Beacon EmbeddedWorks - SOMOMAP3503-11-1672IFCR Datasheet

Welcome to E-XFL.COM

Understanding Embedded - Microcontroller, Microprocessor, FPGA Modules

Embedded - Microcontroller, Microprocessor, and FPGA Modules are fundamental components in modern electronic systems, offering a wide range of functionalities and capabilities. Microcontrollers are compact integrated circuits designed to execute specific control tasks within an embedded system. They typically include a processor, memory, and input/output peripherals on a single chip. Microprocessors, on the other hand, are more powerful processing units used in complex computing tasks, often requiring external memory and peripherals. FPGAs (Field Programmable Gate Arrays) are highly flexible devices that can be configured by the user to perform specific logic functions, making them invaluable in applications requiring customization and adaptability.

Applications of Embedded - Microcontroller,

Details	
Product Status	Obsolete
Module/Board Type	MPU Core
Core Processor	ARM® Cortex®-A8, OMAP3503
Co-Processor	-
Speed	600MHz
Flash Size	256MB (NAND), 8MB (NOR)
RAM Size	128MB
Connector Type	Board-to-Board (BTB) Socket - 240
Size / Dimension	1.23" x 3.01" (31.2mm x 76.5mm)
Operating Temperature	0°C ~ 70°C
Purchase URL	https://www.e-xfl.com/product-detail/logic-pd/somomap3503-11-1672ifcr

PRODUCT BRIEF:

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

OMAP35x SOM-LV System on Module

:: SUPPORTED PROCESSORS:

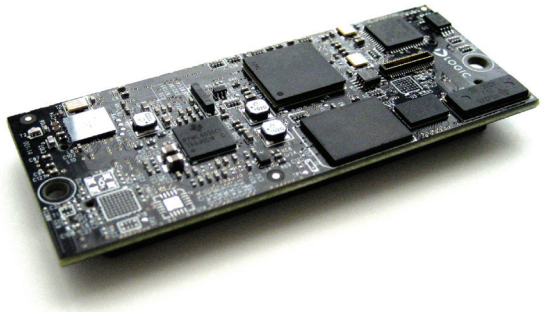
OMAP3530
OMAP3503

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:

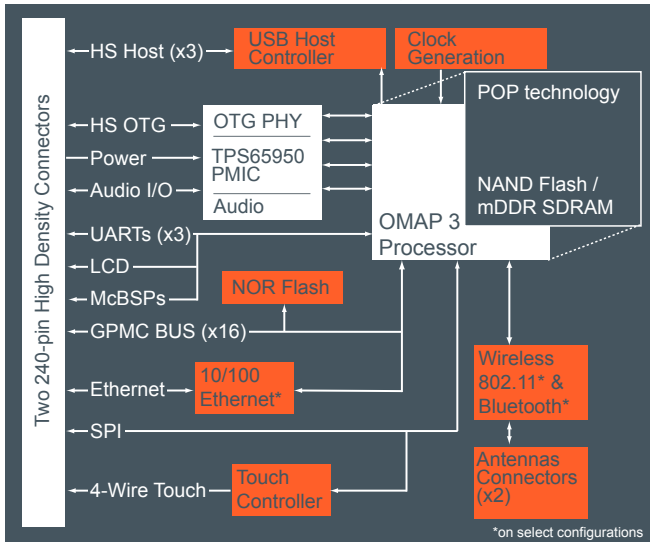
+ Product-ready System on Module with a TI OMAP 3 processor running up to 600 MHz
+ Compact form factor—SOM-LV Type III (31.2 x 76.5 x 7.4 mm)
+ Long product lifecycle
+ Microsoft Windows® Embedded CE 6.0 Board Support Packages (BSPs)
+ Open source Linux™ BSP
+ Commercial temp (0°C to 70°C)
  Extended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

ZOOM DEVELOPMENT KIT :: FEATURES:

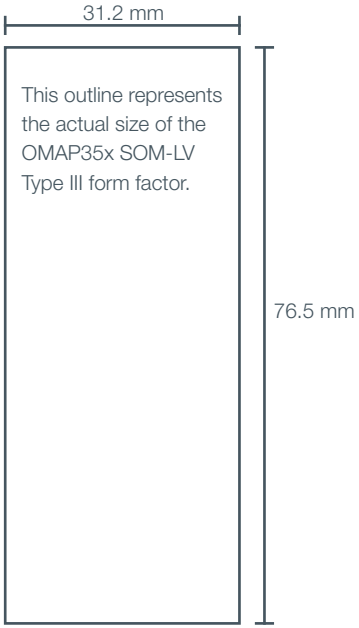
+ Application baseboard
+ OMAP35x SOM-LV
+ 4.3" WQVGA LCD with 4-wire touchscreen
+ Necessary accessories to immediately get up and running
+ See Zoom OMAP35x Development Kit product brief for more information

LOGIC PD™

OMAP35x SOM-LV Block Diagram



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



OMAP35x SOM-LV Ordering Information

Model Number	mDDR (MB)	NAND Flash (MB)	NOR Flash (MB)	Wired Ethernet	802.11b/g Ethernet	Bluetooth	Temp. (°C)
SOMOMAP3503-11-1670HFCR	128	256	0	Y	N	N	0°–70°
SOMOMAP3503-11-1672IFCR	128	256	8	Y	Y	Y	0°–70°
SOMOMAP3530-11-1670EFCR	128	256	0	N	N	N	0°–70°
SOMOMAP3530-11-1672IFCR	128	256	8	Y	Y	Y	0°–70°
SOMOMAP3530-11-1672IFXR	128	256	8	Y	Y	Y	-20°–70°
SOMOMAP3530-11-1782JFIR	256	512	8	Y	N	Y	-40°–85°

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

Zoom™ OMAP35x Development Kit Ordering Information

Model Number	SOM-LV Configuration
TMDSMEVM3530-L	SOMOMAP3530-11-1672IFCR

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

Product Features

Processor
+TI OMAP 3 processor running up to 600 MHz

Memory
+Mobile DDR / NAND flash (PoP technology)
128 MB / 256 MB (standard)
256 MB / 512 MB (standard for I-Temp)

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™
411 N. Washington Ave. Suite 400 Minneapolis, MN 55401
T : 612.672.9495 F : 612.672.9489 I : www.logicpd.com

TEXAS INSTRUMENTS OMAP

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