PRODUCT BRIEF: Logic PD :: Texas Instruments www.logicpd.com/am1808-som-m1

## AM1808 SOM-M1 System on Module

The AM1808 System on Module (SOM) is a compact, product-ready hardware and software solution that fast forwards embedded designs while reducing risk and controlling cost.

Based on the Texas Instruments (TI) AM1808 processor and designed in the SOM-M1 form factor, the AM1808 module offers essential features for handheld and embedded networking applications.

The AM1808 SOM-M1 brings the industry leading low power ARM926 core to a small, off-the-shelf solution. The standard SOM-M1 form factor allows developers to reuse existing baseboard designs when upgrading to new Sitara processors, which extends roadmap possibilities for end-products.

The compact size of the AM1808 SOM-M1 is ideal for medical patient monitoring wearables and other portable instrumentation applications; the built-in Serial ATA (SATA) controller provides fast access to large capacity storage devices. For medical, industrial, audio, and communication



AM1808 SOM-M1

products, the AM1808 SOM-M1 allows for powerful versatility, long-life, and greener products.

Two Zoom<sup>™</sup> 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.

#### AM1808 SOM-M1 :: HIGHLIGHTS:

- + Product-ready System on Module with a TI AM1808 processor running at 450 MHz
- +Compact form factor—SOM-M1 (30 x 40 x 4.5 mm)
- +Long product lifecycle
- +Linux<sup>™</sup> and Windows® Embedded CE SDKs
- +Commercial temp (0°C to 70°C) Industrial temp (-40°C to 85°C)
- +RoHS compliant

#### ZOOM DEVELOPMENT KIT :: OPTIONS:

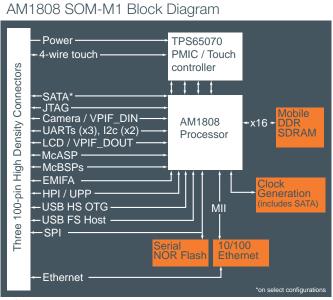
#### eXperimenter Kit

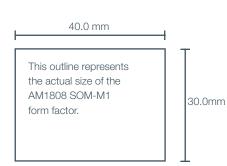
- +AM1808 SOM-M1
- + Application baseboard
- +4.3" WQVGA LCD panel
- +Necessary accessories to immediately get up and running

#### EVM Development Kit

- +AM1808 SOM-M1
- +Application baseboard
- +User Interface (UI) board
- +WLAN daughter card
- +4.3" WQVGA LCD panel
- +Necessary accessories to immediately get up and running

# LOGIC PD<sup>\*\*</sup>





NOTE: Block diagram is for reference purposes only; it is not drawn to scale.

## AM1808 SOM-M1 Ordering Information

Model Number	Processor	Speed (MHz)	mDDR (MB)	NOR Flash (MB)	Wired Ethernet	SATA	Temp (°C)
SOMAM1808-10-1502QHCR	AM1808	450	64	8	Y	Ν	0°–70°
SOMAM1808-10-1602QHIR	AM1808	450	128	8	Y	Ν	-40°–85°

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

### Zoom<sup>™</sup> AM1808 Development Kit Ordering Information

Development Kit <sup>1</sup>	Model Number	SOM-M1 Configuration Included	Suggested Resale
EVM Development Kit	TMDXEVMWIFI1808L	SOMAM1808-10-1602AHCR <sup>2</sup>	\$1150
eXperimenter Kit	TMDSEXP1808L	SOMAM1808-10-1602AHCR <sup>2</sup>	\$445

NOTES: 1. The EVM and eXperimenter Kits are available through Texas Instruments distributors.

2. This configuration has added power measurement circuitry.



411 N. Washington Ave. Suite 400 Minneapolis, MN 55401 T : 612.672.9495 F : 612.672.9489 I : www.logicpd.com © 2014 Logic PD, Inc. All rights reserved. PN: 1015625 Rev E

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

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

## **Product Features**

#### Processor

+TI AM1808 processor with ARM926EJ-S core running at 450 MHz

#### SDRAM Memory

+Mobile DDR (64 or 128 MB)

#### Flash Memory

+Scalable serial NOR flash (8 MB standard)

#### Display

+ Programmable color LCD controller supports up to a 16 bpp TFT interface

#### Touchscreen

+ Integrated 4-wire touchscreen controller (TPS65070)

#### Network Support

+10/100 Base-T Ethernet controller

Serial ATA Controller

+SATA 1.5 & 3.0 Gbps support

PC Card Expansion +MMC/SD card support

#### USB

+One USB 2.0 high-speed On-the-Go interface +One USB 1.1 full-speed host interface

#### Serial Ports

+Three external UARTs +Two I2Cs

- TWO 1208

### GPIO

+Programmable I/O depending on peripheral requirements

#### Software

+U-Boot (bootloader/monitor)

+Linux™ SDK

+Windows® Embedded CE SDK

#### Mechanical

+SOM-M1 form factor

+30.0 mm wide x 40.0 mm long x 4.5 mm high

#### **RoHS** Compliant



# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for RF Cable Assemblies category:

Click to view products by Logic Product Development manufacturer:

Other Similar products are found below :

 573/2
 73-6311-6
 73-6353-3
 73-6364-6
 MDB1-9SH001
 MDM-15PH003L-K139
 MDM-21PH003L-K139
 MH113-01SB1-MH1RP-0152

 MIKQ6-7SH076
 R288940005
 RF174-01RP1-03RP1-0110
 RMTB1-6PHY0102
 145111-05-12.00
 1661-C-24
 2192
 CA-628485-A43

 24P104C24J1-012
 24P104C24P1-006
 24P104C24P1-018
 24P203C24P2-006
 24P204C24J1-003
 172-2150-EX
 1800920920914PJ
 FCB-3030 

 ALT
 21117-046
 21117-050
 PCX-24-50
 24P103C24P2-003
 25P203C25P2-003
 R284008001
 R288940003
 R288940008

 RF174-03RP1-01BR1-0200
 RF179-74BJ3-77RP1-0305
 RMTB1-15PHY0102
 RMTB1-8PHY0102
 4814-BB-24
 500-181-R-ACC
 MIKQ6 

 7SH023
 5260-72
 314-120
 JR4N1-CL1-6F
 JR4R3-CL1-4F
 JT2N1-CL1-1F
 JT2T1-CL1-6F
 4814-K-48
 RN-UFL-SMA6
 100E151JW3600X

 CCNTN2-MM-LL335-26

 2192
 CA-628485-A43