

AMD Socket AM2 AdvancedMC Processor Module



Product Datasheet

AdvancedMC™

PDSi's new **AMD Socket AM2 AMC Processor Module** (AMC-A2) is a high performance computing module for use in AdvancedTCA® and MicroTCA™ (μTCA) systems. Designed around AMD's latest x86-based Athlon™ processors, it provides exceptional computing power in the convenient and versatile AdvancedMC™ (AMC) form factor.

The AMC-A2 complies with the most current PICMG specifications for operation in ATCA and μTCA applications. It supports all the relevant sub-specifications to insure compatibility with the broad set of interface options presented by AMC carriers – including SAS/SATA, Ethernet and PCI-Express. It also features an onboard Pigeon Point module management controller (MMC) for assurance of module health and hot-swap ability.

PDSi's new AMC processor module gives OEMs in a broad range of industries a higher performance, robust, cost effective alternative – a compute module built around AMD's technology and designed for long-life, high reliability embedded solutions. Extended availability from PDSi is assured as key components are supported by embedded roadmaps. PDSi can also provide customization, turnkey integration and support, as well as extended warranty and repair services to ensure that OEMs can focus where they prefer to add their own unique value.



Key Features

- High performance AdvancedMC hot-swappable compute module
 - Conforms to PICMG AMC.0 R2.0
- Supports AMD Athlon Socket AM2 Processor family
 - Single- and Dual-core 64-bit CPUs
 - 9W, 15W, 22W & 25W versions
- Up to 2GB DDR2 SOCDIMM memory with ECC
- Up to 8 GB optional uDOC onboard Flash drive
- 1 x PCIe x4 links (AMC.1)
- 2 x 1Gb Ethernet links (AMC.2)
- 2 x SAS/SATA interfaces (AMC.3)
- Pigeon Point IPMI management
- Extended availability assured

Compact, Versatile and Powerful

PDSi's AMD Socket AM2 AMC Processor Module fits a broad range of industries and applications:

- **Telecom** – Edge applications, customer premise equipment, next-generation convergent (voice, video, data) media gateways, media servers, messaging servers, session border controllers, WiMAX base stations
- **Datacom / Enterprise Computing** – Routers / gateways, network security/firewall appliances, switches, storage array controllers
- **Industrial** – Embedded controllers, co-processor applications
- **Medical** – Imaging, Ultrasound, X-Ray
- **Instrumentation** - Test & measurement platforms
- **Military and Aerospace** – Portable Tactical Devices, Simulators, Unmanned Vehicles

- Processors** AMD Socket AM2 processors, including:
- AMD Athlon™ 2000+, single core, 1GHz, 9W
 - AMD Athlon™ 2600+, single core, 1.6GHz, 15W
 - AMD Athlon™ 3100+, single core, 2.0GHz, 25W
 - AMD Athlon™ X2 3400+ dual core, 1.8GHz, 22W
- High performance CPUs with:
- L1 Cache – 64K instruction, 64K Data
 - L2 Cache – 512K or more
 - Integrated Memory Controller
 - 1x16 lane HyperTransport channel

- Chipset** Broadcom HT1100
- Memory** Up to 2 GB DDR2 SOCDIMM with ECC
- BIOS** AMI BIOS
User BIOS Flash boot via LPC bus
- Storage** Up to 8 GB uDOC Flash Drive

Front Panel

- USB** 2x USB 2.0 ports
- Serial** 1x RJ45 (Winbond 87427)
- LEDs** MMC: Hot-swap, Out of Service, OK

Fabric Interfaces

- Ethernet** 2x Gb SerDes Ethernet (Broadcom 5715)
- PCI Express** 1x PCIe x4
- Hard Drive** 2x SAS/SATA

- System Management** Pigeon Point MMC

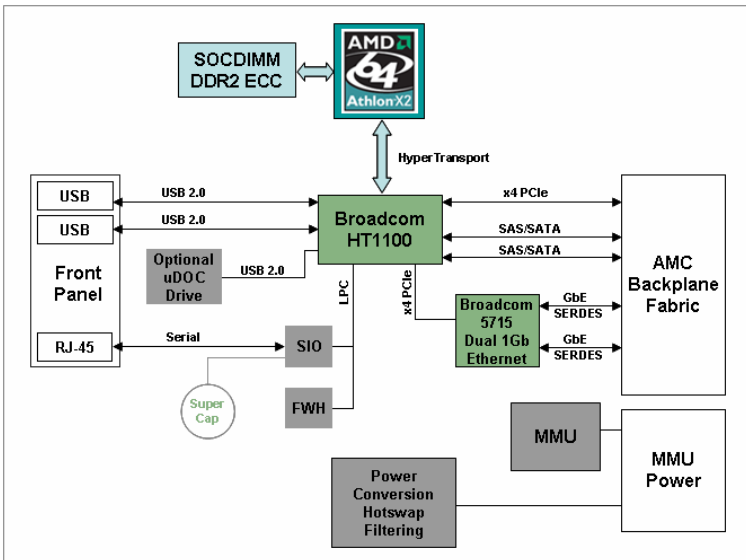
- Debug** JTAG Port

- Compliance** PICMG AMC.0 R2.0, AMC.1, AMC.2, AMC.3, ATCA 3.0, µTCA.0
IPMI V2.0
RoHS Directive 2002/95/EC

- Operating Systems** Linux, Windows, Solaris x86

- FormFactor/ Dimensions** PICMG AMC.0 R2.0
Full Size Module (6HP)
73.5mm (W) x 180.6mm (D) x 28.95mm (H)

- Temperature & Humidity** Operation : -5 to 55 degC
5% - 90% non-condensing



Ordering Guide	Description										
To configure OPN:	AMC-A2- 0000 [X] - [X] - [X]										
(1) Select Processor	AMD Socket AM2 AdvancedMC board, with: uDOC Flash Drive										
(2) Select Memory Size											
(3) Choose Flash Required											
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