OMAP35x SOM-LV

System on Module

Essential features for handheld and embedded networking applications with optional DSP functionality

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.



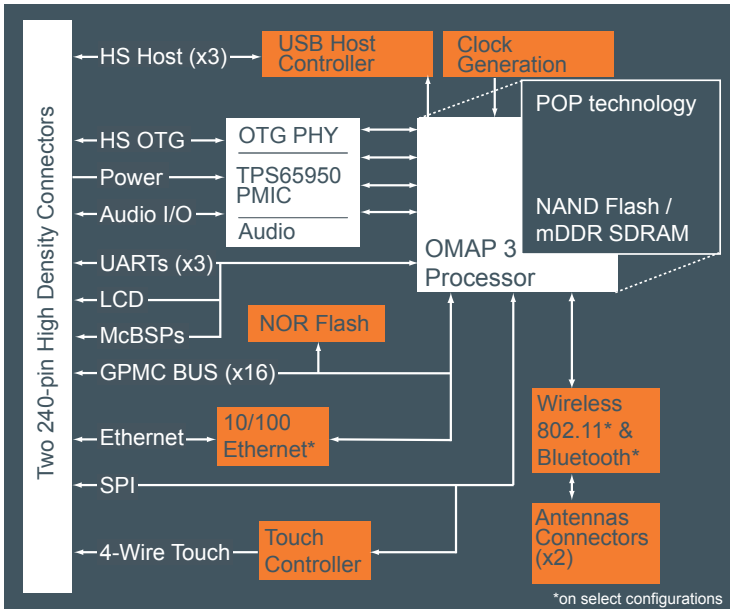
OMAP35x SOM-LV

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.

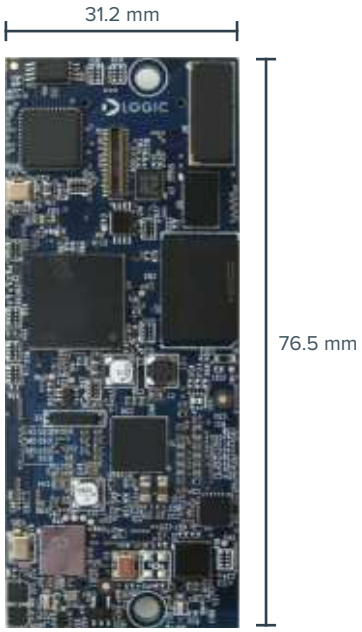
OMAP35x SOM-LV :: HIGHLIGHTS:

+ Product-ready System on Module with a TI OMAP 35x processor running up to 600 MHz
+ TMS320C64x DSP core running up to 430 MHz (OMAP3530 only)
+ Compact form factor—SOM-LV Type III (31.2 x 76.5 x 7.4 mm)
+ 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)
+ Long product lifecycle
+ RoHS compliant

OMAP35x SOM-LV Block Diagram



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



TOP VIEW :: ACTUAL SIZE

OMAP35x SOM-LV Ordering Information

Model Number[1]	mDDR (MB)	NAND Flash (MB)	NOR Flash (MB)	10/100 Ethernet	802.11b/g Ethernet	Bluetooth 2.0 + EDR	Temp. (°C)	DSP
SOMOMAP3503-12-1783GFIR[2]	256	512	16	Y	N	N	-40°–85°	N
SOMOMAP3530-12-1783IFXR	256	512	16	Y	Y	Y	-20°–70°	Y
SOMOMAP3530-12-1783JFIR	256	512	16	Y	N	Y	-40°–85°	Y

NOTES: 1. Custom configurations are available by special order. Please contact Logic PD Sales for details.
2. Does not include touch controller.

Product Features

Processor

+TI OMAP 3 processor with ARM® Cortex™-A8 core running up to 600 MHz

+TMS320C64x DSP core running up to 430 MHz (OMAP3530 only)

Memory

+Mobile DDR / NAND flash (PoP technology) 256 MB / 512 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

LOGIC PD®

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