# **LOGIC** PD<sup>®</sup>

# DM3730 / AM3703 SOM-LV System on Module

Boasts speeds of up to 1GHz and contains both on-board Wi-Fi (802.11 b/g/n) and Bluetooth 2.1 + EDR technology wireless radios and a 10/100 Ethernet controller with optional DSP functionality

The Logic PD DM3730 SOM-LV presents a highperformance, full-featured System on Module (SOM) with all the necessary connectivity interfaces essential for today's market-changing products.

Based on Texas Instruments' DaVinci<sup>™</sup> DM3730 digital media processor, the DM3730 SOM-LV boasts PC-like speeds up to 1 GHz and contains on-board Wi-Fi (802.11b/g/n), Bluetooth 2.1 + EDR technology wireless radios, and a 10/100 Ethernet controller.

The DM3730 SOM-LV is available in several standard configurations, including TI's Sitara<sup>™</sup> AM3703 ARM microprocessor. By remaining footprint compatible with Logic PD's existing OMAP35x SOM-LV product line, the DM3730 SOM-LV extends the roadmaps of existing products and provides an upgrade path from today's products to future technologies.

By starting with the corresponding Zoom<sup>™</sup> DM3730 Development Kit, engineers can write application software on the same hardware that will be used in the final product.



DM3730 / AM3703 SOM-LV

The DM3730 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 DM3730 SOM-LV allows for powerful versatility and long-life products.

### DM3730 / AM3703 SOM-LV :: HIGHLIGHTS:

- + Product-ready System on Module with a TI DM3730 or AM3703 ARM® Cortex<sup>™</sup>-A8 processor running up to 1 GHz
- +802.11b/g/n and Bluetooth 2.1 + EDR radios
- +10/100 Ethernet controller
- + Android, Linux™, and Windows® Embedded CE Board Support Packages (BSPs)
- + Commercial temp (0°C to 70°C) Extended temp (-20°C to 70°C) Industrial temp (-40°C to 85°C)
- +Compact form factor—SOM-LV Type III (31.2 x 76.5 x 7.4 mm) +Long product lifecycle

## ZOOM DEVELOPMENT KIT :: FEATURES:

- +Application baseboard
- + DM3730 SOM-LV
- +4.3" WQVGA LCD with 4-wire touchscreen
- +Wattson™ power measurement application
- + Necessary accessories to immediately get up and running
- + See the Zoom DM3730 SOM-LV Development Kit Product Brief for more information

# DM3730 SOM-LV Block Diagram



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

# DM3730 / AM3703 SOM-LV Ordering Information

Model Number	Speed (MHz)	mDDR/ NAND Flash (MB)	NOR Flash (MB)	10/100 Ethernet	802.11b/g/n Ethernet	Bluetooth 2.1 + EDR	Temp. (°C)	DSP
SOMDM3730-11-2783IFCR	1000	256/512	16	Y	Y	Y	0°–70°	Y
SOMDM3730-11-1783IFXR	800	256/512	16	Y	Y	Y	-20°–70°	Y
SOMDM3730-11-1783JFIR	800	256/512	16	Y	N	Y	-40°–85°	Y

# Zoom<sup>™</sup> DM3730 SOM-LV Development Kit Ordering Information

Model Number	SOM-LV Configuration	
SDK-DM3730-10-256512R	SOMDM3730-10-2782IFCR	

# **LOGIC** PD<sup>•</sup>

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#### LOGIC PD WEBSITE :: DESIGN RESOURCES:

+Logic PD Products : <u>www.logicpd.com/products</u> +Logic PD Technical Support : <u>support.logicpd.com</u> +Logic PD Sales : <u>www.logicpd.com/contact/</u>

# **Product Features**

#### Processor

- + TI DaVinci™ DM3730 or Sitara™ AM3703 ARM® Cortex™-A8 core running up to 1 GHz
- + TMS320C64x DSP core running up to 800 MHz (DM3730 only)
- + POWER SGX<sup>™</sup> graphics accelerator (DM3730 only)

#### Memory

- + Mobile DDR / NAND flash (PoP technology) 256 MB / 512 MB
- +NOR flash 16 MB

#### Display

- + Programmable color LCD controller supports up to a 24 bpp TFT interface
- +Hardware supports XGA 1024 x 768 at 24-bit color

#### **User Interface**

- +Integrated 4-wire touchscreen controller
- +8 x 8 keypad signals

#### Network Support

- +10/100 Base-T Ethernet controller
- +802.11b/g/n wireless Ethernet
- +Bluetooth 2.1 + 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

- + Three USB 2.0 high-speed host interface
- + One USB 2.0 high-speed On-the-Go interface

#### Serial I/O

+ Three external UARTs

#### GPIO

- + Programmable I/O depending on peripheral requirements
- + General purpose memory controller (GPMC) interface

#### Debug

+ JTAG & ETM support

#### Software

- +LogicLoader<sup>™</sup> (bootloader/monitor)
- + Android, Linux<sup>™</sup>, Windows<sup>®</sup> Embedded CE BSPs

### Mechanical

+31.2 mm wide x 76.5 mm long x 7.4 mm high RoHS Compliant



31.2 mm

TOP VIEW :: ACTUAL SIZE