Product Change Notification PCN.2010.09.14.1

Transition from
Colibri XScale® PXA270 V1.2d (312/520MHz) to Colibri XScale® PXA270 V2.2b (312/520MHz)
Colibri XScale® PXA270M V2.1a (312/520MHz) to Colibri XScale® PXA270 V2.2b (312/520MHz)

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1. Toradex Product Numbers Affected

Production Module EOL		Replacement	
Part Number	Product Name	Part Number	Product Name
00011203	Colibri XScale PXA270 312MHz V1.2d	00082201	Colibri XScale PXA270 312MHz V2.2b
00021203	Colibri XScale PXA270 520MHz V1.2d	00092201	Colibri XScale PXA270 520MHz V2.2b

Sample Module EOL		Replacement	
Part Number	Product Name	Part Number	Product Name
00082100	Colibri XScale PXA270M 312MHz V2.1a	00082201	Colibri XScale PXA270 312MHz V2.2b
00092100	Colibri XScale PXA270M 520MHz V2.1a	00092201	Colibri XScale PXA270 520MHz V2.2b

2. Product Phase in / Phase out Schedule

Production Module EOL		Replacement	
Part Number	Estimated Schedule	Part Number	Estimated Schedule
00011203 / 00021203	**LTB (Last Time Buy):** November 30, 2010 non-cancellable and non-returnable **LTS (Last Time Ship):** March 31, 2011	00082201 / 00092201	**Volume Production:** October 2010

Sample Module EOL		Replacement	
Part Number	Estimated Schedule	Part Number	Estimated Schedule
00082100 / 00092100	**LTB/LTS:** No longer available	00082201 / 00092201	**Volume Production:** October 2010

Customers are strongly encouraged to convert their designs to the replacement parts listed above. Toradex also advises customers to carefully validate the new Colibri Modules before their production release.

3. Description of Changes

From 00011203 to 00082201 (version 1.2d to 2.2b):

From 00021203 to 00092201 (version 1.2d to 2.2b):

- The Numonyx StrataFlash P33 (PC28F128P33B85) is assembled instead of Intel StrataFlash J3.
- Audio and touch controller: Wolfson WM9715L is replacing NXP UCB1400 (which is EOL).
- SODIMM pin 95 can now be used as RDY signal from the PXA (open drain with 4.7k Pullup on the module). On previous product versions this signal was driven push-pull.

From 00082100 to 00082201 (version 2.1a to 2.2b):

From 00092100 to 00092201 (version 2.1a to 2.2b):

- The die-shrinked Marvell PXA270M processor which was used in the sample modules 00082100 and 00092100 will no longer be used. Instead, we will continue to support the existing Marvell PXA270 processor with the new modules 00082201 and 00092201. This is due to an extension of the life of processor by Marvell and migration issues to the new die-shrinked PXA270M processor identified during sampling.

4. Customer Impact

4.1. Hardware Design

- When deploying the new audio codec the signal characteristics for the following SODIMM pins change: 1, 2, 3, 4, 5, 6, 7, 8, 13, 14, 15, 16, 17, 18, 20.
  The general functionality of these pins remains the same, but for example the input range of one of the analog inputs is changed.
  The new device can also be used to interface with a 5-wire touch screen.
  For more details please refer to the Wolfson WM9715L datasheet:
  www.wolfsonmicro.com/uploads/documents/en/WM9715L.pdf

4.2. Software

- In order to support the new PXA270 Colibri module, customers using Windows CE need to upgrade their Toradex BSP to the newest version which provides support for the new Flash and codec devices.
- The Wolfson codec has a different register set than the NXP chip. If your SW is controlling any of the NXP registers directly you have to change this code to support the Wolfson register set.
- Users of Linux and any other operating systems need to include the respective drivers in order to support the new devices.

5. Definitions

LTB: Last Time Buy

LTS: Last Time Ship

EOL: End Of Life