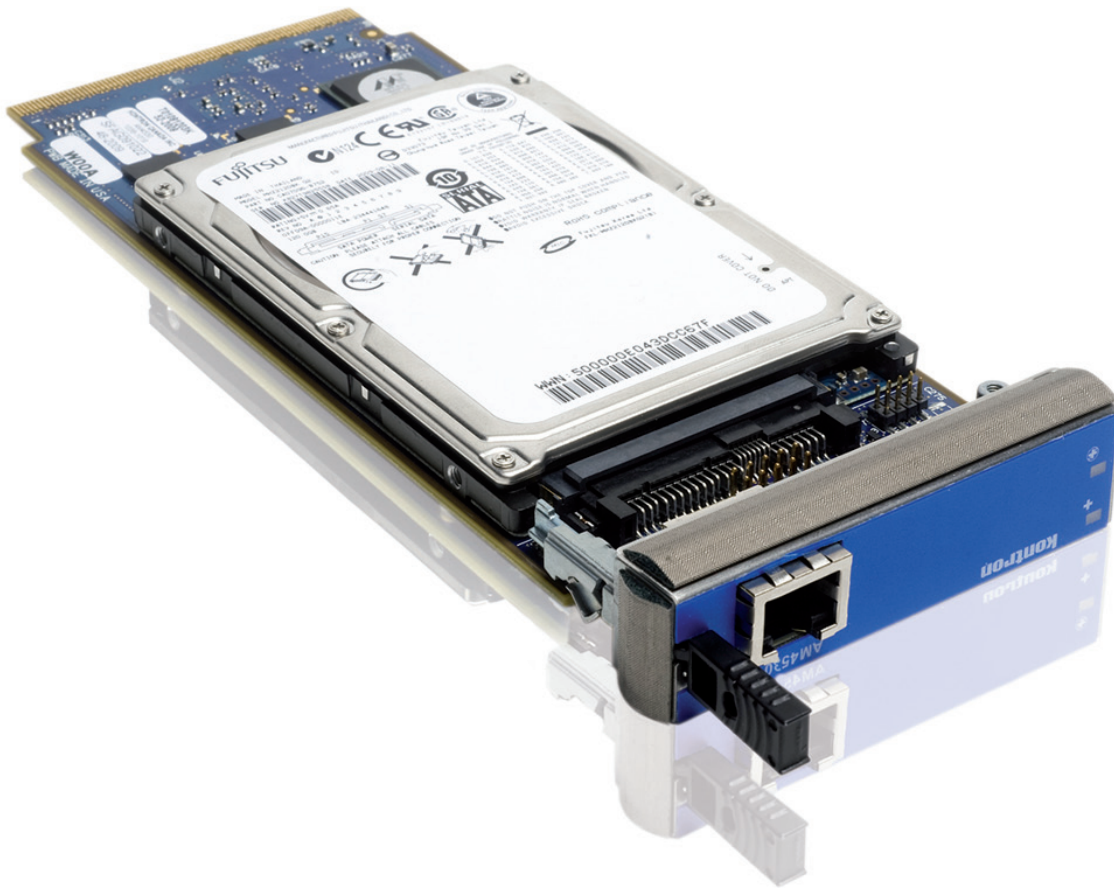


## » AM453x «



### Features

- » Cost-competitive NAS storage solution for MicroTCA and ATCA platforms
- » AM4530 and AM4531 available with multiple SATA/HDD capacity options
- » Base or/and Fabric access via VLAN
- » AMC.0, AMC.1, AMC.2 and AMC.3 compliant
- » IPMC, Dual IPMB, IPMI v2.0

# Kontron AM453x NAS AMC Module

Unique in the market, the Kontron AM453x AMC module is a cost-competitive storage solution for MicroTCA and ATCA platforms that require Network Attached Storage connectivity.

Specifically for MicroTCA-based systems, the AM453x module provides storage access for Processor AMC modules that are without a SATA connection, such as the AM4100 PPC AMC for control plane applications or the AM42xx Cavium OCTEON Plus AMC for data plane applications.

From an ATCA platform standpoint, the AM453x can be a single point of code storage for the entire system when populated in one or both AMC slots of the Kontron AT89xx switch. This makes it an ideal solution for fast boot code or application code updates. Two AM453x modules can be set up in a redundant

configuration for increased storage reliability, and are accessible by all blades and AMCs in the system via the base and/or fabric interface.

In terms of media, the AM453x supports both Hard Disk Drives and Solid State Drives using the 2.5" form factor and SATA interconnect. Basic NFS NAS is available via port 0 and 1 in the Common Option Region (Base Interface or Control Plane) and/or port 8 and 9 in the FAT Pipes Region (Fabric Interface or Data Plane) with VLAN support provided in all flavors.

Included into the module design are extensive sensors for monitoring and event generation on thresholds, and there are two redundant Boot Block Flash BIOS and IPMI firmware with rollover.

## Technical Information

<b>Hard Disk Features</b>	AM4530 and AM4531 available with multiple SATA/HDD capacity options
<b>Processor</b>	Marvell 88F6281, 1.2 Ghz ARMv5TE-compliant with a 256KB L2 Cache
<b>Memory</b>	512 MB DDR2-800MHz
<b>File Systems</b>	NFS support PXE Boot for x86 processors at release date DHCP or Static IP address
<b>Compliance</b>	PICMG AMC.0 R2.0, AMC.1 R2.0, AMC.2 R1.0 & AMC.3 R1.0
<b>IPMI Features</b>	Management Controller compliant to PICMG 3.0, AMC.0 and IPMI v1.5 rev 1.1. Management Controller is run time field reprogrammable without payload impact. Robust fail safe reprogramming implementation (which includes two firmware images) that could perform automatic or manual rollback if a problem occurs during critical reprogram phase. Remote upgrade capability from all IPMI interfaces (via IPMB)
<b>Supervisory</b>	Hardware system monitor through IPMI (voltage, currents, temperature), temperature monitor / alarm; board temperature sensor, power failure.
<b>Mechanical</b>	181.5 x 75 x 30.16 mm, single-width full-size; 181.5 x 75 x 18.96 mm, single-width mid-size; Weight: 350 g
<b>Power Requirements</b>	Management power is less than 100mA peak at 3.3V Payload power is 6W without hard drive
<b>Environmental Temperature*</b>	Operating: 0-55°C/32-131°F HDD, 0-70°C/32-158°F SSD version; Storage and Transit: -40 to +70°C/-40 to 158°F
<b>Environmental Humidity*</b>	Operating: 15% to 90% @55°C/131°F non-condensing; Storage&Transit: 5% to 95% @ 40°C/104°F non-condensing
<b>Environmental Altitude*</b>	Operating: 4,000 m / 13,123 ft; Storage and Transit: 15,000 m / 49,212 ft
<b>Environmental Shock*</b>	Operating: 30G, half-sine 11ms, each axis; Storage and Transit: Bellcore GR-63-CORE Section 4.3
<b>Environmental Vibration*</b>	Operating: 1.0G, 5-500Hz each axis; Storage and Transit: 0.5G, 5-50Hz; 3.0G, 50-500Hz each axis
<b>Safety / EMC</b>	Meet or exceed: Safety: UL 60950-1; CSA C22.2 No 60950-1-03; EN 60950-1:2001; IEC60950-1 EMI/EMC: FCC 47 CFR Part 15, Class B; CE Mark to EN55022/EN55024/EN300386
<b>Warranty</b>	Two years limited warranty

\* Designed to meet or exceed

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