ami | FabricS™

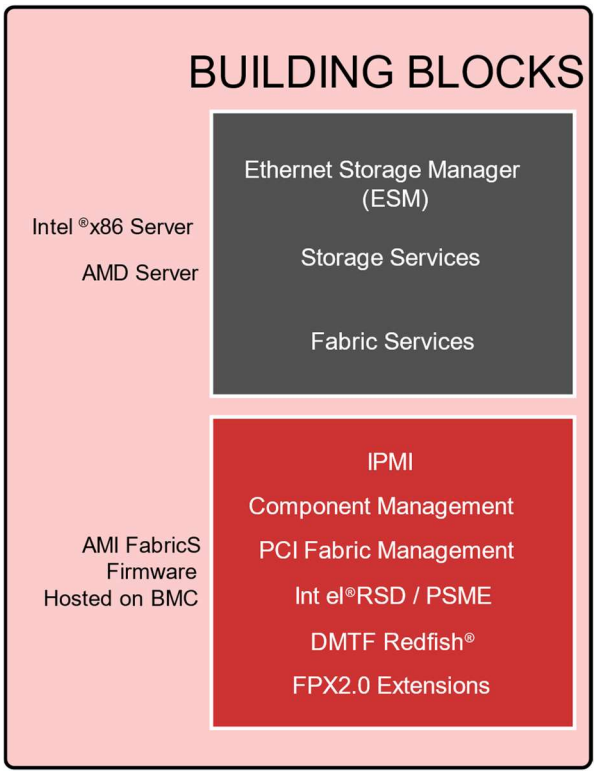
NVMe over Ethernet Fabric Management Firmware

A powerful NVMe over Ethernet Fabric (NVMe-oF) firmware / software stack combining Ethernet Fabric management capabilities and NVMe drive management together to create and manage a true Server SAN solution, delivering highly manageable NVMe storage to remotely connected clients

AMI® FabricS™ NVMe-oF Management Firmware from AMI is a powerful firmware/software solution combining the complete functionality to support Server SAN, including Ethernet Fabric management and NVMe drive management.

AMI FabricS is a combination of firmware and software components that constitute a feature-rich, highly manageable NVMe over Ethernet Fabric solution. The firmware component resides on the preexisting onboard BMC, along with AMI FabricS firmware extensions that enable completely secure, out-of-band (OOB) NVMe storage manageability, available right out of the box. The software component, called Ethernet Storage Manager (ESM), runs on the server chipset in case of storage server boxes.

AMI FabricS supports Intel® x86 and AMD platforms and storage server architectures.



In addition to the high degree of out-of-band NVMe storage management for discovering storage pools, creating namespaces, attaching/detaching NVMe storage volumes to remote compute nodes, a key aspect of AMI FabricS is its inclusion of NVMe Management Interface (NVMe-MI) support to enable drive inventory and telemetry data support on the BMC OOB interface.

AMI FabricS is based on the proven, highly stable and industry-leading AMI Core Technology. AMI FabricS firmware provides a high level of modularity, with the ability to easily configure the complete firmware / software stack by selecting and deselecting features that are available in package form.

Key Features

- True Server SAN solution: Out-of-the-box solution for commodity / white box storage hardware
- Caters to hyperscale (storage servers) as well as hyperconverged (storage appliance/JBOF) infrastructure needs
- Supported servers: Intel® x86 and AMD
- Quick, fully automated provisioning & installation to convert an off-the-shelf storage box into a Server SAN
- Completely secure, out-of-band (OOB) storage management
- Storage management network is separated from storage area network (Data Path)
- Drive inventory and telemetry data support
- Drive hot swap support (Add / Remove)
- Drive slicing support for storage optimization
- Runs on standard BMC hardware (including AST2500/AST2600/PILOT 4)
- Complete “NVMe-MI” support on target
- High Availability / Failover support

Technology Pack Features

- Redfish™ support
- Intel® RSD (Storage/Fabric PSME) support
- AMI® Composer™ Hyperscale Management Ecosystem

For more information please visit the request form at
ami.com/fabrics

ami™
power • manage • secure

ami | FabricS™

AMI FabricS Features and Specifications

Completely Secure, Out-of-band Server SAN Functionality

- AMI FabricS is supported on all commodity/white box storage platforms (servers and appliances), a fundamental Server SAN function
- Targeted for hyperscale environments / datacenters, as well as for hyperconverged infrastructure
- All storage management functions available over the existing out-of-band interface of the onboard BMC
- Storage network connectivity and management LAN connectivity are separated, for highly secure remote storage connectivity between targets and remote clients (initiators)

Exceptional Remote Storage Manageability

- Simple storage pool abstraction with complete storage device discovery support
- Drive inventory and telemetry data, with NVMe-MI support
- Compliant with Intel® Rack Scale Design (RSD) specification for hyperscale infrastructure
- Storage/namespace creation with attach/detach storage to the remote computer node

Auto-Provisioning and Installation

- Standard feature - no additional software installation required
- Storage box can be provisioned in the field to enable AMI FabricS
- Simple, fully automated process to convert a commodity storage server box to a Server SAN target
- Storage boxes can also be configured as Server SAN units at the time of shipment

Hot Swap (Add/Remove) and Drive Slicing

- Complete Hot Add and Hot Remove support for NVMe drives on commodity storage boxes
- Each NVMe drive can be split into multiple partitions/volumes and each partition/volume can be independently attached to a remote client machine
    - Drive slicing enables optimal use of available storage, where one physical NVMe drive can be shared across multiple remote client systems

High Availability (HA) / Failover

- Per the specific hardware design, complete failover support can be enabled in AMI FabricS
- Storage data paths are unaffected during failover
- Remote storage manageability is transparently available to the user throughout, with no disruption in service

Stack Design and Packaging

- Robust NVMe over Ethernet Fabric (NVMe-oF) management using stable, fast and reliable RDMA based technology
- Each AMI FabricS feature is built and available as an individual package for a high level of stack modularity
- Each package contains clearly defined, separate common and hardware-specific modules for easy portability across various SoC and hardware platforms

ami™

For more information please visit the request form at
ami.com/fabrics

5555 Oakbrook Parkway
Building 200
Norcross, GA 30093 USA
Tel: 770.246.8600
Sales/Toll Free : 800.828.9264
ami.com