	N	N	N	Y	Y	N	FXOS8700
Sensor - Accelerometer	N	N	N	N	Y	Y	N	FXOS8700
Sensor - Gyroscope	N	N	N	N	Y	Y	N	FXAS2100
Sensor - Light	N	N	N	N	Y	Y	N	ISL29023
Sensor - Pressure	N	N	N	N	Y	Y	N	MPL3115
Sensor - Temperature	N	N	N	N	Y	Y	N	MPL3115
File Based Encryption	Y	Y	Y	Y	Y	Y	Y	-
USB Accessory	Y	Y	Y	Y	Y	Y	Y	Google AOA v2.0
Ethernet APK	Y	Y	Y	Y	Y	Y	N	-
webGL	Y	Y	Y	Y	Y	Y	Y	-
Vulkan	N	Y	Y	Y	Y	Y	N	-

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Table 2. Features (continued)

Feature	i.MX 8M Mini EVK	i.MX 8M Nano EVK	i.MX 8M Plus EVK	i.MX 8M Quad EVK	i.MX 8QuadMax MEK	i.MX 8QuadX Plus MEK	i.MX 7ULP EVKB	Remarks
OTA for A/B	Y	Y	Y	Y	Y	Y	N	-
USB Type-C PD	Y	Y	Y	Y	Y	Y	N	Supports power role switch with devices that support USB power delivery
DM Verity	Y	Y	Y	Y	Y	Y	N	-
TEE backed Keymaster HAL	Y	Y	Y	Y	Y	Y	N	This is based on i.MX Trusty OS TEE firmware.
TEE backed AVB	Y	Y	Y	Y	Y	Y	N	This is based on i.MX Trusty OS TEE firmware and secure storage of eMMC chip. In this release, users need to initialize the RPMB part manually.

5 Multimedia Codecs

For multimedia codecs and features, see *i.MX Android™ Extended Codec Release Notes (IMXACRN)*.

6 Extended Features

An enhanced multimedia experience is available for the Android platform. This release delivers an error-resilient, feature-rich multimedia solution by extending the existing multimedia features of the Android platform and introduces additional features.

For detailed extended and additional features, see *i.MX Android™ Extended Codec Release Notes (IMXACRN)*.

For more information and details, contact "L2manager-android@nxp.com".

7 Change Logs

Compared to the android-10.0.0_2.3.0 release, android-10.0.0_2.5.0 for i.MX 8M Mini EVK, i.MX 8M Nano EVK, i.MX 8M Plus EVK, i.MX 8M Quad EVK, i.MX 8QuadMax MEK, and i.MX 8QuadXPlus MEK have the following major changes:

- Upgraded the Android code base from android-10.0.0_r35 to android-10.0.0_r41.
- Upgraded the kernel from v5.4.24 to v5.4.47.
- Upgraded the GPU driver from 6.4.0 to 6.4.3.
- Supports ISP camera on i.MX 8M Plus EVK.
- Added TensorFlow Lite v2.2.0.

Compared to the P9.0.0_2.2.0-ga release, android-10.0.0_2.5.0 for i.MX 7ULP EVKB has the following major changes:

- Upgraded the Android code base from android-9.0.0_r35 to android-10.0.0_r41.
- Upgraded the kernel from v4.14.98 to v5.4.47.
- Upgraded the U-Boot from v2018.03 to v2020.04.
- Upgraded the GPU driver from 6.2.4 to 6.4.3.

8 Known Issues and Limitations

The known issues about the hardware and hardware rework instructions are not included in this document. There may be hardware-related reference materials for some reference boards. Make sure to check the link [i.MX Application Processors](#) to see if it is applicable.

Table 3. Known issues and limitations

Issue description	Remarks
The Google USB driver must be installed multiple times for the MTP, PTP, MTP&ADB, PTP&ADB, and ADB function settings.	Some Windows XP environments may display MTP and PTP windows even with only PTP enabled in the device.
U-Boot will hang when erasing Kingston SD card.	U-Boot will hang when sending the erase command on some Kingston SD cards.
For i.MX 8QuadXPlus silicon revision B0, it fails to boot from some types of eMMC.	<p>In the default settings, the UUU script burns the boot image into the eMMC Boot Partition with 32KB offset. Although it works properly on the MEK board, it fails to read the boot image on some types of eMMC.</p> <p>There are two possible solutions:</p> <ul style="list-style-type: none"> • Download flash.bin in the eMMC Boot Partition + 0KB offset + eMMC fastboot enabled in fuse. • Download flash.bin in the eMMC User Partition + 32KB offset (eMMC fastboot can be either enabled or disabled in fuse). <p>For more information, see https://community.nxp.com/docs/DOC-342877.</p>
No audio output for BT HSP on i.MX 8QuadXPlus MEK.	-
After connecting to a Wi-Fi access point, on i.MX 8M Plus EVK, i.MX 8MQuad EVK, and i.MX 8QuadXPlus MEK, suspend-resume may cause to system to reboot or the system cannot detect access points any more.	-
Bluetooth A2DP connection gets disconnected automatically with crash log on i.MX 8M Plus EVK, i.MX 8M Quad EVK, i.MX 8QuadMax MEK, and i.MX 8QuadXPlus MEK.	-
After the code is synchronized, the image build procedure for i.MX 7ULP EVKB ends up with failure if it is started first.	This is a build issue for i.MX 7ULP EVKB, which has recovery image. There are two ways to avoid this issue:

Table continues on the next page...

Table 3. Known issues and limitations (continued)

Issue description	Remarks
	<ul style="list-style-type: none"> Execute the following command before building an image for i.MX 7ULP EVKB: <pre data-bbox="862 401 1187 506">cd \${MY_ANDROID} source build/envsetup.sh make mkdtimg -j8</pre> Make modifications on the code to fix this build issue. The code repository is under <code>\${MY_ANDROID}/device/fsl</code>, and the modification is as follows: <pre data-bbox="862 646 1446 1205">diff --git a/common/build/imx-recovery.mk b/common/build/imx-recovery.mk index 001050c9..d03f82c2 100644 --- a/common/build/imx-recovery.mk +++ b/common/build/imx-recovery.mk @@ -2,7 +2,7 @@ .PHONY : IMX_INSTALLED_RECOVERYIMAGE_TARGET ifneq (\$(BOARD_USES_RECOVERY_AS_BOOT), true) -\$(BOARD_PREBUILT_RECOVERY_DTBOIMAGE) : \$ (TARGET_DTB) +\$(BOARD_PREBUILT_RECOVERY_DTBOIMAGE) : \$ (TARGET_DTB) \$(MKDTIMG) for dtssplat in \$ (TARGET_BOARD_DTS_CONFIG); do \ DTS_PLATFORM=`echo \$\$dtssplat cut -d':' -f1`; \ DTB_NAME=`echo \$\$dtssplat cut -d':' -f2`; \</pre>

9 Revision History

Table 4. Revision history

Revision number	Date	Substantive changes
P9.0.0_1.0.0-beta	11/2018	Initial release
P9.0.0_1.0.0-ga	01/2019	i.MX 8M, i.MX 8QuadMax, i.MX 8QuadXPlus GA release.
P9.0.0_2.0.0-ga	04/2019	i.MX 8M, i.MX 8QuadMax, i.MX 8QuadXPlus GA release.
P9.0.0_2.0.0-ga	08/2019	Updated the location of the SCFW porting kit.
android-10.0.0_1.0.0	02/2020	i.MX 8M Mini, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.
android-10.0.0_1.0.0	03/2020	Deleted the Android 10 image.

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Table 4. Revision history (continued)

Revision number	Date	Substantive changes
android-10.0.0_2.1.0	04/2020	i.MX 8M Plus Alpha and i.MX 8QuadXPlus Beta release.
android-10.0.0_2.0.0	05/2020	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.
android-10.0.0_2.3.0	07/2020	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8QuadMax, and i.MX 8QuadXPlus GA release.
android-10.0.0_2.5.0	10/2020	i.MX 8M Mini, i.MX 8M Nano, i.MX 8M Plus, i.MX 8M Quad, i.MX 8QuadMax, i.MX 8QuadXPlus, and i.MX 7ULP EVK GA release.

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