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

AM3517 SOM-M2 System on Module

:: SUPPORTED PROCESSORS:
AM3505
AM3517

The AM3517 System on Module (SOM) is a compact, product-ready pre-certified hardware and software solution that fast forwards embedded designs while reducing risk and controlling cost.

Based on Texas Instruments' new Sitara AM3517 microprocessor and designed in the SOM-M2 form factor, the AM3517 module offers essential features for handheld and embedded networking applications. The AM3517 SOM-M2 features the superset AM3517 processor, but also supports the AM3505 processor.

The standard SOM-M2 form factor allows developers to reuse existing baseboard designs when upgrading to new AM processors, which extends roadmap possibilities for their end-product.

Two Zoom™ Development Kit options allow developers to choose the platform best suited to their application needs. By starting with the corresponding Zoom Development Kit, engineers can write application software on the same hardware that will be used in their final product.

The compact size of the AM3517 SOM-M2 is ideal for medical patient monitoring wearables and other portable instrumentation applications. The AM3517 includes an SGX530 graphics accelerator and multiple communication ports, including Bluetooth, wireless 802.11b/g/n, and wired 10/100 Ethernet. For commercial signage, medical imaging, avionics, and industrial displays, the AM3517 SOM-M2 allows for powerful versatility, long-life, and greener products.



AM3517 SOM-M2

AM3517 SOM-M2 :: HIGHLIGHTS:

+ Product-ready System on Module with a TI AM3517 processor running at 600 MHz
+ Compact form factor—SOM-M2 (40.9 x 51.2 x 5.4 mm)
+ Long product lifecycle
+ 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 :: OPTIONS:

Low-cost eXperimenter Kit

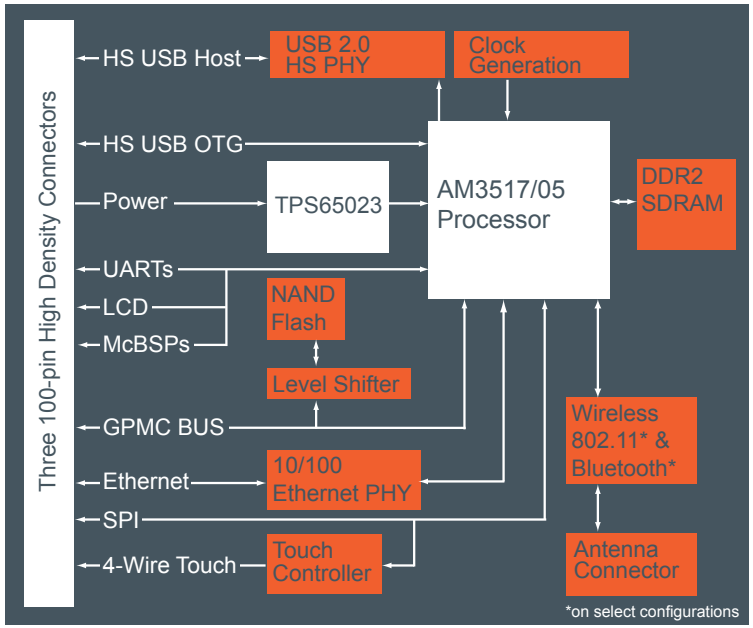
+ AM3517 SOM-M2
+ eXperimenter baseboard

EVM Development Kit

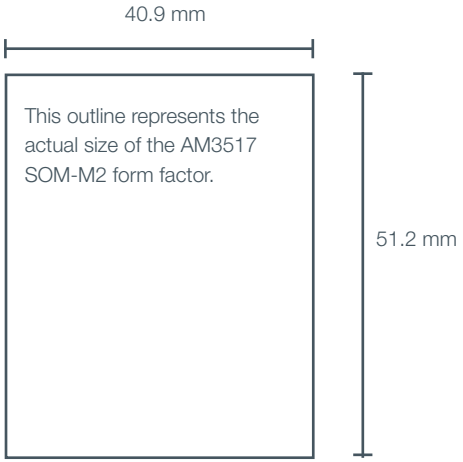
+ AM3517 SOM-M2
+ eXperimenter baseboard
+ Application board
+ 4.3" WQVGA LCD panel
+ Necessary accessories to immediately get up and running

LOGIC PD™

AM3517 SOM-M2 Block Diagram



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



AM3517 SOM-M2 Ordering Information

Model Number	Speed (MHz)	DDR2 (MB)	NAND Flash (MB)	Wired Ethernet	802.11 Ethernet	Bluetooth	Temp. (°C)
SOMAM3517-10-1780RJCR	600	256	512	Y	b/g/n	Y	0°–70°
SOMAM3517-10-1780FJCR	600	256	512	Y	—	—	0°–70°
SOMAM3517-10-1780RJXR	600	256	512	Y	b/g/n	Y	-20°–70°
SOMAM3517-10-1780FJIR	600	256	512	Y	—	—	-40°–85°

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

Zoom™ AM3517 Development Kit Ordering Information

Development Kit	Model Number	SOM-M2 Configuration(s) Included	Suggested Resale
EVM Development Kit	TMDXEVM3517	SOMXAM3517-10-1780RJCR	$999
Low-cost eXperimenter Kit	SDK-XAM3517-10-256512R	SOMXAM3517-10-1780FJCR	$199

NOTES: The Zoom AM3517 EVM Development Kit is available through Texas Instruments distributors.
The Zoom AM3517 eXperimenter Kit is available through Logic PD distributors.
Both kits currently use pre-release (X) processor silicon.

Product Features

Processor
+TI AM3517 processor with ARM Cortex-A8 core running at 600 MHz

SDRAM Memory
+DDR2 256 MB (scalable to 512 MB)

Flash Memory
+NAND flash 512 MB (scalable)

Display & Graphics
+SGX530 graphics accelerator (AM3517 only)
+Programmable color LCD controller supports up to a 24 bpp TFT interface

Touchscreen
+Integrated 4-wire touchscreen controller

Network Support
+10/100 Base-T Ethernet PHY
+802.11b/g/n wireless Ethernet
+Bluetooth 2.1 + EDR

PC Card Expansion
+Multiple SD/MMC card support

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

Serial Ports
+Up to four external UARTs
+Three I2C ports
+Three SPI ports

GPIO
+Programmable I/O depending on peripheral requirements

Software
+U-Boot (bootloader/monitor)
+Open source Linux BSP

Mechanical
+SOM-M2 form factor
+40.9 mm wide x 51.2 mm long x 5.4 mm high

FCC Part 15 Subpart C Compliant

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

LOGIC PD WEBSITE :: DESIGN RESOURCES:
+Logic PD Products : www.logicpd.com/products
+Logic PD Technical Support : www.logicpd.com/product-support
+For more information contact Logic PD Sales : product.sales@logicpd.com

© 2010 Logic Product Development Company. All rights reserved. PN: 1014275 Rev B

Texas Instruments
Sitara