

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.

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Revision History

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

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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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