

Product Change Notification (PCN): 0046 Apalis iMX8QXP 2GB WB IT V1.0A to 0046 Apalis iMX8QXP 2GB WB IT V1.1B

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Table of Contents

- 1. Affected Product Numbers
- 2. Product Phase in / Phase-out Schedule
- 3. Description of Changes
 - Change #1: Key components
 - Change #2: Fixed PCIe issue
 - Change #3: Gigabit Ethernet PHY changed
 - Change #4: Fixed ADC accuracy issue
 - Change #5: VBUS for Wi-Fi module was not connected to the SoC
- 4. Customer Impact
 - Hardware
 - Software
- 5. Contact

1. Affected Product Numbers

End of Life Product		Replacement Product	
Part Number	Product Name	Part Number	Product Name
00461000	Apalis iMX8QXP 2GB WB IT	00461101	Apalis iMX8QXP 2GB WB IT

2. Product Phase in / Phase-out Schedule

End of Life Product		Replacement Product	
Part Number	Estimated Schedule	Part Number	Estimated Schedule
00461000	Early Access product, no longer available for sale	00461101	Volume Candidates available in Q3, 2020

Customers are strongly encouraged to convert their designs to the replacement parts listed above. Toradex also advises customers to carefully validate the new product version before their production release, since the product is still in “Sample” product phase.

3. Description of Changes

Change #1: Key components

- SoC: Replaced PIMX8QX6AVLF1BB with MIMX8QX5CVLFZAC
- PMIC: Replaced PC33PF8100A0ES with MC34PF8100A0EP
- eMMC: Replaced MTFC8GAKAJCN-4M IT with MTFC16GAPALBH-IT

Change #2: Fixed PCIe issue

- 50-Ohm pull-down resistors added to fix PCIe internal clock issue from V1.0A

Change #3: Gigabit Ethernet PHY changed

- Gigabit Ethernet PHY has been changed from KSZ9031RNXIC to KSZ9131RNXI for compliance with IEEE 1000Base-T

Change #4: Fixed ADC accuracy issue

- ADC series resistor was changed from 10k to 1k, to improve the ADC accuracy

Change #5: VBUS for Wi-Fi module was not connected to the SoC

- VBUS Wi-Fi is now connected to SoC (GPIO4.IO00)

4. Customer Impact

Hardware

- The change from V1.0A to V1.1B of 0046 Apalis iMX8QXP 2GB WB IT doesn't have any effect on carrier boards and other related hardware
- eMMC capacity increased from 8GB to 16GB
- No HiFi 4 DSP feature
- SoC frequency changed from 1.0 GHz to 1.2 GHz
- Increased accuracy of ADC

Software

- 0046 Apalis iMX8QXP 2GB WB IT V1.0A will be supported with the OE-machine `apalis-imx8x-v11a` (optional) and RAMID has to be correct for V1.0B products from BSP 4.0 Zeus onwards (and including upcoming BSP 5.0 Dunfell). Stable BSP 3.0.4 supports it under the regular OE-machine `colibri-imx8x`. It was an Early Access product that may have limited support in future Toradex software releases.
- 0046 Apalis iMX8QXP 2GB WB IT V1.1B is a Volume Candidate product for which Toradex will provide extended software support.
- For the latest Linux BSP information, please refer to:
<https://developer.toradex.com/software/linux/linux-software/release-details>
- For the latest Toradex Easy Installer information, please refer to:
<https://developer.toradex.com/software/toradex-easy-installer/release-details>
- For the latest Torizon Core information, please refer to:
<https://developer.toradex.com/software/torizon/release-details>
- For more general Software information, please refer to:
<https://developer.toradex.com/software>

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