

PRODUCT BRIEF:

Logic :: 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 Texas Instruments' OMAP™ 3 processor family and designed in the SOM-LV Type III form factor, the OMAP35x module 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 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, engineers can write application software on the same hardware that will be used in the final product.



OMAP35x SOM-LV

The OMAP35x 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 OMAP35x SOM-LV allows for powerful versatility and long-life products.

OMAP35x SOM-LV :: HIGHLIGHTS:

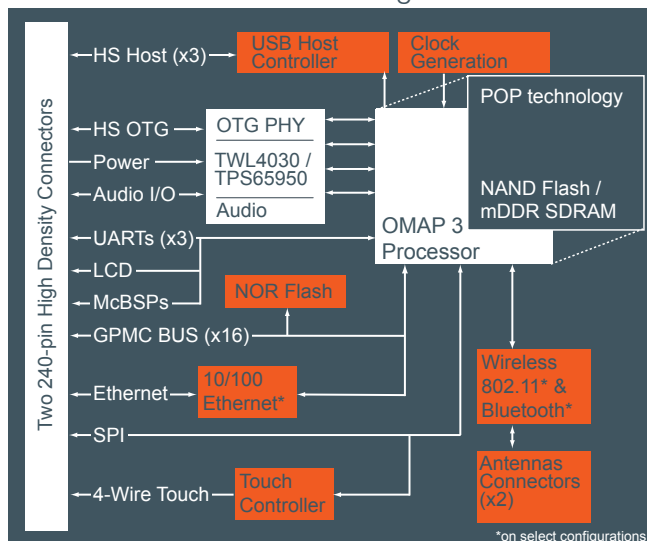
- +Product-ready System on Module with a TI OMAP 3 processor running up to 600 MHz
- +Compact form factor—SOM-LV Type III (31.2 x 76.5 x 7.4 mm)
- +Long product lifecycle
- +Microsoft Windows® Embedded CE 6.0 Board Support Packages (BSPs)
- +Open source Linux™ BSP
- +0°C to 70°C (commercial temp)
-20°C to 85°C (extended temp)
-40°C to 85°C (industrial temp)
- +RoHS compliant

ZOOM DEVELOPMENT KIT :: FEATURES:

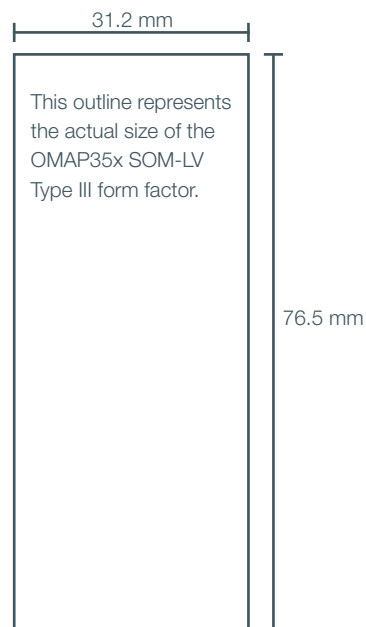
- +Application baseboard
- +OMAP35x SOM-LV
- +4.3" WQVGA LCD with 4-wire touchscreen
- +Necessary accessories to immediately get up and running
- +See Zoom OMAP35x Development Kit product brief for more information



OMAP35x 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

Memory

+Mobile DDR / NAND flash (PoP technology)
128 MB / 256 MB (standard)
+The following DDR / NAND memory densities are available for custom configurations
256 MB / 256 MB
256 MB / 512 MB
128 MB / 0 MB
256 MB / 0 MB
512 MB / 0 MB

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
+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

OMAP35x SOM-LV Ordering Information

| Model Number | mDDR (MB) | NAND Flash (MB) | NOR Flash (MB) | Wired Ethernet | 802.11b/g Ethernet | Bluetooth | Temp. (°C) |
|-------------------------|-----------|-----------------|----------------|----------------|--------------------|-----------|------------|
| SOMOMAP3503-10-1670HFCR | 128 | 256 | 0 | Y | N | N | 0°–70° |
| SOMOMAP3503-10-1672IFCR | 128 | 256 | 8 | Y | Y | Y | 0°–70° |
| SOMOMAP3530-10-1670EFCR | 128 | 256 | 0 | N | N | N | 0°–70° |
| SOMOMAP3530-10-1672IFCR | 128 | 256 | 8 | Y | Y | Y | 0°–70° |
| SOMOMAP3530-10-1672IFXR | 128 | 256 | 8 | Y | Y | Y | -20°–85° |
| SOMOMAP3530-10-1672JFIR | 128 | 256 | 8 | Y | N | Y | -40°–85° |

NOTE: Custom configurations are available by special order. Please contact Logic Sales for details: product.sales@logicpd.com.

Zoom™ OMAP35x Development Kit Ordering Information

| Model Number | SOM-LV Configuration |
|----------------|-------------------------|
| TMDSMEVM3530-L | SOMOMAP3530-10-1672IFCR |

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



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+For more information contact Logic Sales : product.sales@logicpd.com
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