

# Product Change Notification (PCN): 0025 Apalis T30 2GB V1.1B, 0026 Apalis T30 V1.1B and 0031 Apalis T30 1GB IT V1.1B to versions V1.1Z

Date of publication: 25 Apr 2023

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## 1. Affected Products

End of Life Product		Additional Substitution Version (with limited features to increase availability, group EOL still apply)	
Part Number	Product Name	Part Number	Product Name
00251101	Apalis T30 2GB V1.1B	00251125	Apalis T30 2GB V1.1Z
00261101	Apalis T30 1GB V1.1B	00261125	Apalis T30 1GB V1.1Z
00311101	Apalis T30 1GB IT V1.1B	00311125	Apalis T30 1GB IT V1.1Z

## 2. Product Phase-out Schedule

End of Life Product		Additional Substitution Version (with limited features to increase availability, group EOL still apply)	
Part Number	Estimated Schedule	Part Number	Estimated Schedule
00251101	Last time buy (LTB)/Last time ship (LTS) can not be assured due to overwhelming LTB for EOL of product group and complex supply situation. In order to keep validation effort for our customers to a minimum, we are introducing a new version with one single functional change.	00251125	Sample: April, 2023
00261101		00261125	Volume: May 2023
00311101		00311125	LTB (Last Time Buy): 2023-06-15 non-cancellable and non-returnable, subject to availability of key components LTS (Last Time Ship): 2025-01-15

Customers not requiring the parallel camera input are strongly encouraged to use this additional substitute 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

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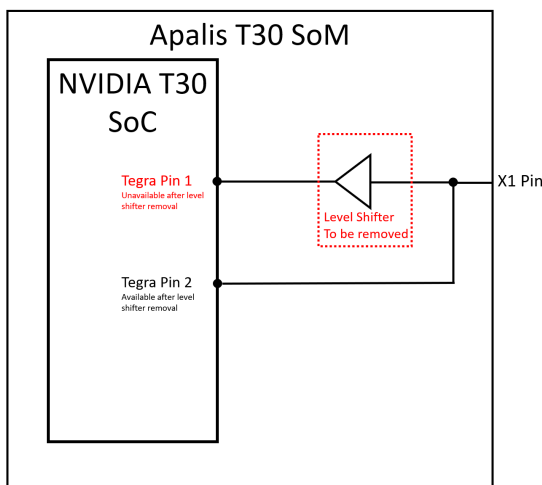
#### **Change #1: Removal of Level Shifter**

- Removed TI 74AVCA164245ZQLR and related components due to component EOL and shortage

## 4. Customer Impact

### Hardware

- Parallel camera interface won't be available in V1.1Z
- No changes are required on the Apalis carrier board
- SoM Pins affected by this change are : 99, 123, 135, 159, 173, 175, 177, 179, 181, 183, 185, 187, 191, 195, 197 (Figure 5 and Table 5-54 in [Apalis T30 datasheet](#))
- All the affected SoM pins multiplexed. They are connected to 2 pins on the SoC-side (see Table 4-1 - Apalis T30 Multiplexed Pins in [Apalis T30 datasheet](#))



**Affected Pins on SODIMM Connector X1**

X1 Pin#	Tegra Pin 1	Tegra pin 2
99	VI_D11	KB_COL5
123	VI_D10	KB_COL6
135	VI_D0	KB_ROW8
159	VI_D1	KB_ROW9
173	VI_D9	KB_ROW7
175	VI_D8	KB_ROW6
177	VI_D7	KB_ROW5
179	VI_D6	KB_ROW4
181	VI_D5	KB_ROW3
183	VI_D4	KB_ROW2
185	VI_D3	KB_ROW1
187	VI_D2	KB_ROW0
191	VI_PCKL	KB_COL2
195	VI_VSYNC	KB_COL3
197	VI_HSYNC	KB_COL4

## 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.

Without the level shifter being assembled, the following Tegra pins are floating:

Tegra Pin	X1 Pin#
VI_D0	135
VI_D1	159
VI_D2	187
VI_D3	185
VI_D4	183
VI_D5	181
VI_D6	179
VI_D7	177
VI_D8	175
VI_D9	173
VI_D10	123
VI_D11	99
VI_HSYNC	197
VI_PCLK	191
VI_VSYNC	195

### Toradex Linux BSP

- The removal of the TI 74AVCA164245ZQLR does not impact the functionality of software, i.e. no errors are displayed
- Coming out of Reset, some of these pins will have the internal pull-up/down enabled (for more details see Section 4.4 - List Functions in [Apalis T30 datasheet](#))
- After boot, If not handled properly, the affected Tegra pins listed above will be left floating as a direct consequence of removing the TI 74AVCA164245ZQLR level shifter. Thus, Toradex strongly recommends enabling the pull-down resistor on these Tegra pins (see related [developer website guide](#))

### Windows CE

- The removal of the TI 74AVCA164245ZQLR do not impact the functionality of software, i.e. no errors are displayed. All the pins are left on pull-down unless the camera interface is effectively used

## 5. Contact

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- Please contact Toradex if you have any questions.
- For commercial and sales questions, please contact [shop@toradex.com](mailto:shop@toradex.com)
- For technical questions, please contact [support@toradex.com](mailto:support@toradex.com)