

## 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 high-performance, full-featured System on Module (SOM) with all the necessary connectivity interfaces essential for today's market-changing products.

Based on Texas Instruments' DaVinci™ 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™ 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™ 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.

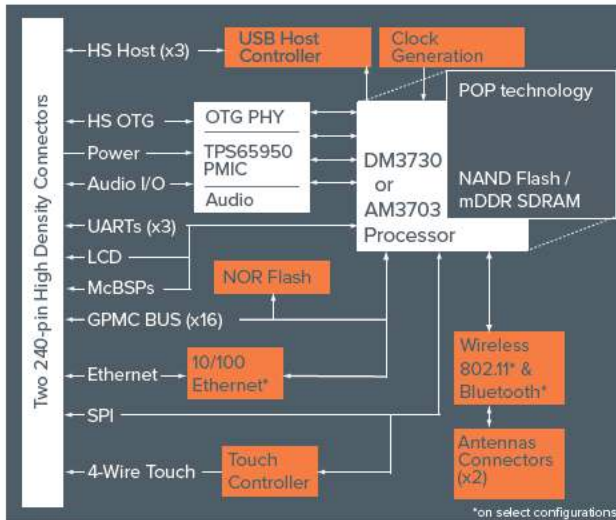
#### DM3730 / AM3703 SOM-LV :: HIGHLIGHTS:

- + Product-ready System on Module with a TI DM3730 or AM3703 ARM® Cortex™-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

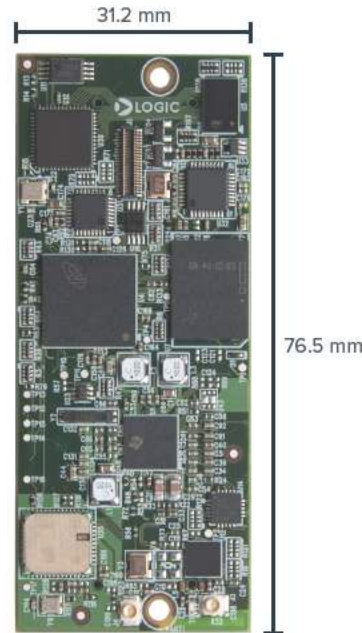
#### ZOOM DEVELOPMENT KIT :: FEATURES:

- + 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)



TOP VIEW :: ACTUAL SIZE

## 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™ DM3730 SOM-LV Development Kit Ordering Information

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

## 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™ 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™ (bootloader/monitor)
- + Android, Linux™, Windows® Embedded CE BSPs

### Mechanical

- + 31.2 mm wide x 76.5 mm long x 7.4 mm high

### RoHS Compliant



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