

AMC635 / AMC635C

AMC Carrier for JBOD, 8 mSATA Disks



AMC635

Key Features

- JBOD Carrier Module for 8 Mini-SATA (mSATA) disks
- Single removable tray carries mSATA drives
- Conduction cooled version available
- Single module, mid-size per AMC.0
- Auto-latching of the caddy into the carrier for secure retention, push-button release
- IPMI 2.0 compliant

Benefits

- Multi-Terabit storage capacity in a single module AMC form factor carrier
- Removable storage for data-sensitive applications
- Fully compatible with HBA/RAID controller AMC629
- Strong mil/aero support

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AMC635 /AMC635C

The removable mSATA carrier tray on the AMC635 allows all drives to be removed together, supporting applications where large amounts of data need to be physically moved from one equipment to another, or where sensitive (e.g. classified) data must be removed from a system. The unit is fully compatible with the AMC629 RAID controller so can support fault-tolerant storage.

Multiple AMC635 units can be 'daisy chained' within a system (depending on backplane capabilities) supporting large scale storage systems. The on-board expander enables 12 Gbps aggregate performance with 6 Gbps (SATA) devices. It includes an integrated ARM Cortex-R4 processor for topology management functions for efficiency.

The AMC635 is available in both air-cooled (MTCA.0 and MTCA.1) and rugged conduction-cooled (MTCA.2 or MTCA.3) versions.



Figure 1: AMC635 with JBOD



Figure 2: AMC635 Carrier Only



Figure 3: JBOD Cartridge

AMC635 Block Diagram

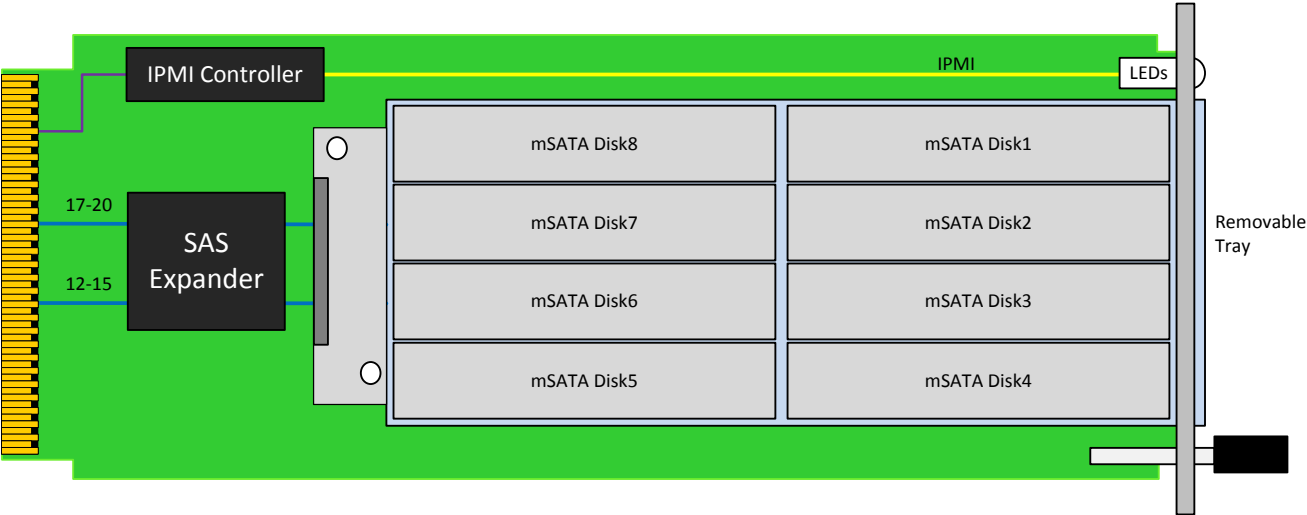


Figure 4: AMC635 Functional Block Diagram

AMC635 C Block Diagram

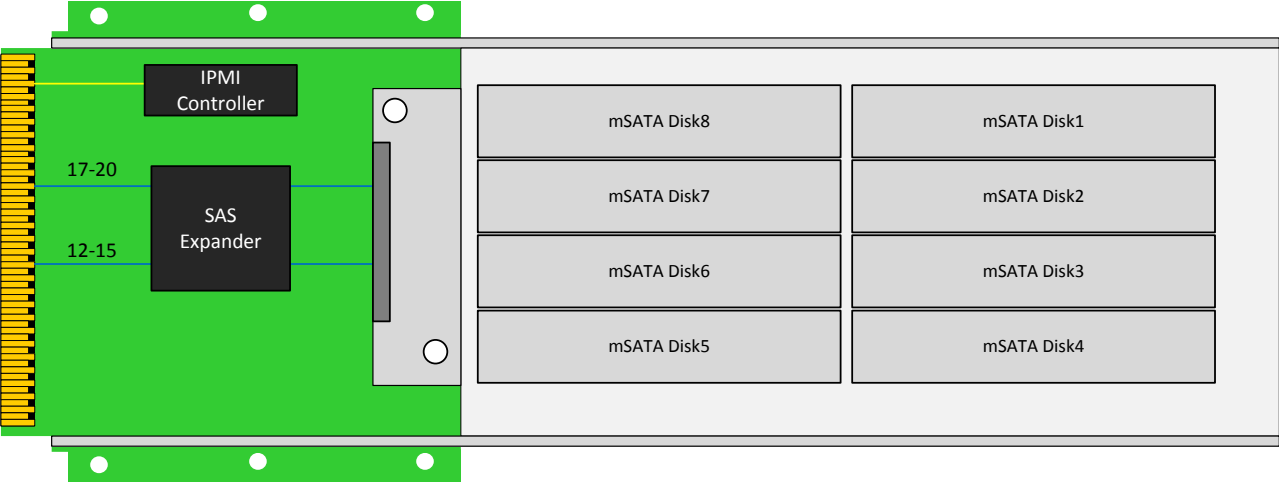


Figure 5: AMC635C Functional Block Diagram

Front Panel



Figure 6: AMC635 Front Panel

Specifications

Architecture		
Physical	Dimensions	Single module, mid-size (full-size optional)
		Width: 2.89" (73.5 mm)
		Depth 7.11" (180.6 mm)
Type	AMC Storage	8x mSATA JBOD Carrier
Standards		
AMC	Type	AMC.0
Module Management	IPMI	IPMI version 2.0
Storage	Type	Up to 8x Mini-SATA drives
Configuration		
Power	AMC635	10 W (drive tray removed)
Environmental	Temperature	Operating temperature: -5° to 45° C (55°C for limited time, performance restrictions may apply), industrial and military versions also available (See environmental spec sheet)
		Storage Temperature: -40° to +85°C with the disk
	Vibration	Operating 9.8 m/s ² (1G), 5 to 500Hz on each axis
	Shock	Operating 325G / 2 ms, 160G / 1 ms
	Relative Humidity	5 to 95 per cent, non-condensing
Front Panel	Interface Connectors	None
	LEDs	IPMI management control Activity
	Mechanical	Hot swap ejector handle (AMC635); wedgelocks (AMC635 C) Removable tray
Software Support	Operating System	Linux (consult factory for VxWorks, Windows, or other options)
Other		
MTBF	MIL Hand book 217-F@ TBD hrs	
Certifications	Designed to meet FCC, CE and UL certifications, where applicable	
Standards	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards	
Warranty	Two (2) years	

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and µTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

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Ordering Options

AMC635 – ABC-000-00J

A = mSATA Disks		
0 = 8 disks		
1 = 4 disks		
2 = Reserved		
B = mSATA Disk Capacity		
0 = 256 GB/disk		
1 = 512 GB/disk		
2 = 1 TB/disk		
3 = Reserved		
C = Front Panel Size		J = Temperature Range and Coating
1 = Reserved		0 = Commercial (–5° to +45° C), No coating
2 = Mid-size		1 = Commercial (–5° to +45° C), Humiseal 1A33 Polyurethane
3 = Full-size		2 = Commercial (–5° to +45° C), Humiseal 1B31 Acrylic
4 = Reserved		3 = Industrial (–20° to +70° C), No coating
5 = Mid-size, MTCA.1 (captive screw)		4 = Industrial (–20° to +70° C), Humiseal 1A33 Polyurethane
6 = Full-size, MTCA.1 (captive screw)		5 = Industrial (–20° to +70° C), Humiseal 1B31 Acrylic
		6 = Reserved
		7 = Reserved

AMC635 C – ABC-000-00J

A = mSATA Disks		
0 = 8 disks		
1 = 4 disks		
2 = Reserved		
B = mSATA Disk Capacity		
0 = 256 GB/disk		
1 = 512 GB/disk		
2 = 1 TB/disk		
3 = Reserved		
C = Ruggedization Level *		J = Temperature Range and Coating**
0 = None		0 = Commercial (–5° to +45° C), No coating
1 = Contact Vadatech		1 = Commercial (–5° to +45° C), Humiseal 1A33 Polyurethane
2 = Contact Vadatech		2 = Commercial (–5° to +45° C), Humiseal 1B31 Acrylic
3 = Contact Vadatech		3 = Industrial (–20° to +70° C), No coating
		4 = Industrial (–20° to +70° C), Humiseal 1A33 Polyurethane
		5 = Industrial (–20° to +70° C), Humiseal 1B31 Acrylic
		6 = Reserved
		7 = Reserved

* Ruggedization level is per the MTCA.2 and MTCA.3 specification

** Temperature is at edge of module. Consult factory for availability

Related Products

AMC626



- Host Bus Adapter (HBA) for external SATA III (6.0 Gbps) or SAS-3 (12 Gbps) drives
- AMC.1 compliant, PCIe Gen3 x8 or x4
- Support for 8 SAS/SATA ports

AMC629



- Host Bus Adapter (HBA) for external SATA III (6.0 Gbps) or SAS-3 (12 Gbps) drives
- Conduction cooled version available
- Integrated RAID 0, 1, 1E, and 10

VT950



- MicroTCA rugged 1U 19" rackmount chassis platform
- Meets MIL-STD-810F, MIL-STD-901D for shock/vibration
- Meets MIL-STD-461E for EMI

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