MitySOM-AM62 System On Module (SOM)

Revision History and Errata



1 Introduction

This document describes the revision history and any known design issues or exceptions to the form, fit or functional specifications for the MitySOM-AM62 family of System On Modules (SOMs) developed by Critical Link LLC.

Details regarding the modules may be accessed at <u>https://www.criticallink.com/product/mitysom-am62/</u>, and additional support information may be located at <u>https://support.criticallink.com/redmine/projects/mitysom_am62x/wiki</u>.

This document is subject to change without notification. However, the most recent version of this document will be made available at the website https://support.criticallink.com/redmine/projects/mitysom_am62x/wiki/Errata_and_ Module Product Change Notifications. The website supports email notification (via the "watch option") for changes to documents published.

2 Product Marking

The module model number and serial number may be visually read from a label affixed to the backside of the module. The same label also includes a Data Matrix code that includes the Printed Circuit Assembly (PCA) number, serial number, and model number. The Printed Circuit Board (PCB) revision is etched in copper, also visible on the side of the module.

The model number begins with "6254", "6252", "6251", "6234", "6232", or "6231".

The serial number is of the format "S/NXXXXXX", where XXXXXX is the serial number.

The PCB revision begins with a "90-".

The PCA part number begins with "80-" and is stored in the Data Matrix code. The PCA number can also be determined by the serial number, if necessary. Please contact Critical Link for details.

3 PCA Product History

The PCA product history for all MitySOM-AM62 modules is listed below. Details for Product Change Notifications (PCNs) may be downloaded from the link below.

https://support.criticallink.com/redmine/projects/mitysom_am62x/wiki/Errata_and Module_Product_Change_Notifications

Table 1 highlights the PCA product history for all MitySOM-AM62 modules.



Table 1 Revision History

Model Number ¹	PCA Number ¹	Applicable Design Exceptions	PCNs
6254-TX-DAD-RI	80-001614RI-1 RevA	4.1 Potential Latch up on Power Off / Shutdown	
6254-TX-XXD-RI	80-001633RI-1 RevA	4.2 VD_SEL (MMC1 IO voltage select) not driven on SOM	
		4.3 PMIC GPIO not drive on SOM	
		4.4 PMIC silicon is designated pre-production	
6254-TX-DAD-RI	80-001614RI-2 RevA	No known exceptions.	20230205000
6231-IX-XXA-RI	80-001631RI-2 RevA		
6252-TX-XXD-RI	80-001632RI-2 RevA		
6254-TX-XXD-RI	80-001633RI-2 RevA		

Notes:

1- Red indicates obsolete models.



4 Known Design Exceptions and Usage Notes

This section outlines the design exceptions to the baseline module specification for the MitySOM-AM62 family of SOMs.

4.1 Potential Latch up on Power Off / Shutdown

If the on-board power management integrated circuit (PMIC) is commanded to power down, it is possible for the +3.3V rail not to shut down when used with the MitySOM-AM62 Development Kit reference design. There are no known workarounds for this issue.

PCN 20230205000 addresses this issue.

4.2 VD_SEL (MMC1 IO voltage select) not driven on SOM

The external SD-card IO voltage selection pin, used for the processor MMC1 data voltage levels, requires an external pullup resistor to +3.3V on the carrier card when using an external SD-Card as boot media on the MMC1 processor bus.

PCN 20230205000 addresses this issue.

4.3 PMIC GPO1 not driven on SOM

The PMIC General Purpose Output 1 (GPO1) signal is an open drain signal and requires a pullup resistor to +3.3V on the carrier card to operate properly.

PCN 20230205000 addresses this issue.

4.4 Preproduction PMIC silicon populated

The PMIC silicon loaded on module variants identified with this issue is designated preproduction by Texas Instruments (TI) and is intended for early adoption / integration activity. TI has not identified any known issues/errata related to the preproduction versions of the device.

5 REVISION HISTORY

Date	Version	Change Description
05-FEB-2023	1.0	Initial release for Production -2 configuration.

