

PCN# 20120811000

Correct Bootstrap Pull-up Reference Voltage
and
0-10V ADC Inputs on

MityARM-335x Development Kits

Date: August 11, 2012
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
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PCN Number: 20120811000
PCN Date: December 3, 2012
Title: Correct Bootstrap Pull-up Reference Voltage, ADC OpAmps
Contact: Bill Halpin
Phone: (315) 425-4045
Ship Date: 01/01/2013

Overview

2 changes to the MityARM-335X development kit printed circuit board are presented below.

Correct Bootstrap Pull-up Reference Voltage

Description of Change

The pull up rail for pull-up resistors R111, R113, R115, R117, R119, R121, R123, R125, R127, R129, R131, and R133 was change from +3.3V to VIO_3V3.

Reason for Change

Per the specification for the processor, the voltage rails for the inputs for the BOOT mode strapping pins should be sequenced with and/or connected to the same voltage domain as the I/Os that are latching the state of the pins. In the this design, that is the VIO_3V3 voltage rail.

Work Arounds

After powering the board, pushing the manual reset button should cause the proper boot media configuration to be latched.

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

No impact on form, fit, or function with respect to the baseline specification is anticipated.

Anticipated Impact on Quality or Reliability (positive / negative)

With this change, the boot strap register will more reliable latch the proper/desired boot media configuration, resulting in a consistent power-on behavior.

Correct 0-10V ADC Input Circuit

Description of Change

Operational amplifiers for U902, U903, U904, and U905 were changed from TLV2404IPW to OPA4171AIPWR.

Reason for Change

The original operational amplifiers do not provide sufficient output current drive (0.2 mA) to adequately drive the circuitry feeding the AM335X analog to digital converter (ADC) circuitry. The new operational amplifiers provide up to 25 mA of drive, sufficient for the design.

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

No impact on the specified board form, fit, or function is anticipated with this change.

Anticipated Impact on Quality or Reliability (positive / negative)

With this change, the 0-10 Volt input circuitry will function according to the baseline board specification.

Products Affected:

Details regarding the full printed circuit assembly (PCA) revision history can be located in the [MityARM-335x Development Kit Revision History](#) section on the Critical Link support site.

Current PCA	New PCA
80-000458RI-2A, 2B	80-000458RI-3A