ADVANTECH

ASR-1000K-00A1E
JBOD Kit for HPC-8xxx Series Chassis
Startup Manual

Packing List

Before you begin installing your card, please make sure that the following items have been shipped:

- Startup manual x 1
- China RoHS x 1
- mSAS-HD 8643 to 8643 cables x 2
- Mylar for HPC-8316 front panel LED x 1
- Mylar for HPC-8212/8224/8424 front panel LED x 1
- Mylar for HPC-8212/8224/8424 front panel USB x 1
- 2.5" HDD metal cover for HPC-8316 x 1
- Screws of 2.5" HDD cover x 3

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

Note: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: http://www.adobe.com/downloads/ (Acrobat is a trademark of Adobe)

Specifications

Standard Functions

- **Max Storage:** 72 SAS/SATA HDDs, storage daisy chain support
- **Host Interface:** SAS 12G x 4 wide-ports
- **Connect to Disk:** SAS 12G interface
- **MiniSAS HD SFF-8644 Port:** 2 (In/Out)
- **Front Button:** Power, Mute

Note: Buzzer is warning while the system fault LED is on caused by any of HDD/SAS Expander/PSU/Fan/Overheat failure or abnormal voltage, till the mute button is pressed.

- **Front LED:** Power (blue/blinking/off), System fault (red/off), Fan fault (red/off), Overheat (red/off)
- **Smart Fan Control**

Mechanical and Environmental

- **Dimensions (W x H x D):** 175 x 53.2 x 181.77 mm
  130 x 170 mm (board only)
- **Operating temperature:** 0 ~ 35 °C
- **Storage Temperature:** -40 ~ 60 °C
- **Vibration (non-operating):** 0.25 Grms
- **Certification:** CE, FCC
- **Weight:** 0.5 kg (board with bracket)

For more information on this and other Advantech products, please visit our website at:

http://www.advantech.com

For technical support and service, please visit our support website at:

http://www.advantech.com/support

This manual is for the ASR-1000K-00A1E series.

Jumpers and Connectors

The board has a number of jumpers that allow you to configure your system to suit your application. The table below lists the function of each jumper and connector.

Connector list	
Label	**Function**
ATXPWR1	ATX main power connector (24-pin)
SYSFAN0~SYSFAN3	System FAN connector (4-pin)
CN3, CN4	External MiniSAS HD SFF-8644 connector to Host
CN5, CN6	Internal MiniSAS HD SFF-8643 connector to Expander
CN7	Power/System fault LED connector (2x5-pin)
CN8	Fan / Overheat LED connector (5-pin)
CN10	Mute button connector (2-pin)
CN11	Power button connector (2-pin)
CN1	Power supply's mute connector (2-pin)
PCN6	Power supply's TTL connector (2-pin with housing)
BZ_SEL1	Buzzer (2-3 Closed: On as default, 1-2 Closed: Always mute)
SW1	Smart fan for HPC-8xxx chassis support
JCASE1	Reserved (1-2 Closed: No function as default)
PSOC_UR1	For debug purpose (4-pin)
UPDATE_CON1	For firmware update (5-pin)
SMB_CON2	For debug purpose (4-pin)

Note: Please connect the SYSFAN0~SYSFAN3 connectors in the correct sequence. For example, if there are four fans in the chassis to be connected, correct method would be to connect them into SYSFAN0, SYSFAN1, SYSFAN2 and SYSFAN3. If fans are connected out of sequence, alarm will not function correctly.

Hardware Switch	
SW1	Pin1 OFF / ON (HPC-8212)
	Pin2 OFF / ON (HPC-8224)
	Pin3 OFF / ON (HPC-8316)
	Pin4 OFF / ON (HPC-8424)
SW5	Pin1 OFF
	Pin2 OFF
	Pin3 ON
	Pin4 ON
	Pin5 OFF
	Pin6 OFF
SW6	Pin1 OFF
	Pin2 OFF
	Pin3 ON
	Pin4 ON
	Pin5 OFF
	Pin6 OFF
SW7	Pin1 ON
	Pin2 OFF
	Pin3 OFF
	Pin4 ON
	Pin5 OFF
	Pin6 OFF

Declaration of Conformity

This device complies with the requirements in Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation

Board Layout & Installation
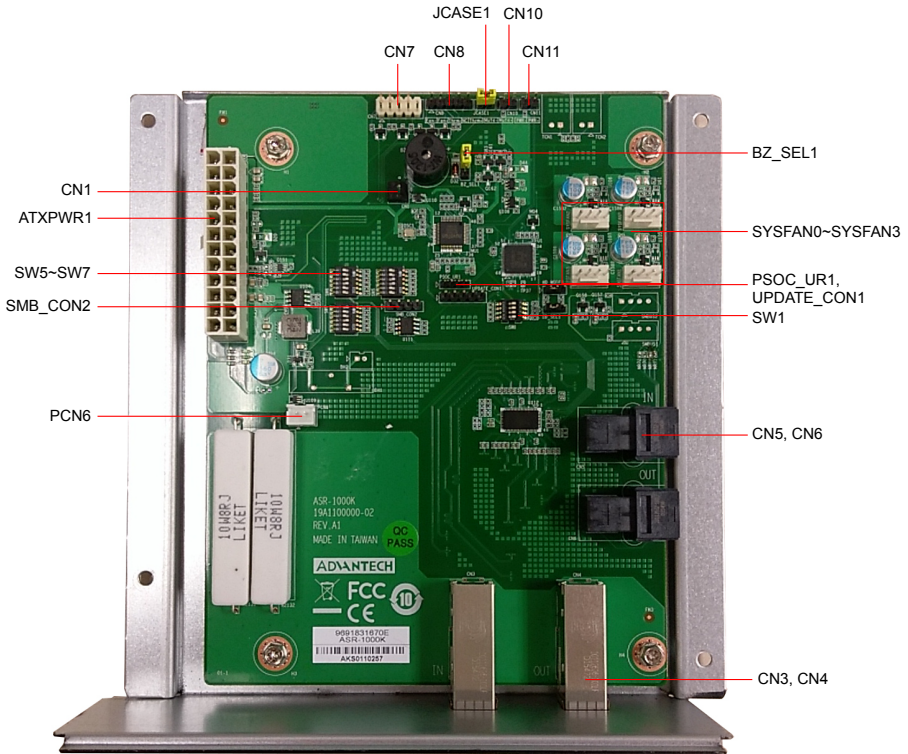
Board Layout & Installation: Jumper and Connector Locations

Install to HPC-8xxx chassis and fix following the steps below:

1. Check SW 1 setting to match the supported chassis
2. Fix the JBOD kit into HPC-8xxx chassis with screws
3. Connect SYSFAN0~ SYSFAN3 with chassis fans
4. Connect CN5/CN6 with internal MiniSAS cables
5. Connect CN7, CN8 to chassis Power/System fault/Fan/ Overheat LEDs
6. Connect CN10/CN11 to chassis Mute/Power buttons
7. Connect CN1 with power supply Mute
8. Connect PCN6 with power supply TTL
9. Connect ATXPWR1 with power supply