## ARM® Cortex-A8 up to 720* MHz

- 32K/32K L1 w/SED
- 256K L2 w/ECC
- 64K RAM

**Graphics**
- PowerVR SGX 3D Gfx

**Display**
- 24 bit LCD Ctrl (WXGA)
- Touch Scr. Ctrl.**

**Security w/ crypto acc.**
- 64K Shared RAM

**PRU SS**
- PRU x2 200 MHz
- 8K P. w/SED
- 8K D. w/SED
- 12K RAM w/SED
- Peripherals

## L3/L4 Interconnect

**Serial Interface**
- UART x6
- SPI x2
- I²C x3
- McASP x2 (4ch)
- CAN x2 (2.0B)

**System**
- EDMA
- Timers x8
- WDT
- RTC
- eHRPWM x3
- eQEP x3
- eCAP x3
- JTAG/ETB
- ADC (8ch) 12-bit SAR**

**Parallel**
- MMC/SD/SDIO x3
- GPIO
- USB 2.0 OTG + PHY x2
- EMAC 2port 10/100/1G w/1588 & switch (MII,RMII, RGMII)

**Memory Interface**
- LPDDR1/DDR2/DDR3
- NAND/NOR (16b ECC)

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| Orderable Part Number | 3D GFX | Speed | Operating Temp (Junction) |
|---|---|---|---|
| XAM3359ZCZ | ● | 720 MHz | 0 to 90 C |
| XAM3358ZCE | ● | 500 MHz | 0 to 90 C |

**Package Info:**
- ZCZ:15 x 15mm (0.8mm, 324-ball)
- ZCE: 13 x13mm (0.65mm, 298-ball, Via Channel™)

**Symbols/footprints:**
http://www.ti.com/product/am3359#symfootprint

**IBIS/BSDL Simulation Models:**
http://www.ti.com/product/am3359#simulationmodels

**Supported Power Management IC's:**
TPS65217: http://www.ti.com/product/tps65217
TPS65910A: http://www.ti.com/product/tps65910a
TPS650250: http://www.ti.com/product/tps650250
TI Power Management Site: http://power.ti.com

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**AM335x** Sitara ARM Cortex-A8 microprocessors (MPUs) deliver up to 720 MHz ARM Cortex-A8 performance with robust peripheral set and flexible power management modes that consume as little as 7mW of power. Ideal for fan-less applications such as portable navigation terminals, handheld gaming devices and home/building automation control systems. Optimized for system and peripheral integration, provide multiple high-performance interfaces, such as, USB2.0 w/ PHY, Gigabit Ethernet two-port switch, CAN, PRU and more.

AM3359 Product Page: http://www.ti.com/am3359
AM3358 Product Page: http://www.ti.com/am3358
AM3357 Product Page: http://www.ti.com/am3357
AM3356 Product Page: http://www.ti.com/am3356
AM3354Product Page: http://www.ti.com/am3354
AM3352 Product Page: http://www.ti.com/am3352
Datasheet: http://www.ti.com/lit/gpn/am3358
TRM: http://www.ti.com/lit/pdf/spruh73
Errata: http://www.ti.com/lit/pdf/sprz360
Wiki Overview: http://processors.wiki.ti.com/index.php/Device:AM335x:Device_Evaluation
Product Bulletin: http://www.ti.com/lit/pdf/sprt617
E2E Forum: http://e2e.ti.com/support/dsp/sitara_arm174_microprocessors/f/791.aspx
Overview Video: http://focus.ti.com/general/docs/video/Portal.tsp?entryid=0_siv3pgx1
Get Started with Development Video: http://focus.ti.com/general/docs/video/Portal.tsp?entryid=0_z1mryapv
Power (Total: 600mW-1000mW; Standby: ~25mW)
Power Consumption Summary: http://processors.wiki.ti.com/index.php/AM335x_Power_Consumption_Summary
PinMux Tool: http://www.ti.com/tool/pinmuxtool
Schematic Checklist: http://processors.wiki.ti.com/index.php/AM335x_Schematic_Checklist
App notes, White Papers, Hardware Migration Guides: http://www.ti.com/product/am3359#technicaldocuments
End Equipment & Applications: http://www.ti.com/apps/docs/appshomepage.tsp
Memory Vendor Selection Guide: http://processors.wiki.ti.com/index.php/Memory_Vendor_Selection_Guide

## Application Level Software

| User Interface | Browser/ Media Players | "Applications" |
|---|---|---|

**Application Frameworks – Java, Qt, GStreamer, Flash, Android, DShow, Direct Draw**

### Board Support Package

- **Linux – Open Source – TI Developed**
- **Android – Open Source – TI Funded**
- **Windows Embedded CE – TI Owned, Developed by Microsoft Gold Partner**
- **Commercial Linux and Android – Many Partners**
- **RTOS – QNX, VxWorks, Nucleus, Integrity etc.**

| Video, Imaging, Speech, Audio Codecs and Frameworks on NEON™ | OpenGL® ES and OpenVG™ Library On SGX | 2D Graphics Library On NEON |
|---|---|---|

**OS Kernel**

**ARM Cortex-A8 with on chip USB**

**Accelerators – SGX 530 and Neon**

**AM335x**

## Available OS:

| TI owned – No charge | | TI owned – No charge | |
|---|---|---|---|
| Linux | | Android | WinCE |
| Community | Commercial | G'bread (2.3) Community | WEC 7.0 |
| 4Q11 | Beta – 4Q11 | Beta – 4Q11 | Beta – 4Q11 |

Linux SDK: http://www.ti.com/tool/linuxezsdk-sitara

Android  SDK: http://www.ti.com/tool/androidsdk-sitara

Windows Embedded CE 6.0 SDK: http://www.ti.com/tool/wincesdk-a8

Code Composer Studio: http://www.ti.com/tool/ccstudio

Sourcery G++:
http://focus.ti.com/dsp/docs/thirdparty/catalog/devtoolsproductfolder.tsp?actionPerformed=productFolder&productId=2477

Evaluation Module (EVM): http://www.ti.com/tool/tmdxevm3358

EVM technical docs & schematics: http://www.ti.com/tool/tmdxevm3358

More Software and Development Tools: http://www.ti.com/product/am3358#toolssoftware

Sitara Forums: http://www.ti.com/e2e-sitara

Sitara Wiki:  http://www.ti.com/sitarawiki

Videos, Training & Events: http://www.ti.com/am3358#supportandcommunity

TI Third Party Network: http://www.ti.com/3p

Distributor info: http://focus.ti.com/general/docs/distributorinfo.tsp