PRODUCT BRIEF:

Logic PD :: Texas Instruments www.logicpd.com/ti

OMAP35x SOM-LV System on Module

:: SUPPORTED PROCESSORS:

OMAP3530 OMAP3503

The OMAP35x System on Module (SOM) is a compact, product-ready hardware and software solution that fast forwards embedded designs.

Based on the Texas Instruments (TI) OMAP 3 processor family and designed in the SOM-LV Type III form factor, the OMAP35x SOM-LV offers essential features for handheld and embedded networking applications. The OMAP35x SOM-LV features the superset OMAP3530 processor, but also supports the OMAP3503 processor.

The OMAP35x SOM-LV is an off-the-shelf solution that reduces development risks associated with the complex design and manufacturing details of the OMAP 3 processor. The standard SOM-LV form factor allows developers to reuse existing baseboard designs when upgrading to new OMAP processors, which extends roadmap possibilities for end-products.

The OMAP35x SOM-LV is ideal for applications in the medical, point-of-sale, industrial, and security markets.



OMAP35x SOM-LV

From patient monitoring and medical imaging, to card payment terminals and bar code readers, to CCTV cameras and intruder alarms, the OMAP35x SOM-LV allows for powerful versatility and long-life products.

By starting with the corresponding Zoom™ OMAP35x Development Kit, engineers can write application software on the same hardware that will be used in the final product.

OMAP35x SOM-LV :: HIGHLIGHTS:

- +Product-ready System on Module with a TI OMAP 35x processor running up to 600 MHz
- +Compact form factor—SOM-LV Type III (31.2 x 76.5 x 7.4 mm)
- +Long product lifecycle
- + Microsoft Windows® Embedded CE 6.0 Board Support Package (BSP)
- +Open source Linux™ BSP
- + Extended temp (-20°C to 70°C) Industrial temp (-40°C to 85°C) Commercial temp in kit (0°C to 70°C)
- +RoHS compliant

ZOOM OMAP35x DEVELOPMENT KIT :: FEATURES:

- +Application baseboard
- +OMAP35x SOM-LV
- +4.3" WQVGA LCD with 4-wire touchscreen
- +Necessary accessories to immediately get up and running
- +See the Zoom OMAP35x Development Kit Product Brief for more information



OMAP35x SOM-LV Block Diagram USB Host Controller Clock -HS Host (x3)-POP technology Connectors OTG PHY ←HS OTG -TPS65950 -Power -PMIC NAND Flash / -Audio I/O-Density Audio mDDR SDRAM OMAP 3 —UARTs (x3)-Processor ←LCD-High | NOR Flash -McBSPs-240-pin l ←GPMC BUS (x16)-802.11* & -Ethernet-Two Ethernet* -SPI--4-Wire Touch-

NOTE: Block diagram is for reference purposes only; it is not drawn to scale.

This outline represents the actual size of the OMAP35x SOM-LV. 76.5 mm

OMAP35x SOM-LV Ordering Information

Model Number ¹	mDDR (MB)	NAND Flash (MB)	NOR Flash (MB)	Wired Ethernet	802.11b/g Ethernet	Bluetooth	Temp. (°C)
SOMOMAP3503-11-1782GFIR ²	256	512	8	Υ	N	N	-40°–85°
SOMOMAP3530-11-1782IFXR	256	512	8	Υ	Υ	Υ	-20°–70°
SOMOMAP3530-11-1782JFIR	256	512	8	Υ	N	Υ	-40°–85°

NOTES: 1. Custom configurations are available by special order. Please contact Logic PD Sales for details.

2. Does not include touch controller.

Zoom™ OMAP35x Development Kit Ordering Information

Model Number	SOM-LV Configuration
TMDSMEVM3530-L	SOMOMAP3530-11-1672IFCR

NOTE: Zoom OMAP35x Development Kits are available through Logic PD and TI distributors.



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- + Logic PD Technical Support : www.logicpd.com/support
- + Logic PD Sales: www.logicpd.com/contact/inquiry

Product Features

Processor

+TI OMAP 3 processor running up to 600 MHz

Memory

+Mobile DDR / NAND flash (PoP technology) 128 MB / 256 MB (kit SOM) 256 MB / 512 MB (standard SOMs)

Displa

- +Programmable color LCD controller supports up to a 24 bpp TFT interface
- +Hardware supports XGA 1024x768 at 24-bit color

Touchscreen

+Integrated 4-wire touchscreen controller (TSC2004)

Network Support

- +10/100 Base-T Ethernet controller
- +802.11b/g wireless Ethernet
- +Bluetooth 2.0 + EDR

Audio

+I2S compliant audio codec (16-bit stereo DAC, 13-bit ADC)

PC Card Expansion

- +CompactFlash Type I card (memory-mode only)
- +MMC/SD card support

USB

- +One USB 2.0 high-speed host interface
- +One USB 2.0 high-speed On-the-Go interface

Serial Ports

+Three external UARTs

GPIO

+Programmable I/O depending on peripheral requirements

Software

- +LogicLoader™ (bootloader/monitor)
- +Windows® Embedded CE 6.0 BSP
- +Open source Linux™ BSP

Mechanical

- +SOM-LV Type III form factor
- +31.2 mm wide x 76.5 mm long x 7.4 mm high

RoHS Compliant

