OMAP™ 3 SOM-LV System on Module
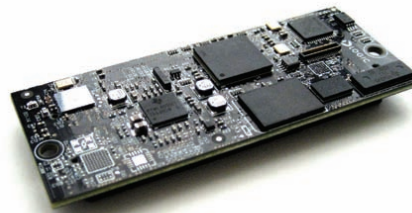
:: SUPPORTED PROCESSORS:
OMAP3530
OMAP3525
OMAP3515
OMAP3503
OMAP3430

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.
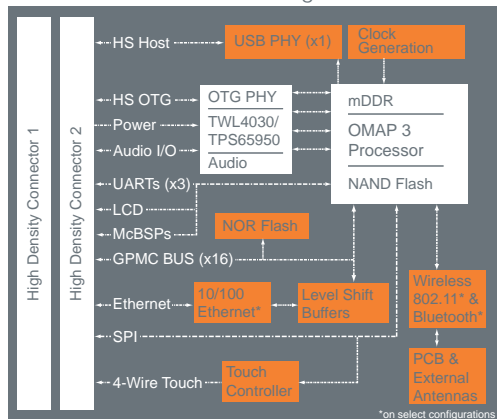
OMAP 3 SOM-LV :: HIGHLIGHTS:

+ 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℃ to 70℃ (commercial temp) or -40℃ to 85℃ (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

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OMAP™ 3 SOM-LV Block Diagram

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

31 mm

This outline represents the actual size of the OMAP 3 SOM-LV Type III form factor.

76.2 mm

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

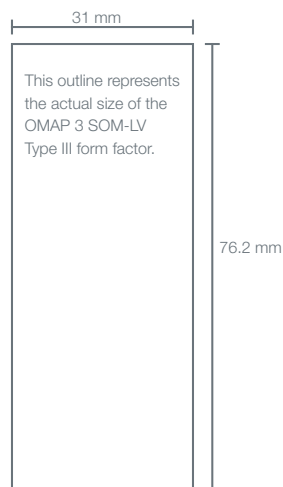NOTE: Please see the Zoom OMAP34x Mobile Development Kit product brief for configuration information.

LOGIC

embedded product solutions

TEXAS INSTRUMENTS
OMAP

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