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**PRODUCT BRIEF:**

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

## DM3730 / AM3703 Torpedo + Wireless System on Module

**:: SUPPORTED PROCESSORS:**

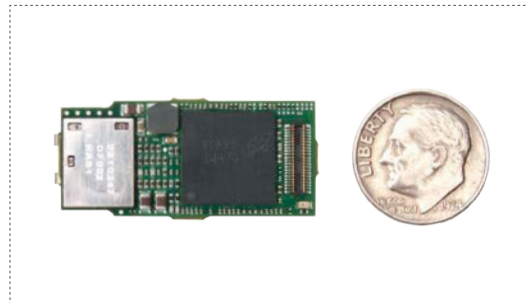
DM3730  
AM3703

Combine a powerful applications processor with PC-like speeds and a wireless chipset with 802.11a/b/g/n, Bluetooth, and GPS support; toss in Android and Linux BSPs developed using processes compliant with the ISO 13485 medical system standard; and the outcome is an innovative off-the-shelf solution that reduces your development time and risk.

The award-winning Torpedo + Wireless System on Module (SOM) is an ultra-compact form factor built around the Texas Instruments' DaVinci™ DM3730 processor or Sitara™ AM3703 processor and WiLink™ 7.0 wireless solution. Confining these two systems to a single board isolates the complex design, manufacturing, and wireless certifications from the rest of your product.

The DM3730/AM3703 Torpedo + Wireless SOM occupies less than one square inch, but boasts PC-like speeds up to 1 GHz with long battery life. Partnered with such high performance is a startlingly low power consumption in suspend state. This balance of speed and power is accomplished through Logic PD's vast system design experience; understanding the most detailed workings of each component and their interaction with one another creates a product that operates at optimal efficiency.

The WL1283 wireless chipset provides access to all the wireless protocols required in today's connected world. 802.11a/b/g/n, Bluetooth, and GPS signals are natively integrated with the DM3730/AM3703 Torpedo + Wireless SOM and Logic PD BSPs.



DM3730 / AM3703 TORPEDO + WIRELESS SOM

By using the same connectors as Logic PD's existing OMAP35x and DM3730/AM3703 Torpedo SOMs, the DM3730/AM3703 Torpedo + Wireless SOM extends the roadmaps of existing products and provides an upgrade path from today's products to future technologies.

The ultra-compact DM3730/AM3703 Torpedo + Wireless SOM is an ideal off-the-shelf solution for applications in markets where network connectivity is required and space is a premium. From point-of-care medical products to handheld communication devices, the DM3730/AM3703 Torpedo + Wireless SOM allows for the powerful versatility and compact designs needed in today's market-changing products.

**AWARDS WON IN 2012:**

- +CONNECT Most Innovative Product
- +*Design News* Golden Mousetrap Award
- +*Embedded Computing Design* Top Embedded Innovation

**DM3730 / AM3703 TORPEDO + WIRELESS SOM :: HIGHLIGHTS:**

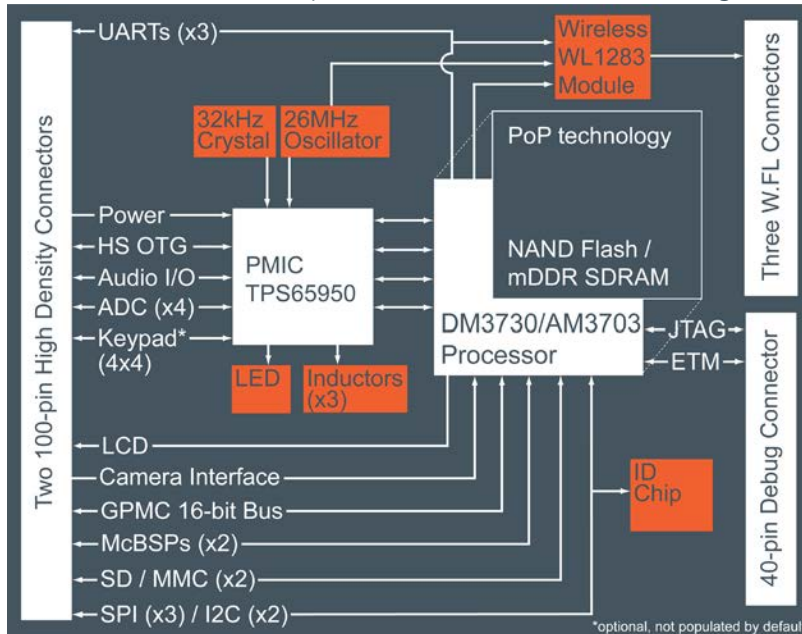
- +Product-ready System on Module with a TI DM3730 or AM3703 ARM@ Cortex™-A8 processor running up to 1 GHz
- +Android & Linux™ Board Support Packages (BSPs)
- +Network connectivity: 802.11a/b/g/n, Bluetooth, & GPS
- +FCC & IC modular certified
- +Commercial & industrial temp configurations
- +Ultra-compact form factor (15 x 33 x 3.8 mm installed)
- +Same connectors as DM3730 / AM3703 Torpedo SOM
- +Long product lifecycle

**ZOOM™ DM3730 TORPEDO DEVELOPMENT KIT :: FEATURES:**

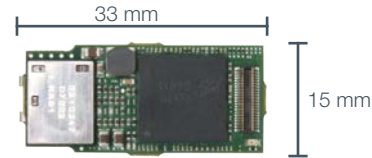
- +Application baseboard
- +DM3730 Torpedo + Wireless SOM  
DM3730 Torpedo SOM
- +4.3" WQVGA LCD with 4-wire touchscreen
- +Wattson™ power measurement application
- +Necessary accessories to immediately get up and running



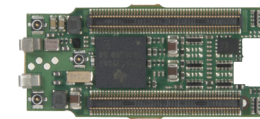
## DM3730 / AM3703 Torpedo + Wireless SOM Block Diagram



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



TOP VIEW :: ACTUAL SIZE



BOTTOM VIEW :: ACTUAL SIZE

## 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 (standard) 512 MB / 512 MB (standard)

### Network Connectivity

- + WL1283 wireless module featuring 802.11a/b/g/n, Bluetooth, & GPS

### Display

- + Programmable color LCD controller supports up to a 24 bpp TFT interface
- + Hardware supports XGA 1024x768 at 24-bit color

### Camera

- + Parallel camera interface

### Audio

- + I2S compliant audio codec (16-bit stereo DAC, 13-bit ADC)

### User Interface

- + Optional 4x4 keypad interface

### PC Card Expansion

- + Multiple SD/MMC card support

### USB

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

### Serial I/O

- + UARTs, SPI, I2C, McBSPs

### GPIO

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

### Debug

- + 40-pin debug connector on top side of SOM
- + JTAG & ETM support

### Software

- + Android BSP
- + Linux™ BSP
- + LogicLoader™ (bootloader/monitor)
- + Wattson™ power measurement application

### Mechanical (Installed)

- + 15 mm wide x 33 mm long x 3.8 mm high

### FCC & IC Modular Certified

### RoHS Compliant

## DM3730 / AM3703 Torpedo + Wireless SOM Ordering Information

Model Number <sup>1</sup>	Speed (MHz)	SDRAM (MB)	NAND Flash (MB)	Temperature
SOMAM3703-30-1780AKIR	800	256	512	Industrial <sup>2</sup>
SOMDM3730-30-2780AKCR	1000	256	512	Commercial <sup>3</sup>
SOMDM3730-30-1780AKIR	800	256	512	Industrial <sup>2</sup>
SOMDM3730-30-1880AKIR	800	512	512	Industrial <sup>2</sup>

NOTES: 1. Custom configurations are available by special order. Please contact Logic PD Sales for details.

2. Junction temperature of the DM3730/AM3703 processor must stay below 105°C.

3. Junction temperature of the DM3730/AM3703 processor must stay below 90°C.

## Zoom™ DM3730 Torpedo Development Kit Ordering Information

Model Number	SOM Configuration	Suggested Resale
SDK-DM3730-30-256512R	SOMDM3730-30-2780AKCR SOMDM3730-20-2780AGCR	

### LOGIC PD WEBSITE :: DESIGN RESOURCES:

- + Logic PD Products : [www.logicpd.com/products](http://www.logicpd.com/products)
- + Logic PD Technical Support : [www.logicpd.com/support](http://www.logicpd.com/support)
- + Contact Logic PD Sales : [www.logicpd.com/contact/inquiry](http://www.logicpd.com/contact/inquiry)



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