

MityARM-335x Development Kit Board 80-000458

Revision History and Errata

1 Introduction

This document describes the production revision history for any known design issues or exceptions to the functional specifications for the MityARM-335x Development Kit Host I/O Board developed by Critical Link LLC.

Details regarding the development kit host board may be accessed at <http://www.mitydsp.com>, and additional support information may be located at <http://support.criticallink.com/redmine/projects/am335x-devkit/wiki>.

This document is subject to change without notification. However, the most recent version of this document will be made available at the website mentioned above. The website supports email notification (via the “watch option”) for changes to documents published.

2 Product Marking

The board serial number may be visually read from a label affixed to the board. The board Printed Circuit Assembly (PCA) number may also be visually read from a label affixed to the board. The Printed Circuit Board (PCB) part number and revision are etched in copper, also visible on the board.

The serial number is of the format “S/NXXXXXX”, where XXXXXX is the serial number. The PCA part number begins with “80-“. The PCB revision begins with a “90-“.

3 PCA Product History

The PCA product history for all MityARM-335X Development Kit boards is listed below. Details for Product Change Notifications (PCNs) may be downloaded from the link below.

http://support.criticallink.com/redmine/projects/am335x-devkit/wiki/Development_Kit_Revision_Information

Table 1 highlights the PCA product history for all MityARM-335x Development Kit Boards.

Table 1 Revision History

| PCA Number | Applicable Design Exceptions | PCNs |
|---------------------|---|-------------|
| 80-000458RC-2A | <ul style="list-style-type: none">• 0-10V ADC input circuits do not function• Intermittent startup failure• High USB inrush current failure• Intermittent Ethernet Transmit Packet Failure• HDMI DDC Data and Clock lines swapped | |
| 80-000458RC-3A | <ul style="list-style-type: none">• High USB inrush current failure• Intermittent Ethernet Transmit Packet Failure• HDMI DDC Data and Clock lines swapped | 20120811000 |
| 80-000458RC-5A3, 5B | | 20121203001 |

4 Known Design Exceptions and Usage Notes

This section outlines the design exceptions to the baseline specification for the MityARM-335X Development Kit Host Board.

4.1 0-10 V ADC input circuits not working

The 0-10V input conditioning circuitry for the AM335x ADC circuits does not function properly.

PCN 20120811000 addresses this issue.

4.2 Intermittent startup failure

Under certain configurations the boot mode configuration is not properly latched by the processor during a cold start.

PCN 20120811000 addresses this issue.

4.3 High USB inrush current failure

Not enough bulk capacitance is available on the VBUS USB 2.0 supplies when configured as a host or OTG device. Some peripherals requiring a large inrush current during insertion can fail to enumerate properly.

PCN 20121203001 addresses this issue.

4.4 Intermittent Ethernet Transmit Packet Loss

Certain data packets (e.g., a 1024 byte packet containing all 0x0F octets) transmitted by the AM335X processor can be corrupted as a result of low signal integrity margin on the data lines.

PCN 20121203001 addresses this issue.

4.5 HDMI DDC Data / Clock lines swapped

The J400 HDMI connector symbol incorrectly identifies the DDC Data and Clock lines. They are swapped.

PCN 20121203001 addresses this issue.

5 REVISION HISTORY

| Date | Version | Change Description |
|-------------|---------|--------------------|
| 26-DEC-2012 | 1.0 | Initial release |