PCN# 20110711000

Improved CPU Reset on

L138-1808-1810 Family of System On Modules

Date: July 11,2011
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 PCN Manager, Larry Bossert (larry.bossert@criticallink.com).

Sincerely,

PCN Team,
Critical Link, LLC
Phone: (315) 425-4045
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PCN Number: 20110711000
PCN Date: July 11, 2011
Title: Modification of Reset Circuitry
Contact: Larry Bossert
Phone: (315) 425-4045
Ship Date: 7/01/2011

Description of Change

The Critical Link L138-1808-1810 family of System on Modules (SOMs) CPU reset, previously connected to the RESPWRON pin of the onboard power management integrated circuit (PMIC) (the TPS65023), has been connected to the INT output line of the same PMIC. In addition, the RESET_IN# edge connector signal (Pin 11), previously routed directly to the HOT_RESET input of the PMIC, has been connected to a watchdog reset monitoring circuit (TPS3808G33) which then drives the HOT_RESET input of the PMIC. The RESPWRON output of the PMIC is no longer used.

Reason of Change

The MityDSP-L138/MityARM-1808/MityARM-1810 SOMs are expected to reset cleanly when exposed to a power up condition. It was noted on some FPGA-less modules, that powering the unit while providing an RTC battery backup voltage resulted in failure to initialize the CPU properly. This change corrects this behavior.

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

No change to form, fit, or function.

Anticipated Impact on Quality or Reliability (positive / negative)

The expected reliability of the power on reset circuitry of FPGA-less variants of the MityDSP-L138/MityARM-1808/MityARM-1810 modules should improve, particularly when provided with an external RTC battery source.

Products Affected:

Module Model Number
L138-CG-225-RC
L138-CX-225-RC
L138-CI-225-RC