Appendix for Product Change Notifications

Notification No. PCN.23-0812…23-0816

Dear TQ-Systems customer,

this Appendix lists all affected module variants and their respective old and new firmware versions belonging to the various Product Change Notifications from TQ-Systems named above. Additionally, some technical and version details of the several firmware components are given.

Module family / variant	Binary old	Binary new
TQMa8x		
TQMA8QM-AA	TQMa8QM-4G-E-MMC.SW.BIN.0037	TQMa8QM-4G-E-MMC.SW.BIN.0092
TQMA8QM-AB	TQMa8QM-8G-SPI-NOR.-SW.BIN.0037	TQMa8QM-8G-SPI-NOR.-SW.BIN.0092
TQMa8Xx		
TQMA8XQP-AA	TQMA8XQP-1G-E-MMC.SW.BIN.0036	TQMA8XQP-1G-E-MMC.SW.BIN.0092
TQMA8XDP-AA	TQMA8XDP-1G-E-MMC.SW.BIN.0036	TQMA8XDP-1G-E-MMC.SW.BIN.0092
TQMA8XQP-AB	TQMA8XQP-1G-SPI-NOR.SW.BIN.0036	TQMA8XQP-1G-SPI-NOR.SW.BIN.0092
TQMA8XQP-AD	TQMA8XQP-1G-SPI-NOR.SW.BIN.0083	
TQMA8XQP-AC	TQMA8XQP-2G-E-MMC.SW.BIN.0055	TQMA8XQP-2G-E-MMC.SW.BIN.0092
TQMA8XQP-CA		
TQMa8Xx4		
TQMA8XQP4-AA	TQMA8XQP4-2G-E-MMC.SW.BIN.0036	TQMA8XQP4-2G-E-MMC.SW.BIN.0092
TQMA8XQP4-AC		
TQMA8XQP4-AD		
TQMA8XQP4-AE		
TQMA8XDP4-AA	TQMA8XDP4-2G-E-MMC.SW.BIN.0036	TQMA8XDP4-2G-E-MMC.SW.BIN.0092
TQMA8XQP4-AB	TQMA8XQP4-2G-SPI-NOR.SW.BIN.0036	TQMA8XQP4-2G-SPI-NOR.SW.BIN.0092
TQMa8XxS		
TQMA8XQPS-AA	TQMA8XQPS-2G-E-MMC.SW.BIN.0036	TQMA8XQPS-2G-E-MMC.SW.BIN.0092
TQMA8XQPS-AB		
TQMA8XDPS-AA	TQMa8XDPS-2G-E-MMC.SW.BIN.0038	TQMa8XDPS-2G-E-MMC.SW.BIN.0092
TQMA8XDPS-AB		

The latest source code for U-Boot and trusted firmware can be found on GitHub. Binaries for SCU firmware are included in yocto BSP as published on GitHub. The SCFW porting kit is available from NXP. Source code changes for the SCU firmware board support code are available on request from TQ-Systems GmbH. Please note that the version of the SCU firmware shall be used together with the matching SECO firmware version as per recommendation from NXP. Mixing other versions is neither tested by TQ-Systems GmbH nor recommended by NXP.

Please see:

Software component	Git repository / Source location	Tag
U-Boot	https://github.com/tq-systems/u-boot-tqmaxx	kirkstone.TQMa8.BSP.SW.0092
TF-A (atf)	https://github.com/tq-systems/atf	kirkstone.TQMa8.BSP.SW.0092
SCU firmware	https://github.com/tq-systems/meta-tq Binary bundle under meta-tq/recipes-bsp/imx-sc-firmware/imx-sc-firmware-tq	kirkstone.TQMa8.BSP.SW.0092
SECO firmware	Binary download from NXP mirror via yocto recipes	Not available

The following table gives a short overview for the changes of the several bootloader components:

Implemented changes	Additional notes
The U-Boot has been updated to latest TQ-Systems BSP revision. This includes NXP fixes up to rel_imx_5.4.70_2.3.2 / 185bdaaaf5644319284566e5c340927d28954a1a	Changelog can be found in yocto BSP and U-Boot git log
The security controller firmware was upgraded to the latest version (5.9.0) matching the new SCU firmware version.	Improvements and fixes from NXP. Changelog can be found in NXP provided binary archive.
The SCU firmware was upgraded to 1.15.0	Improvements and fixes from NXP. Changelogs can be found in NXP provided SCFW porting kits. TQ-Systems GmbH board support code available on request.
The Trusted Firmware has been upgraded to v2.6 based NXP version and includes fixes from NXP up to lf-5.15.71-2.2.0 / 3c1583ba0a5d11e5116332e91065cb3740153a46	Changelog can be found in yocto BSP and ATF git log.

The new firmware images from TQ-Systems GmbH can be found under the following links:
https://www.tq-group.com/en/products/tq-embedded/arm-architecture/tqma8x/#downloads
https://www.tq-group.com/en/products/tq-embedded/arm-architecture/tqma8Xx/#downloads
https://www.tq-group.com/en/products/tq-embedded/arm-architecture/tqma8Xx4/#downloads
https://www.tq-group.com/en/products/tq-embedded/arm-architecture/tqma8XxS/#downloads

The corresponding software licenses used by the firmware and the license documentation can found at the following link:
https://www.tq-group.com/filedownloads/files/licenses/embedded/kirkstone.TQMa8.BSP.SW.0092.LIZ.0005.pdf

Archives of the source code of the used open source components can be downloaded from:
https://www.tq-group.com/filedownloads/files/licenses/embedded/atf-kirkstone.TQMa8.BSP.SW.0092.tar.gz
https://www.tq-group.com/filedownloads/files/licenses/embedded/u-boot-tqmaxx-kirkstone.TQMa8.BSP.SW.0092.tar.gz

In case of non-functional links etc. please contact support@tq-group.com