

PCN# 20160215000

Correct Sleep Mode Memory Corruption

Date: Feb 15, 2016
To: Purchasing Agents

Dear Customer,

This is an initial announcement of a change to a product that is currently offered by Critical Link. The details of this change are on the following pages.

For questions regarding this notice, contact the Production Manager, Bill Halpin (bill.halpin@criticallink.com).

Sincerely,

Critical Link, LLC
Phone: (315) 425-4045
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PCN Number: 20160215000
PCN Date: Feb 15, 2016
Title: Correct Sleep Mode Memory Corruption
Contact: Bill Halpin
Phone: (315) 425-4045
Ship Date: On or after July 1, 2016

Overview

One change to the MitySOM-335x modules is identified in the following section.

Change 1 – Correct Sleep Mode Memory Corruption

Description of Change

Removed DDR_RESETn pullup resistor (R31).

During normal operation the reset signal is controlled by the processor. However, when in sleep mode, the processor does not control the signal. The design was putting the signal in an invalid state, causing memory corruption. Removing the resistor allowed the signal to go to an inactive state.

Remove DDR_CKE pullup resistor (R10).

During normal operation the DDR_CKE signal is controlled by the processor. However, when in sleep mode, the processor does not control the signal and the DDR needs be in self refresh mode – achieved by removing pullup on DDR_CKE signal.

Reason for Change

Memory was being corrupted when entering sleep mode. TI reviewed design and made recommendations.

Anticipated Impact on Form, Fit, Function (positive / negative)

Sleep mode now functional. No change to form or fit.

Anticipated Impact on Quality or Reliability (positive / negative)

Positive. Entering and exiting Sleep mode is reliable with this product change. No other impact to Quality or Reliability is anticipated.

Note: To optimize sleep mode power consumption, see our wiki website listed below for suggested baseboard modification.

<https://support.criticallink.com/redmine/projects/armc8-platforms/wiki>

Products Affected:

Details regarding the full printed circuit assembly (PCA) revision history can be located in the MitySOM-335X Revision History section on the Critical Link support site (see link below).

https://support.criticallink.com/redmine/projects/armc8-platforms/wiki/Module_Product_Change_Notifications

Table 1 Products Affected

Model Number	Current PCA	Replacement PCA
3352-IX-X3A-RC	80-000660RC-2	80-000660RC-3
3352-HX-X27-RC	80-000597RC-2	80-000597RC-3
3352-HX-X27-RI	80-000597RI-2	80-000597RI-3
3352-HX-X38-RC	80-000596RC-2	80-000596RC-3
3352-HX-XX7-RC	80-000601RC-2	80-000601RC-3
3352-HX-XX7-RI	80-000601RI-2	80-000601RI-3
3354-HX-X38-RC	80-000599RC-2	80-000599RC-3
3354-HX-X38-RI	80-000599RI-2	80-000599RI-3
3354-HX-XX8-RC	n/a	80-000906RC-3
3354-IX-X38-RC	80-000659RC-2	80-000659RC-3
3354-IX-X38-RI	80-000659RI-2	80-000659RI-3
3354-IX-X3A-RC	80-000638RC-2	80-000638RC-3
3354-IX-X3A-RI	80-000638RI-2	80-000638RI-3
3358-IX-X38-RI	n/a	80-000907RI-3