

Product Change Notice - PCN-DIMM-MX53x-3_v01en

Rev	Date/Signature	Changes
1	23.03.2012/Mt	First Revision

1 Product affected

Product affected	No.	Rev.	Replacement	Rev.
DIMM-MX535-2-512/256	11140	R2B	DIMM-MX535-3-512/256	R3A
DIMM-MX535-2-256/256	11131	R2B	DIMM-MX535-3-256/256	R3A
DIMM-MX537-2-512/256	11134	R2B	DIMM-MX537-3-512/256	R3A
DIMM-MX537-2-256/256	11129	R2B	DIMM-MX537-3-256/256	R3A
DIMM-MX537-2-512/1G	11132	R2B	DIMM-MX537-3-512/1G	R3A

2 Change 1 – UART1 RTS/CTS

2.1 Key Characteristics of the Change

UART1 RTS and CTS signal switched at the i.MX53x.

2.2 Description of Change to the Customer

The UART1 signals RTS and CTS are switched at the i.MX53x processor. The RTS and CTS signals are now available at the SODIMM connector. The can be used as described.

2.3 Costumer Impact of Change and Recommended Action

UART1 RTS and CTS signals can be used with board revision R3A.

3 Change 2 – Added POWER_ON_BASE signal

3.1 Key Characteristics of the Change

Added the signal POWER_ON_BASE on the SODIMM connector pin 135 and removed the signal 3V3 at that pin.

3.2 Description of Change to the Customer

With that signal the periphery power on the baseboard can be switched on with that signal, if the baseboard supports that feature. More details are described in the Application Note Baseboard Design v003 on the emtrion support homepage.

<http://www.support.emtrion.de/doku.php?id=hw:dimmconcept>

3.3 Customer Impact of Change and Recommended Action

If the baseboard supports that feature the periphery power supply is only switched on if the signal POWER_ON_BASE is high.

If the baseboard doesn't support that feature, it has no influence.

4 Change 3 – RAM technology changed from DDR2 SDRAM to DDR3 SDRAM

4.1 Key Characteristics of the Change

The RAM technology is changed from DDR2 SDRAM to DDR3 SDRAM.

4.2 Description of Change to the Customer

The RAM technology is changed from DDR2 SDRAM to DDR3 SDRAM, to support memory space up to 1GB.

4.3 Customer Impact of Change and Recommended Action

No influence.

5 Change 4 – Added low power mode at VDDGP

5.1 Key Characteristics of the Change

If the i.MX53x core frequency is $\leq 400\text{MHz}$ the VDDGP core voltage can be reduced to save power.

5.2 Description of Change to the Customer

If the i.MX53x core frequency is $\leq 400\text{MHz}$ the VDDGP core voltage can be reduced with the signal LOW_VDDGP_EN. If that signal is set high the core voltage VDDGP is reduced. The signal LOW_VDDGP can be set via the GPIO4-1.

5.3 Customer Impact of Change and Recommended Action

The test point TP22 is not available any more.