Zoom™ OMAP34x-II MDP to OMAP35x SOM-LV Design Guidelines

Application Note 403

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Abstract

This application note describes important design considerations when starting development with the Zoom OMAP34x-II Mobile Development Platform (MDP) and migrating to the OMAP35x SOM-LV for production.

Revision History

REV	EDITOR	DESCRIPTION	APPROVAL	DATE
1	KTL, ME	Internal release	JCA	03/29/09
A	JCA	Official release	JCA	06/08/09

Table of Contents

1 Introduction

This application note describes important design considerations when starting development with the Zoom OMAP34x-II Mobile Development Platform (MDP) and migrating to the OMAP35x SOM-LV for production.

2 Hardware Migration

The OMAP34x processor and OMAP34x-II MDP utilize technologies that may not be available from suppliers for customers that manufacture products less than 200,000 units per year.

2.1 Transferable Hardware Features

This table highlights features that are generally available through standard electronics distributors.

	OMAP35X custom product
CPU model number	OMAP3530
Power Management Chip	TPS65950
Micron 256MB/512MB POP RAM & NAND	Supported
SanDisk 16GB eMMC device	Supported
NEC 4.1" WVGA LCD	Supported
Parallel LCD interface	Supported
HDMI	Supported
Audio	Supported
Microphone inputs	Supported
Accelerometers	Supported
6-in-1 SD/MMC card slot	Supported
USB On-the-Go	Supported
Li-ion battery	Supported
QWERTY keypad with NAV	Supported
200 pin expansion connectors	Supported
10/100 Base-T Ethernet	Supported
Five USB Mini-AB ports	Supported
JTAG connectors	Supported
UART ports	Supported
I2C ports	Supported
SPI ports	Supported
Antennas	Supported
Vibration motor	Supported
GPIO	Supported

2.2 Non-Transferable Hardware Features

This table highlights features on the Zoom OMAP34x-II MDP that customers may not be able to directly reuse in lower quantity custom designs.

	OMAP34x-II MDP	OMAP35x custom product
CPU model number	OMAP3430	OMAP3530
CPU Synchronous Serial Interface	Supported	Not supported by TI
CPU Security features	Supported	Not supported by TI without NDA
Power Management Chip	TWL5030	TPS65950
Synaptics Capacitive Multi Touch screen	Supported	Not supported for non-cellular markets
Sony 8-megapixel camera sensor	Supported	Not sold to non-cellular markets
Texas Instruments WL1271 802.11 b/g, Bluetooth, FM Tx/Rx		Not supported by TI nor Murata. Logic can provide access to these solutions for end applications.*
Texas Instruments GPS	Supported	Not supported by TI. Logic can provide access to these solutions for end applications.*

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