Temporary Product Introduction Notification (TPIN): Apalis iMX6 V1.1Z 2021-04-15

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1. Affected Product Numbers

Affected Products		Additional Substitution Version (temporary, with limited features)	
Part Number	Product Name	Part Number	Product Name
00271101	Apalis iMX6Q 1GB V1.1B	00271125	Apalis iMX6Q 1GB V1.1Z
00281102	Apalis iMX6Q 2GB IT V1.1C	00281125	Apalis iMX6Q 2GB IT V1.1Z
00291101	Apalis iMX6D 512MB V1.1B	Not planned	Not planned
00351101	Apalis iMX6D 1GB IT V1.1B	Not planned	Not planned

2. Product Phase in / Phase-out Schedule

Affected Products		Additional Substitution Version (temporary, with limited features)	
Part Number	Estimated Schedule	Part Number	Estimated Schedule
00271101 00281102 00291101 00351101	Product will continue under allocation with limited availability due to component shortage. Situation is expected to be resolved in Q4, 2021.	00271125 00281125	Product available upon request to increase availability

Customers not requiring the resistive touch controller and/or ADC are strongly encouraged to use the additional substitution version. Toradex also advises customers to validate the new product version before their production release, we can provide a rework instruction or "Sample" of the additional substitution version.

3. Description of Changes

Change #1: Removed STMPE811QT

- Removed STMPE811QTR touch controller and related components due to temporary component shortage

4. Customer Impact

Hardware

- 4-wire resistive touch functionality (Apalis pins 315, 317, 319, 321) won't be available in V1.1Z. No changes are required on the Apalis carrier board.
- Analogue input functionality (Apalis pins 305, 307, 309, 311) won't be available in V1.1Z. No changes are required on the Apalis carrier board.

Software

Customer software

We request customers to check their own software in detail to guarantee functionality on the new product version. For example, please check that no excessive warning or error logging is done in the background which might compromise system performance or flash storage lifetime.

Toradex Linux BSP

- The removal of the components listed in the table should not impact the functionality of software. A limited number of error messages may potentially appear on the console and in related log files.
  - Linux console demo: Apalis-iMX6_Console-Image 3.0b4.254 20200421

    Linux LXDE: Apalis-iMX6_LXDE-Image 2.8b7. 20200610

    Monthly release: 5.2.0-devel-202102+build.7

    Linux multimedia image, Linux multimedia image with upstream, Linux minimal image, Linux minimal image with upstream

    the boot sequence didn't register for both modules any problem (crashes, delays, getting stuck)

    touchscreen controller errors:

    ```
    stmpe-i2c 0-0041: failed to read regs 0x0: -6
    ```

  - errors from Toradex Easy Installer : Apalis-iMX6_ToradexEasyInstaller_1.8-20181019

    ```
    [    0.140136] stmpe-i2c 2-0041: failed to read regs
    0x0: -5
    [    0.823571] snvs-secvio 20cc000.caam-snvs: can't get
    snvs clock
    [    1.295186] rtc-ds1307 1-0068: hctosys: unable to
    read the hardware clock
    ```

- Besides the additional errors/warning output, there is no impact on software apart from the fact, that the respective functionality of 4-wire touch and analogue inputs aren't available in software.
- Modifying the device tree to reflect the HW change will remove the error messages. A dedicated page with more information can be found here: https://developer.toradex.com/knowledge-base/software-adjustments-for-colibri-apalis-imx6-v11z-modules
- The boot sequence do not register any problem (crashes, delays, getting stuck)

Windows CE

- WinCE: No impact and no errors displayed. The WinCE BSP recognizes the absence of the ADC/Touch controller and unloads automatically.

5. Contact

- Please contact Toradex if you have any questions.
- For commercial and sales questions, please contact shop@toradex.com
- For technical questions, please contact support@toradex.com