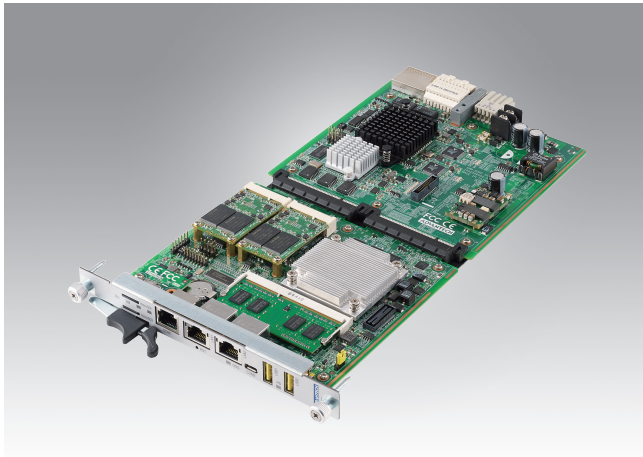


SMM-5060

Netarium™ System Management Module



Features

- ATCA / eATCA Shelf and System Management
- ARM9 based Shelf Management controller with Advantech IPMI core
- Full event log synchronization, robust redundancy and failover
- Optional Netarium™ System Manager on Intel® Atom™ Processor C2000 series
- Features include SoL Proxy, System Explorer, System Boot Server, etc.
- Up to two GbE (RJ45), two USB (host) ports, and two console ports (one RJ-45 and one micro-USB) on front panel
- Two microSD slots for shelf and system event logs storage.
- Up to two internal M0300 SSDs for OS, system management applications, and extended event logs storages
- System mount RAID boot disks and LCD module support
- HPM.1 updates, HPM.2, HPM.3 and HPI options
- Option to host customer applications

Introduction

Advantech's SMM-5060 is the intelligence in Netarium™ ATCA or eATCA systems responsible for platform health and management as a whole. All individual FRU elements in the system including each power supply, fan module, node blade, hub blade, RTM or eRTM, backplane, and even the module itself can be monitored and controlled through the Shelf Manager residing in the SMM-5060's BMC module. The SMM-5060's Shelf Management (ShM) is ATCA compliant and supports the latest PICMG specifications such as HPM.1, HPM.2 and HPM.3. In addition to providing full redundancy and failover support, Advantech's ShM features full log and state synchronization. All firmware and software on the Shelf Manager supports redundant images and can be upgraded via HPM.1 for maximum reliability.

As an option, the SMM-5060 can be extended with System Manager functionality via a module based on the Intel® Atom™ processor C2000. Advantech's System Manager (SysM) acts as centralized service access point (such as SoL Proxy), blade boot server (provisioning OS images and node blades' applications), and advanced configuration manager enabling any iA node in the Netarium™ system to boot with a tailored set of BIOS settings yielding best performance for a specific workload. In addition, an integrated web front end, the System Explorer can be used to provide graphical displays of various levels of system information such as system inventory, health views, sensor status, system IDs, and event logs, leading to a friendlier shelf/system management user experience. An LCD module implemented on the chassis can also be interfaced to the SMM-5060 and used to display system statistics or status to onsite technicians, allowing the Netarium™ system to be managed like a big appliance. Customers who are using appliances for their entry and mid-range network gear can now have a consistent system management view for their high end product line based on Advantech's Netarium™ platform and SMM-5060.

Specifications

| | | |
|---------------------|------------------------------|---|
| Processor System | X86 CPU | Intel® Atom™ Processor C2000 Series (C2358/ 2 Cores/ 2 Threads/ 1 MB L2 Cache or C2558/ 4 Cores/ 4 Threads, 2 MB L2 Cache) |
| | Max. Speed | 2.4 GHz |
| | BIOS | Carrier Grade UEFI BIOS based on AMI 1. Redundant flash with HPM.1 update & rollback 2. Configuration settings can be changed over IPMI |
| | BMC Processor | ARM9 based Microcontroller (400MHz) |
| Memory | Technology | x86: 2x 2GB DDR3 1333 MHz with ECC (2GB on board, 2GB on SODIMM) BMC: On-board DDR3/ 800 MHz/ 512 MB |
| | Max. Capacity | Up to 4GB for x86 module |
| Ethernet | Devices | x86: Intel i354 Quad port Gigabit Ethernet controller BMC: 2 integrated 10/100/1000 Mbit MACs |
| | Interface | Up to 2 x GbE uplink Interfaces (only one uplink for basic shelf management SKU) 2 x Base Interface (100 Mbps) 1 x Cross-over interface to other SMM-5060 (GbE) |
| Front I/O Interface | Serial (COM) | 2 x Console ports (1 RJ-45 connector for x86 module and 1 micro-USB connector for BMC module) |
| | Ethernet | 2 x GbE ports (RJ-45 connectors) |
| | USB 2.0 | 2 x Type A ports (available only for x86 SKU) |
| | SDHC | 2 x MicroSD Sockets |
| Mass Storage | Onboard | 2 x 64GB (or 2 x 32GB) M0300 SATA SSD (available only for x86 SKU) |
| | Off board (system connector) | Two SATA-II Interfaces (available only for x86 SKU) |
| Operating System | Compatibility | CentOS 6 64 bit, RHEL6 64bit, others on request |
| Shelf Management | BMC | ARM 9 based controller (400MHz) |
| | IPMI | IPMI 2.0 based on Advantech IPMI Core |
| Watchdog Timer | Supervision | BMC watchdog |
| | Interval | IPMI compliant |

Specifications

| | | | |
|-------------------|-----------------------|---|-----------------------------|
| Miscellaneous | LEDs | x1 blue for hot swap, x1 red for failure and OOS, x4 green/amber for general purpose (user definable) | |
| Compliance | Standards | PICMG 3.0, IPMI v1.5, HPM.1, HPM.2, HPM.3 | |
| Power Consumption | Configuration | Based on Intel® Atom™ C2558, 2 x 1333MHz 2GB DDR3 memory | |
| | Measured | 30W max. | |
| Physical | Dimensions | 6HP, 278.3 mm x 144.8 mm | |
| Environment | | Operating | Non-operating |
| | Temperature | -5 ~ 55° C (23 ~ 131° F) NOTE1 | - 40 ~ 70° C (-40 ~ 158° F) |
| | Humidity | IEC60068-2-78 (95%RH @ 40° C) | |
| | Vibration (5 ~ 500Hz) | IEC60068-2-6 (0.002G2/Hz, 1Grms) | |
| | Shock | IEC60068-2-27 (10G, 11ms) | |
| | Altitude | 4000m above sea level | 10,000m above sea level |
| Regulatory | Conformance | UL94V0, FCC Class B, CE, RoHS & WEEE Ready | |
| | NEBS Level 3 | Designed to meet GR-63-CORE and GR-1089-CORE | |

Ordering Information

| Part Number ⁽²⁾ | Description |
|----------------------------|--|
| SMM-5060P1-M4E | Netarium™ system management module with Intel® Atom™ Processor C2558 module, 4GB DDR3 with ECC, 2x M0300 64GB SSDs, 2x USB host ports, 2x GbE uplink ports |
| SMM-5060P2-M2E | Netarium™ system management module with Intel® Atom™ Processor C2358 module, 2GB DDR3 with ECC, 2x M0300 32GB SSDs, 2x USB host ports, 2x GbE uplink ports, no system mount SATA interfaces to backplane |
| SMM-5060B1-M1E | Netarium™ shelf management module. No Intel processor module, 1x GbE uplink port |

NOTE 1: Operating Temperature: depends on the actual air flow through the ShMM slot. Numbers based on Advantech Netarium™ series

NOTE 2: Two main SKUs are available – one basic SKU provisioning PICMG3.0 compliant shelf management functions, the other SKU contains an x86-based module to provide advanced system management functions

NOTE 3: Contact your regional Advantech NCG representative for detailed information, including other system memory and SSD configurations.