#### PRODUCT BRIEF

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

# OMAP™ 3 SOM-LV System on Module

#### :: SUPPORTED PROCESSORS

OMAP3530

OMAP3525

OMAP3515

OMAP3503

OMAP3430

The OMAP 3 System on Module (SOM) is a compact, productready hardware and software solution that fast forwards embedded designs.

Based on Texas Instruments' OMAP 3 processor family and designed in the SOM-LV Type III form factor, the OMAP 3 module offers essential features for handheld and embedded networking applications. The OMAP 3 SOM-LV features the superset OMAP3530 processor, but also supports OMAP3525, OMAP3515, OMAP3503, and OMAP3430 processors.

The 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 their end-product.

By starting with the corresponding Zoom™ OMAP35x Development Kit or Zoom OMAP34x Mobile Development Kit, engineers can write application software on the same hardware that will be used in the final product.



OMAP 3 SOM-LV SYSTEM ON MODULE

The OMAP 3 SOM-LV is ideal for applications in the medical, point-of-sale, industrial, and security markets. From patient monitoring and medical imaging, to card payment terminals and bar code readers, to CCTV cameras and intruder alarms, the OMAP 3 SOM-LV allows for powerful versatility and long-life products.

#### OMAP 3 SOM-LV :: HIGHLIGHTS:

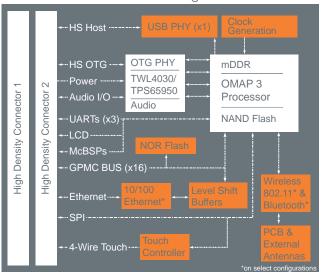
- +Product-ready System on Module with a TI OMAP 3 processor running up to 600 MHz (SOM hardware supports OMAP3530, OMAP3525, OMAP3515, OMAP3503, and OMAP3430 processors)
- +Compact form factor SOM-LV Type III  $(31 \times 76.2 \times 7.4 \text{ mm})$
- +Long product lifecycle
- +Microsoft Windows® Embedded CE 6.0 Board Support Packages (BSPs)
- +Open source Linux™ BSP
- +0°C to 70°C (commercial temp) or -40°C to 85°C (industrial temp)
- +RoHS compliant

#### **ZOOM DEVELOPMENT KIT:: FEATURES:**

- +Application baseboard
- +OMAP 3 SOM-LV
- + Necessary accessories to immediately get up and running
- +See Zoom OMAP35x Development Kit product brief for more information
- +See Zoom OMAP34x Mobile Development Kit product brief for more information



## OMAP™ 3 SOM-LV Block Diagram



(Block diagram is not drawn to scale. For reference purposes only.)

## OMAP 3 SOM-LV Ordering Information

Model Number			NAND Flash (MB)	NOR Flash (MB)			Bluetooth
SOMOMAP3503-10-1672IFCR	up to 600	128	256	8	Υ	Υ	Υ
SOMOMAP3503-10-1670HFCR	up to 600	128	256	0	Υ	N	N
SOMOMAP3530-10-1672IFCR	up to 600	128	256	8	Υ	Υ	Υ
SOMOMAP3530-10-1670EFCR	up to 600	128	256	0	N	N	N

## Zoom<sup>™</sup> OMAP35x Development Kit Ordering Information

Model Number	SOM-LV Configuration
TMDXMEVM3503-L	SOMOMAP3530-10-1672IFCR

NOTE: Zoom OMAP35x Development Kits are available through Logic and Texas Instruments distributors.

## Zoom<sup>™</sup> OMAP34x<sup>™</sup> Mobile Development Kit Ordering Information

Model Number	SOM-LV Configuration
LDP3430-VG1.0.0	SOMOMAP3430-10-1670JFCR

NOTE: Please see the Zoom OMAP34x Mobile Development Kit product brief for configuration information.





## embedded product solutions

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## Product Features

76.2 mm

31 mm

This outline represents

the actual size of the

OMAP 3 SOM-LV

Type III form factor.

## Processor

+TI OMAP 3 processor running up to 600 MHz (SOM hardware supports OMAP3530, OMAP3525, OMAP3515, OMAP3503, and OMAP3430 processors)

### **SDRAM Memory**

+Mobile DDR, 128 or 256 MB (128 MB standard)

#### Flash Memory

- +Scalable NOR flash (8 MB standard)
- +NAND flash, 256 or 512 MB (256 MB standard)

### Display

- +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
- +Integrated 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

#### OIGE

+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 mm wide x 76.2 mm long x 7.4 mm high

### **RoHS Compliant**