



DM3730/AM3703 Torpedo SOM

Product Change Notification

Hardware Documentation

Logic PD // Products
Published: July 2012
Last revised: November 2015

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Revision History

REV	EDITOR	DESCRIPTION	APPROVAL	DATE
A	SO	-Initial release for PCN 545: Software Changes	EN, JMC	07/11/12
B	SO	-Section 1.2: Updated example of sticker on SOM; -Released PCN 567: Hardware Changes	NJK, JMC, KJH	04/03/13
C	JMC	-Section 1.3: Updated current standard models -Released PCN 603: Hardware Changes	JMC, BSB	12/2/14
D	JMC	-Section 1.3 : Updated current standard models -Released PCN 606: Production Facility Change	JMC,BSB	4/10/15
E	JMC	-Section 1.3 : Updated current standard models -Released PCN 614: Hardware Changes	JMC, BSB	11/6/15

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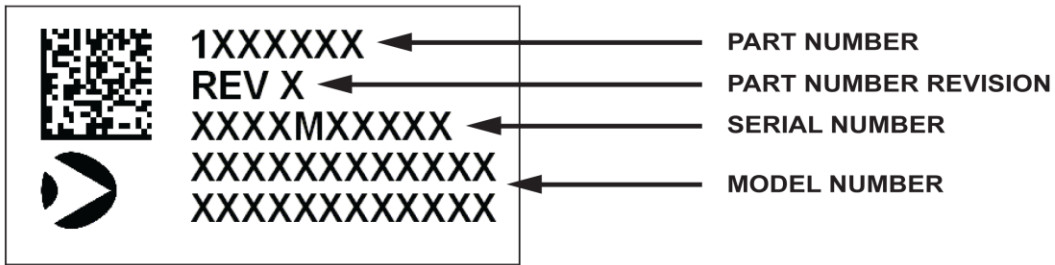
1 DM3730/AM3703 Torpedo SOM PCN Introduction

1.1 Purpose of Document

The purpose of this document is to provide a single repository for explaining design changes to a specific product family. The changes described in this document relate to the DM3730/AM3703 Torpedo SOM product family.

1.2 Determining What Build You Have

To determine whether your DM3730/AM3703 Torpedo SOM is affected by a PCN, locate the sticker on your System on Module (SOM) and compare the model number with the “Affected Models” table for each PCN. In some instances, a PCN may call out the “unique serial number” or “part number” to better identify the affected SOM. The figure below shows the location of each number on the sticker.



NOTE: Logic PD’s [WP 293 Model Number Explanation and Decoder](#)¹ goes into detail about these numbers and their relationship to one another.

1.3 Current Standard Model in Production

The table below lists the most current revisions of standard DM3730/AM3703 Torpedo SOMs. It also specifies the PCN that details the changes prompting the model revision.

Model Number & Rev	PCN Detailing Revision
SOMAM3703-20-1780AGCR-D	PCN 603: Hardware Changes
SOMDM3730-20-1780AGIR-D	PCN 603: Hardware Changes
SOMDM3730-20-2780AGCR-D	PCN 603: Hardware Changes
SOMDM3730-20-1880AGIR-B	PCN 614: Hardware Changes
SOMDM3730-20-2880AGXR-B	PCN 614: Hardware Changes

¹ <http://support.logicpd.com/downloads/601/>

1.4 Early Development Modules

SOMs that are manufactured before the model is released to full production status are sometimes sent to partners and targeted customers for evaluation. This section attempts to capture a history of these pre-production builds for reference. Any products listed in the table below are not meant for production use and may not be actively supported by Logic PD.

Development Phase	Model Number & Rev (Part Number)
Beta	SOMDM3730-20-2780AGCR-1 (1017155)

2 PCN 545: Software Changes

Published: July 2012

PCN Classification:

- A - Recall
 B - Customer Action Required
 C - Product Upgrade
 D - Change of Production Line

2.1 Products Affected

This PCN describes software changes that were made to the DM3730/AM3703 Torpedo SOM. The “New Model Number & Rev” listed below indicate the first SOMs that will be manufactured with the changes described herein.

Affected Model Number & Rev (Part Number)	New Model Number & Rev (Part Number)
SOMAM3703-20-1780AGCR-A (1017195)	SOMAM3703-20-1780AGCR-B (1022100)
SOMDM3730-20-1780AGIR-A (1017193)	SOMDM3730-20-1780AGIR-B (1022101)
SOMDM3730-20-2780AGCR-A (1017878)	SOMDM3730-20-2780AGCR-B (1022102)

2.2 Description of Change

2.2.1 LogicLoader Change

The LogicLoader software included on the DM3730/AM3703 Torpedo SOM has been upgraded to version 2.5.2. This new version of LogicLoader includes the updates noted below.

- Reduces boot time.
- Fixes issue in which writes to the *lboot* partition following a soft reset corrupt the module and prevent a successful boot.
- Fixes LogicLoader’s failure to boot below -30°C when the power is cycled for less than thirty seconds.

LogicLoader version 2.5.2 is backwards compatible with previous versions of the DM3730/AM3703 Torpedo SOM.

2.3 Contact

For additional information, please post a question to the Logic PD [Technical Discussion Group \(TDG\) forum](#).²

² <http://support.logicpd.com/TDGForum.aspx>

3 PCN 567: Hardware Changes

Published: April 2013

PCN Classification:

- A - Recall
 B - Customer Action Required
 C - Product Upgrade
 D - Change of Production Line

3.1 Products Affected

This PCN describes hardware changes that were made to the DM3730/AM3703 Torpedo SOM. The “New Model Number & Rev” listed below indicate the first SOMs that will be manufactured with the changes described herein.

Affected Model Number & Rev (Part Number)	New Model Number & Rev (Part Number)
SOMAM3703-20-1780AGCR-B (1022100)	SOMAM3703-20-1780AGCR-C (1023726)
SOMDM3730-20-1780AGIR-B (1022101)	SOMDM3730-20-1780AGIR-C (1023732)
SOMDM3730-20-2780AGCR-B (1022102)	SOMDM3730-20-2780AGCR-C (1023742)

3.2 Description of Change

3.2.1 NAND Flash (PoP Memory) Change

Micron issued an End of Life (EOL) notice for the Package-on-Package (PoP) memory component MT29C4G48MAZAPAKQ-5IT on the DM3730/AM3703 Torpedo SOM. A new PoP memory component, MT29C4G48MAZBAAKQ-5IT, is a die shrink update of the previous component and will be used as a replacement.

Logic PD re-qualified the DM3730/AM3703 Torpedo SOM with the new component and found no software modifications are necessary. Bus timings for the new memory component are also identical to the previous version.

NOTE: Logic PD recommends purchasing sample units and testing them with your software and manufacturing flow to verify compatibility with your application.

3.3 Contact

For additional information, please post a question to the Logic PD [Technical Discussion Group \(TDG\) forum](#).³

³ <http://support.logicpd.com/TDGForum.aspx>

4 PCN 603: Hardware Changes

Published: December 2014

PCN Classification:

- A - Recall**
 B - Customer Action Required
 C - Product Upgrade
 D - Change of Production Line

4.1 Products Affected

This PCN describes hardware changes made to the DM3730/AM3703 Torpedo SOM. The “New Model Number & Rev” listed below indicate the first SOMs that will be manufactured with the changes described herein.

Affected Model Number & Rev (Part Number)	New Model Number & Rev (Part Number)
SOMAM3703-20-1780AGCR-C (1023726)	SOMAM3703-20-1780AGCR-D (1026735)
SOMDM3730-20-1780AGIR-C (1023732)	SOMDM3730-20-1780AGIR-D (1026736)
SOMDM3730-20-2780AGCR-C (1023742)	SOMDM3730-20-2780AGCR-D (1026737)

4.2 Description of Change

4.2.1 NAND/DDR (PoP Memory) Change

Micron issued an End of Life (EOL) notice for the Package-on-Package (PoP) memory component with manufacturer part number MT29C4G48MAZBAKQ-5 IT on the DM3730/AM3703 Torpedo SOM. A new Micron PoP memory component with manufacturer part number MT29C4G48MAZBBAKB-48 IT is a die shrink update of the previous component and will be used as a replacement.

Logic PD re-qualified the DM3730/AM3703 Torpedo SOM with the new component and found no software modifications are necessary. Bus timings for the new memory component are compatible with the previous version.

NOTE: Logic PD recommends purchasing sample units and testing them with your software and manufacturing flow to verify compatibility with your application.

4.3 Contact

For additional information, please post a question to the Logic PD [Technical Discussion Group \(TDG\) forum](#).⁴

⁴ <http://support.logicpd.com/TDGForum.aspx>

5 PCN 606: Production Facility Change

Published: April 2015

PCN Classification:

- A - Recall**
- B - Customer Action Required**
- C - Product Upgrade**
- D - Change of Production Line**

5.1 Products Affected

This PCN describes a production facility change that affects the DM3730/AM3703 Torpedo SOM. The list below indicates the SOM model numbers that will be affected by this change.

Affected Model Numbers
SOMAM3703-20-1780AGCR
SOMDM3730-20-1780AGIR
SOMDM3730-20-1880AGIR
SOMDM3730-20-2780AGCR
SOMDM3730-20-2880AGXR

5.2 Description of Change

5.2.1 Production Facility Change

The DM3730/AM3703 Torpedo SOM is being qualified for production at Logic PD's Eden Prairie, Minnesota, production facility. This qualification will result in the move of all future production orders from the current subcontractor facility in Taiwan, to the Logic PD production facility in Eden Prairie, Minnesota. This change will have no impact on the form, fit or function of these SOMs.

Qualification of the Eden Prairie facility is expected to be complete within the second calendar quarter of 2015. First shipment of DM3730/AM3703 Torpedo SOMs from the Eden Prairie facility is expected to begin in the third calendar quarter of 2015.

The originating production facility of each SOM can be determined by examining the serial number on the label applied to the SOM. For SOMs that originated from the Taiwan subcontractor facility, the alphabetic character in the middle of the serial number will be "A" (e.g. xxxx**A**xxxx). For SOMs that originated from the Eden Prairie facility, the alphabetic character in the middle of the serial number will be "M" (e.g. xxxx**M**xxxx).

5.3 Contact

For additional information, please post a question to the Logic PD [Technical Discussion Group \(TDG\) forum](#).⁵

⁵ <http://support.logicpd.com/TDGForum.aspx>

6 PCN 614: Hardware Changes

Published: November 2015

PCN Classification:

- A - Recall
 B - Customer Action Required
 C - Product Upgrade
 D - Change of Production Line

6.1 Products Affected

This PCN describes hardware changes that were made to the DM3730/AM3703 Torpedo SOM. The “New Model Number & Rev” listed below indicate the first SOMs that will be manufactured with the changes described herein.

Affected Model Number & Rev (Part Number)	New Model Number & Rev (Part Number)
SOMDM3730-20-1880AGIR-A (1023692)	SOMDM3730-20-1880AGIR -B (1027805)
SOMDM3730-20-2880AGXR-A (1025826)	SOMDM3730-20-2880AGXR-B (1027806)

6.2 Description of Change

6.2.1 NAND Flash (PoP Memory) Change

Micron issued an End of Life (EOL) notice for the Package-on-Package (PoP) memory component MT29C4G96MAZBACJG-5 IT on the DM3730/AM3703 Torpedo SOM. A new PoP memory component, MT29C4G96MAZBBCJV-48 IT, is a die shrink update of the previous component and will be used as a replacement.

Logic PD re-qualified the DM3730/AM3703 Torpedo SOM with the new component and found no software modifications are necessary. Bus timings for the new memory component are also identical to the previous version.

NOTE: Logic PD recommends purchasing sample units and testing them with your software and manufacturing flow to verify compatibility with your application.

6.3 Contact

For additional information, please post a question to the Logic PD [Technical Discussion Group \(TDG\) forum](#).⁶

⁶ <http://support.logicpd.com/TDGForum.aspx>