

PRODUCT BRIEF:

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

OMAP™ 3 SOM-LV System on Module

:: SUPPORTED PROCESSORS:

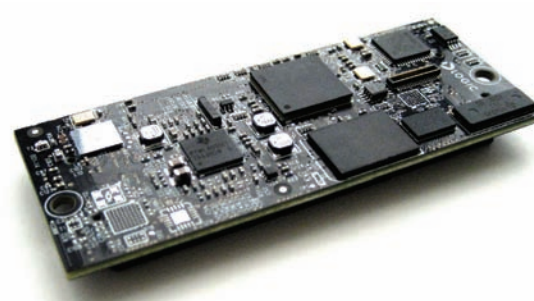
OMAP3530
OMAP3525
OMAP3515
OMAP3503
OMAP3430

The OMAP 3 System on Module (SOM) is a compact, product-ready 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:

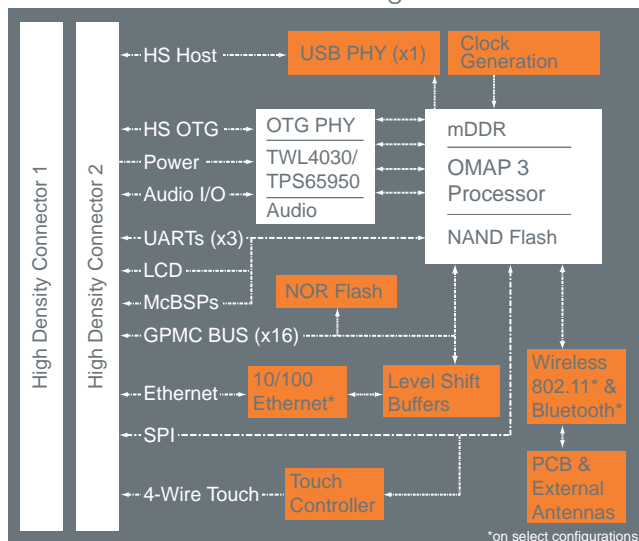
- +Product-ready System on Module with a TI OMAP 3 processor running up to 600 MHz (SOM hardware supports OMAP3530, OMAP3525, OMAP3515, OMAP3503, and OMAP3430 processors)
- +Compact form factor — SOM-LV Type III (31 x 76.2 x 7.4 mm)
- +Long product lifecycle
- +Microsoft Windows® Embedded CE 6.0 Board 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:

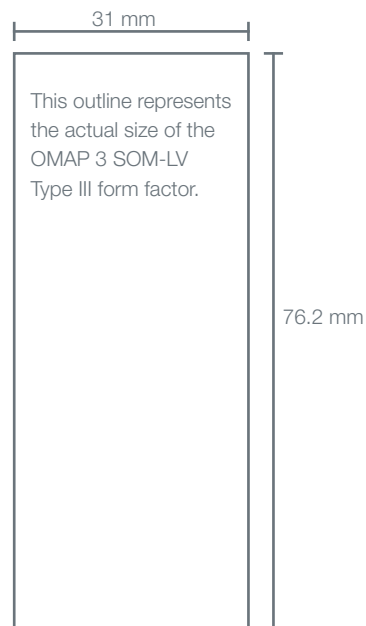
- +Application baseboard
- +OMAP 3 SOM-LV
- +Necessary accessories to immediately get up and running
- +See Zoom OMAP35x Development Kit product brief for more information
- +See Zoom OMAP34x Mobile Development Kit product brief for more information



OMAP™ 3 SOM-LV Block Diagram



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



Product Features

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

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 mm wide x 76.2 mm long x 7.4 mm high

RoHS Compliant

OMAP 3 SOM-LV Ordering Information

Model Number	Speed (MHz)	SDRAM (MB)	NAND Flash (MB)	NOR Flash (MB)	Wired Ethernet	802.11 Ethernet	Bluetooth
SOMOMAP3503-10-1672IFCR	up to 600	128	256	8	Y	Y	Y
SOMOMAP3503-10-1670HFCR	up to 600	128	256	0	Y	N	N
SOMOMAP3530-10-1672IFCR	up to 600	128	256	8	Y	Y	Y
SOMOMAP3530-10-1670EFCR	up to 600	128	256	0	N	N	N

Zoom™ 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™ OMAP34x™ 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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