

OMAP35x SOM-LV

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.

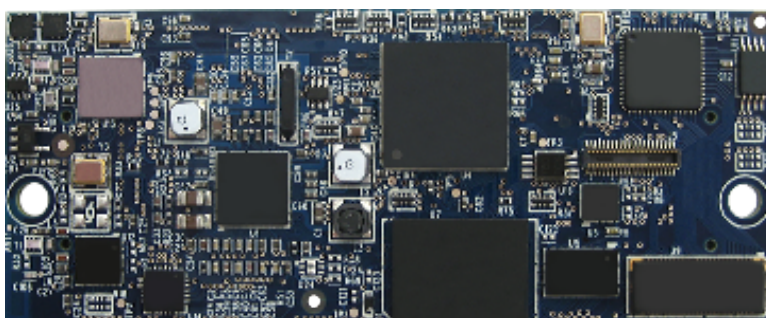
The OMAP35x SOM-LV is an off-the-shelf solution that reduces development risks associated with the complex design and manufacturing details of the OMAP 3 processor. The standard SOM-LV form factor allows developers to reuse existing baseboard designs when upgrading to new OMAP processors, which extends 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

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
- Long product lifecycle
- Industrial temp (–40°C to 85°C)
- Long product lifecycle
- RoHS compliant

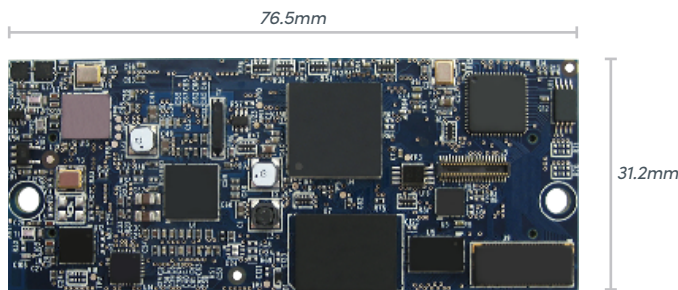
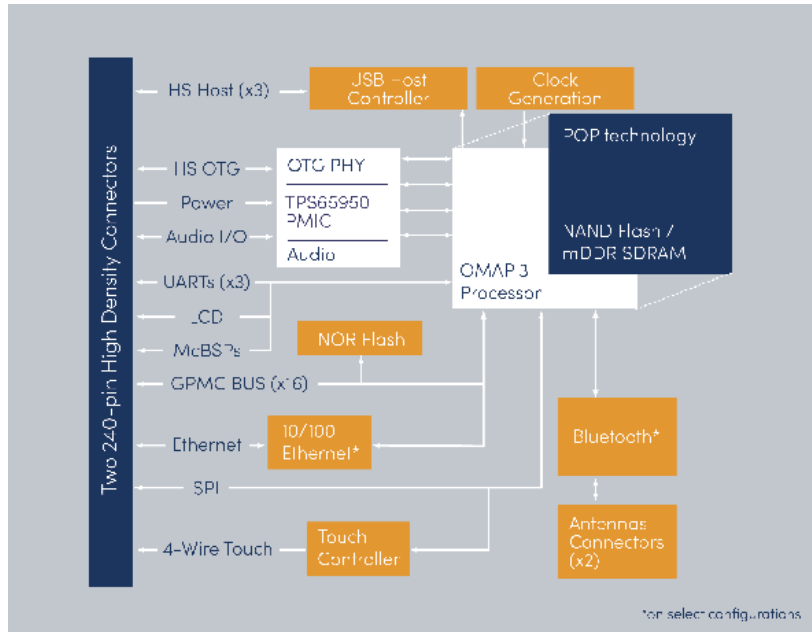


OMAP35x SOM-LV

**Enlarged to show detail*

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 Block Diagram



Top View ▶ Actual Size

OMAP35x SOM-LV Ordering Information

MODEL NUMBER	mDDR (MB)	NAND FLASH (MB)	NOR FLASH (MB)	10/10 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
SOMOMAP3530-12-1783JFIR	256	512	16	Y	N	Y	-40°-85°	Y

NOTES:

1. Custom configurations are available by special order. Please contact Beacon Embeddedworks 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
- 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