

PCN# 20140506000

Replace Crystal with Oscillator, Correct VPP on
MitySOM-335X Family System on Modules

Date: May 06, 2014
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
Fax: (315) 425-4048

PCN Number: 20140506000
PCN Date: May 06, 2014
Title: Replace Crystal with Oscillator, Correct VPP
Contact: Bill Halpin
Phone: (315) 425-4045
Ship Date: 05/06/2014

Overview

Two changes to the MitySOM-335x modules are identified in the following sections.

Change 1 – Proactive Avoidance of Potential PLL Shift Problem

Description of Change

Replace crystal design with an oscillator. Figures 1 and 2 illustrate the drawing updates. See Table 1 for models/ part numbers affected.

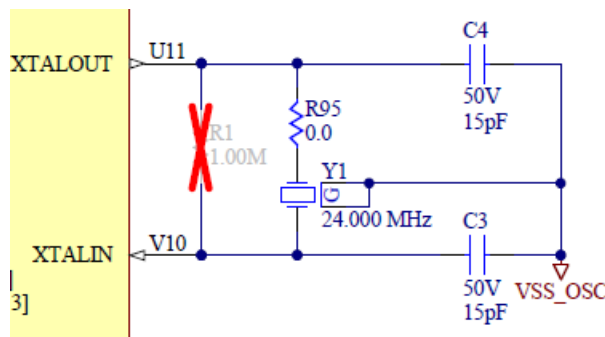


Figure 1 PCA 80-000596RC-1 Drawing Crystal Design

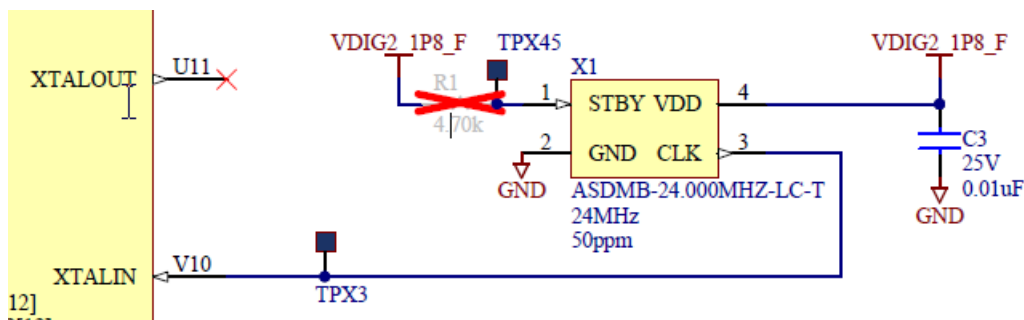


Figure 2 PCA 80-000596RC-2 Drawing Update for Oscillator Design

Reason for Change

TI website raised issues associated with the use of crystal clock design, and PLL shifts potentially caused by grounding technique. While Critical Link has not seen this problem since PCN 20121113000 was implemented to address another crystal issue, it was decided to be proactive and replace the crystal circuit with a more stable oscillator design.

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

None.

Anticipated Impact on Quality or Reliability (positive / negative)

Positive.

Change 2 – VPP Pull up

Description of Change

AM335x Processor VPP pin (M5) changed from 1.1V pull up to no-connect. See Figure 3 and Figure 4. See Table 1 for models/ part numbers affected.

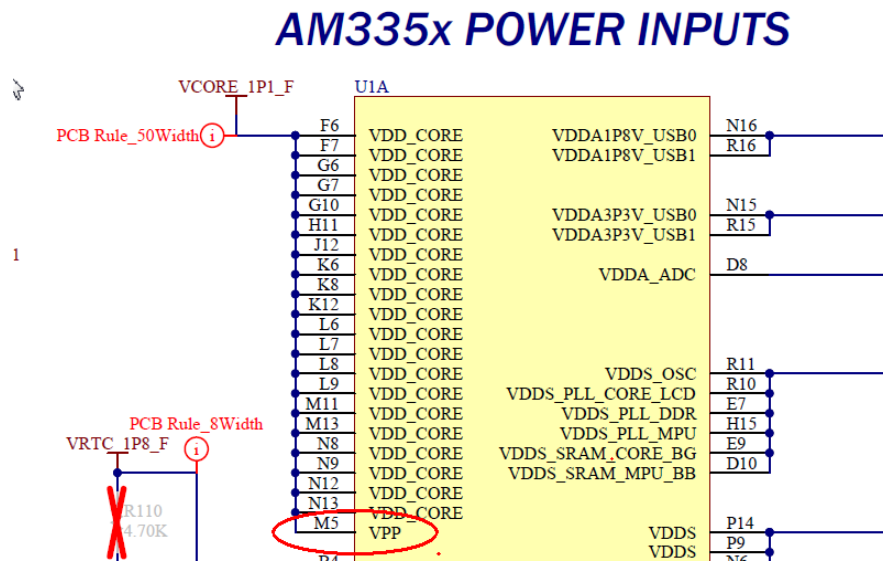


Figure 3 VPP Not Corrected

AM335x POWER INPUTS

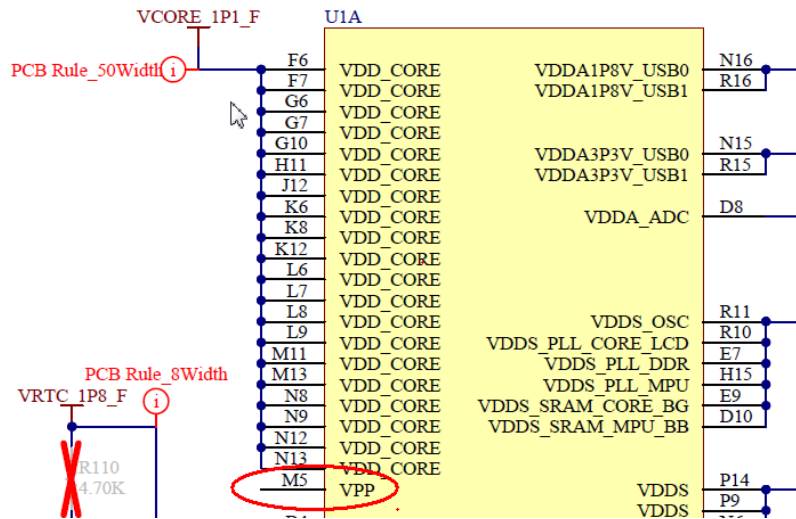


Figure 4 VPP Corrected

Reason for Change

Per TI datasheet, this should be no-connect for functional operation.

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

None.

Anticipated Impact on Quality or Reliability (positive / negative)

Positive.

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.

Table 1 Products Affected

Model Number	Current PCA	Replacement PCA
3352-HX-X38-RC	80-000596RC-1	80-000596RC-2
3354-HX-X38-RC	80-000599RC-1	80-000599RC-2
3354-HX-X38-RI	80-000599RI-1	80-000599RI-2
3352-HX-XX7-RC	80-000601RC-1	80-000601RC-2
3352-HX-XX7-RI	80-000601RI-1	80-000601RI-2