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Product Change Notification Form

PCN#: LMI-PCN-0800023	PCN Revision: A	Issue Date: 13-May-2008
Type of Change: Level 3		Effective Date: N/A

Reason(s) for Change:

These changes are necessary for compatibility with future device revisions.

Detailed Description of Changes:

Luminary Micro recommends that customer designs do not supply VDD25 inputs from an external voltage regulator. Instead, use only the LDO output as the source of VDD25 input. Future releases of product documentation will not include the option of providing VDD25 power from external sources.

Stellaris® devices incorporating an Ethernet controller should have a 12.4-kΩ resistor connected between pin 41 (for LQFP devices) or ball K3 (for BGA devices), and GND for compatibility with future device revisions.

In future revisions, pin 41 and ball K3 will be renamed from GNDPHY to ERBIAS.

Customers should include this resistor in all new designs. Existing designs should be modified to include this change during the next board design cycle.

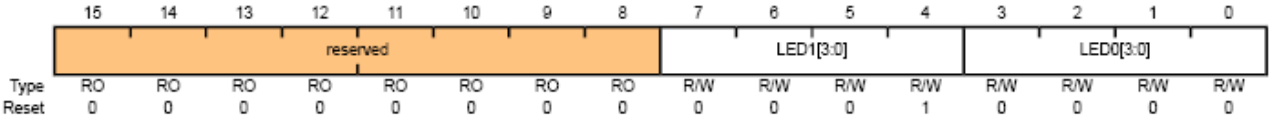
The 12.4-kΩ resistor should have a 1% tolerance and should be located in close proximity to pin 41 or ball K3. Power dissipation in the resistor is low, so a chip resistor of any geometry may be used.

Three of the nine Ethernet LED configuration options will not be supported in future revisions of Ethernet-enabled Stellaris® controllers and should not be used. The three options are TX Activity (0x2), RX Activity (0x3), and Collision (0x4). Future releases of the product documentation will list these options as reserved.

Register 27: Ethernet PHY Management Register 23 – LED Configuration (MR23), address 0x17

Ethernet PHY Management Register 23 – LED Configuration (MR23)

Base 0x4004.8000
Address 0x17
Type R/W, reset 0x0010



Bit/Field	Name	Type	Reset	Description
15:8	reserved	RO	0x0	Software should not rely on the value of a reserved bit. To provide compatibility with future products, the value of a reserved bit should be preserved across a read-modify-write operation.
7:4	LED1[3:0]	R/W	1	LED1 Source The LED1 field selects the source that toggles the LED1 signal. Value Description 0x0 Link OK 0x1 RX or TX Activity (Default LED1) 0x2 *Reserved* 0x3 *Reserved* 0x4 *Reserved* 0x5 100BASE-TX mode 0x6 10BASE-T mode 0x7 Full-Duplex 0x8 Link OK & Blink=RX or TX Activity

3:0	LED0[3:0]	R/W	0	LED0 Source The LED0 field selects the source that toggles the LED0 signal. Value Description 0x0 Link OK (Default LED0) 0x1 RX or TX Activity 0x2 *Reserved* 0x3 *Reserved* 0x4 *Reserved* 0x5 100BASE-TX mode 0x6 10BASE-T mode 0x7 Full-Duplex 0x8 Link OK & Blink=RX or TX Activity

Products Affected:

Part Number	Description
LM3S6965-IQC50	Microcontroller
LM3S6965-EQC50	Microcontroller
LM3S6965-IBZ50	Microcontroller

Forecasted Key Milestones: Not Applicable

Milestone	Date
N/A	N/A

Recommended Action:

Implement these changes during the next board design cycle to facilitate future design compatibility.

Reference Documents/Attachments: N/A

Should you have any issues with the timeline or content of this change, please contact the representative listed below within 90 days. No response will be deemed as customer's acceptance of the change and the change will be applicable as shown in the effective date set forth in this PCN.

For questions, concerns, or comments please direct all correspondence to: customer.service@luminarymicro.com

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