Zoom™ DM3730 SOM-LV Development Kit
Product Change Notification
Hardware Documentation

Logic PD // Products
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Revision History

REV	EDITOR	DESCRIPTION	APPROVAL	DATE
A	SO	-Initial release for PCN 577: Changes for SDK-DM3730-10-256512R-B	KH, NJK, BSB	12/06/13
B	SO	-Removed confidentiality language in copyright boilerplate	SO	02/17/14

Table of Contents

1   Introduction

1.1   Document Purpose

The purpose of this document is to provide a single repository for explaining changes to the Zoom DM3730 SOM-LV Development Kit. These changes may include, but are not limited to, adding or removing items from the kit contents, detailing changes to any expansion boards included in the kit, and specifying the DM3730 SOM-LV model revision included in the kit.

1.1.1   Relationship with Errata Document

This PCN document works in conjunction with the *Zoom DM3730 SOM-LV Development Kit Errata*[1] to describe all known issues and changes to the DM3730 SOM-LV Development Kit. Whereas the errata document provides information about known issues that have not yet been resolved through new hardware, the PCN only describes changes that have occurred to the product between model revisions.

1.2   Identifying Your Kit

To identify your kit, locate the sticker on the bottom panel of the development kit box. This sticker will show the model number of your development kit.

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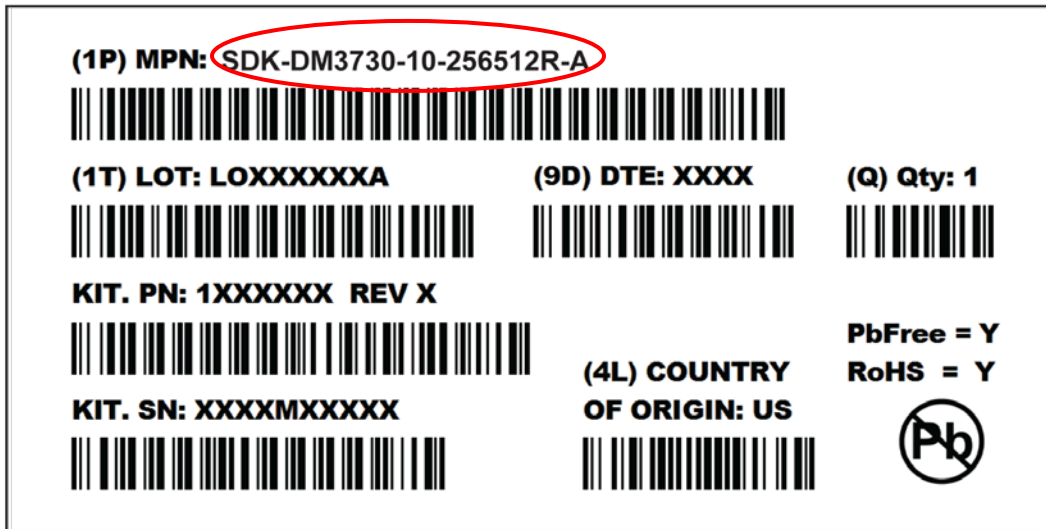
[1] http://support.logicpd.com/DesktopModules/Bring2mind/DMX/Download.aspx?portalid=0&EntryId=2831

2   Initial Production Kit: SDK-DM3730-10-256512R-A

The initial version of the Zoom DM3730 SOM-LV Development Kit was released with the following model number:

SDK-DM3730-10-256512R-A

2.1   Kit Contents

2.1.1   Included PCB Assemblies

The SDK-DM3730-10-256512R-A revision of the Zoom DM3730 SOM-LV Development Kit contains the hardware components listed in the following table. The assembly part number or model number helps to indentify the specific boards; these numbers are indicated by stickers attached to each PCB.

Item	Assembly PN or Model Number
DM3730 SOM-LV SOM	SOMDM3730-10-2782IFCR-B
Baseboard	1018103
High-density Breakout Board	1005705
Embedded Trace Macrocell (ETM) Adapter Board	1012415
4.3″ WQVGA LCD	1018108

2.1.2   Software Contents

The SDK-DM3730-10-256512R-A revision of the Zoom DM3730 SOM-LV Development Kit also contains the following software items:

Item	Assembly PN or Version
180-day Evaluation DVD for Windows Embedded CE 6.0	1010095
Android Demo and Development Kit SD Card	1017734
Linux Demo and SDK SD Card	1017732
Windows CE Demo and SDK SD Card	1017733

2.2   Changes from Previous Revision

This was the initial build of the Zoom DM3730 SOM-LV Development Kit, therefore no changes were made.

3 PCN 577: Changes for SDK-DM3730-10-256512R-B

This PCN describes changes made to the Zoom DM3730 SOM-LV Development Kit built with the following model number:

SDK-DM3730-10-256512R-B

3.1 Kit Contents

3.1.1 Included PCB Assemblies

The SDK-DM3730-10-256512R-B revision of the Zoom DM3730 SOM-LV Development Kit contains the hardware components listed in the following table. The assembly part number or model number helps to identify the specific boards; these numbers are indicated by stickers attached to each PCB.

Item	Assembly PN or Model Number
DM3730 SOM-LV	SOMDM3730-10-2782IFCR-D
Baseboard	1018103
High-density Breakout Board	1005705
Embedded Trace Macrocell (ETM) Adapter Board	1012415
4.3″ WQVGA LCD	1023328

3.1.2 Software Contents

The SDK-DM3730-10-256512R-B revision of the Zoom DM3730 SOM-LV Development Kit also contains the following software items:

Item	Assembly PN or Version
180-day Evaluation DVD for Windows Embedded CE 6.	1010095
Android Demo and Development Kit SD Card (Android Ice Cream Sandwich 4.0.4 BSP v1.0)	1023976
Linux Demo and SDK SD Card (Linux BSP v2.4-2)	1023978
Windows CE Demo and SDK SD Card (Windows CE BSP v3.0.2)	1023977

3.2 Changes from Previous Revision

3.2.1 DM3730 SOM-LV

The DM3730 SOM-LV included with the development kit was updated to the most recent model number revision. Please see PCN 573 in the *DM3730/AM3703 SOM-LV Product Change Notification*[2] for a detailed list of changes.

3.2.2 4.3" WQVGA LCD

A new Sharp 4.3" WQVGA LCD (manufacturer part number LQ043T1DG28) is included with this revision of the DM3730 SOM-LV Development Kit.

Although the new LCD is a near drop-in replacement, all software must be modified to change the configuration registers of the display controllers, the startup sequence of the LCD, and the

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[2] http://support.logicpd.com/DesktopModules/Bring2mind/DMX/Download.aspx?portalid=0&EntryId=597

polarity of the input signal to the LCD in order to accommodate the new display. The specific changes made to each of the Logic PD software offerings are noted below.

■ LogicLoader v 2.5.3 was modified to include an updated display driver that generates accurate signals and timing.

■ The DM37x Windows Embedded CE 6.0 BSP v3.0.2 driver was updated to support the operation of the new LCD, although it does not support LCD initialization. Windows CE should use the LogicLoader initialization of the LCD.

■ The DM37x Linux BSP v2.4-2 includes an updated display driver and startup procedure that correctly powers on the LCD.

■ The DM3730 Android Ice Cream Sandwich 4.0.4 BSP v1.0 was modified at the kernel level to change the driver and startup procedure; the new startup procedure chooses the new display as the default display.

The new LCD is backwards compatible with previous versions of the DM3730 SOM-LV Development Kit, provided those kits are running the latest software versions.

Please see Logic PD's *AN 585 LCD-4.3-WQVGA-10R to LCD-4.3-WQVGA-20R Display Kit Migration*[3] for additional information about the differences between the previous version of the LCD and the new LCD.

3.2.3   New USB Mini-A to A Cable

This revision of the DM3730 SOM-LV Development Kit includes a USB mini-A to A cable. The USB mini-A to A cable adapter enables users to easily connect USB devices to the USB On-the-Go (OTG) serial port on the DM3730 SOM-LV Development Kit.

No changes are necessary to accommodate this new cable.

3.2.4   SD Card Contents

This revision of the DM3730 SOM-LV Development Kit contains the updated Android, Linux, and Windows CE SD cards noted in Section 3.1.2. The SD cards contain pre-built binary images that demonstrate a typical software configuration. Previous versions of the Android, Linux, and Windows CE pre-built binary images are not compatible with this SDK-DM3730-10-256512R-B revision due to the software changes noted in Section 3.2.2 that are necessary to accommodate the new LCD.

NOTE: Customers are encouraged to check the Logic PD support site[4] for the most up-to-date software releases before beginning new product development.

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[3] http://support.logicpd.com/DesktopModules/Bring2mind/DMX/Download.aspx?portalid=0&EntryId=2777
[4] http://support.logicpd.com/Home.aspx