廣橋科技股份有限公司
Antrada Technology Co.,Ltd.

Antrada

AA-SASE-3612L

SAS Expander
12 Gb/s
Low profile

User's Manual

Ver. 1.0

May / 19 / 2015

www.antrada.com.tw

Antrada Technology Co., Ltd.   **www.antrada.com.tw**

Copyright

Copyright © 2015 Antrada Technology Co., Ltd.. All rights reserved.

Unless otherwise indicated, all materials in this manual are copyrighted by Antrada Technology Co., Ltd.. All rights reserved. No part of this manual, either text or image may be used for any purpose other than internal use within purchasing company. Therefore, reproduction, modification in any form or by any means, electronic, mechanical or otherwise, for reasons other than internal use, is strictly prohibited without prior written permission.

Antrada Technology Co., Ltd. reserves the right to make improvement and modification to the products indicated in this manual at any time. Specifications are therefore subject to change without prior notice.

Information provided in this manual is intended to be accurate and reliable. However, Antrada Technology Co., Ltd. assumes no responsibility for its use, nor for any infringements upon the rights of third parties, which may result from its use.

Technical Support

Antrada works hard to offer our customers maximum performance from our chassis.

But in case you have any problem with our product you can find supports from the following resources.

Email Support

contact Information is as following:

jeffkao@antrada.com.tw

edwardliu@antrada.com.tw

Phone Support

contact Information is as following:

Tel: 886-2-8647-2746 #101

886-2-8647-2746 #104

Fax: 886-2-8647-2745

Antrada Technology Co., Ltd.   **www.antrada.com.tw**

Technical Specifications

Mini-SAS HD Ports	**Internal Input from SAS RAID Card：4-port (1x Mini-SAS HD)** **Internal Output to Backplane：24-port (6x Mini-SAS HD)** **External Input from Host：4-port (1x Mini-SAS HD)** **External Output to Storage Center：4-port (1x Mini-SAS HD)**
Number of Supported SAS / SATA in directly	**24 HDDs (Internal connection)**
Mechanical Dimension	**200.00 mm x 106.64 mm**
Power Connector	**4-Pin Connector**
Power Consumption	**30 Watts**
Operating Temperature	**0~50 ℃ (32~122 ℉)**
Relative Humidity	**20%~90%, non-condensing**

Features

General

- **Flexible application of 36-port Standard SAS Expander Card**
- **Support HDD Failure / Activity Indication and HDD ID Mapping**
- **Mechanical fitting compatible with motherboard PCI-Express 1X, 4X, 8X, 16X slots**
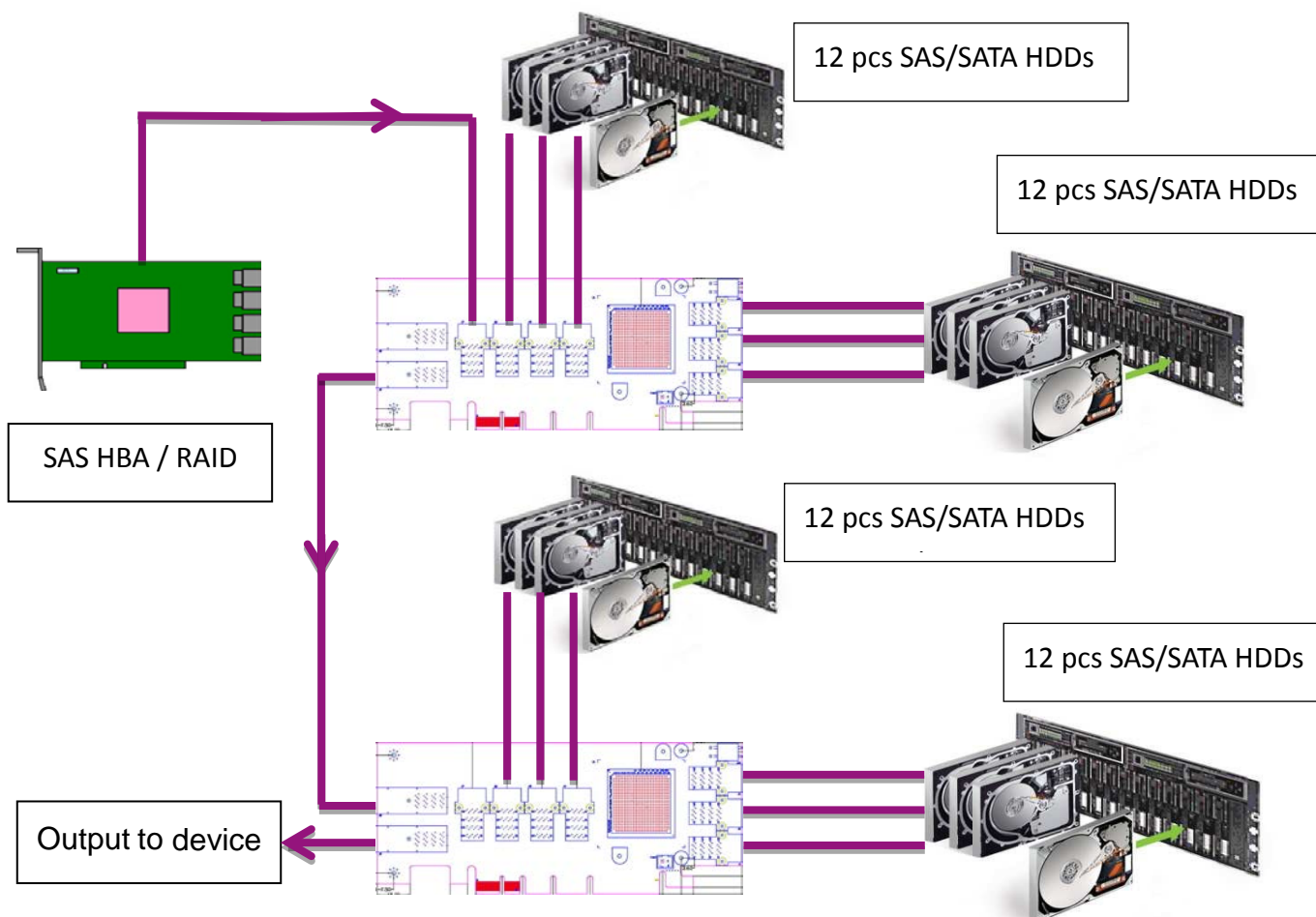- **Low profile.**

High-Speed I/O

- **12.0 Gbit/s or 6.0 Gbit/s or 3.0 Gbit/s operations**
- **Automatic negotiation of linking speed**

Application

- **SAS / SATA HDD NAS storage sever or enclosure**
- **Security system / data storage**
- **CAD/CAM engineering / scientific modeling**
- **Video streaming / editing workstation**

廣橋科技股份有限公司
Antrada Technology Co.,Ltd.

Introducing the SAS Expander Card

SAS expander card expands one SAS address to a number of additional ports. It is an optimal device for usage in data centers.

12 pcs SAS/SATA HDDs

12 pcs SAS/SATA HDDs

SAS HBA / RAID

12 pcs SAS/SATA HDDs

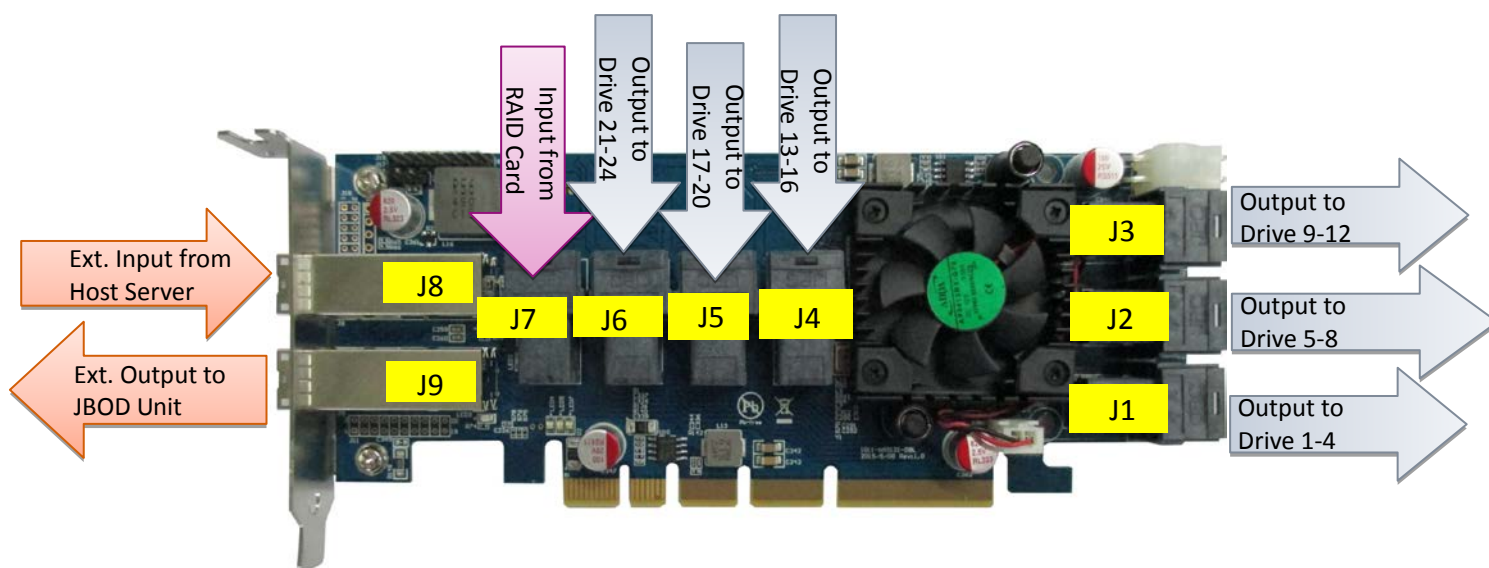12 pcs SAS/SATA HDDs

Output to device

The Antrada 36-port Standard SAS expander card provides high performance, high disk drive connectivity, scalability and flexibility in various storage environments. It is a valuable solution to other expansive and complex topologies. The SAS expander is ideal for high availability, scalable server clustering environments, front-end storage subsystems used in clusters, SANs and NAS environments.

The Antrada SAS Expander is based on LSI LSISAS3x36-R IC that enables the connection of multiple drive devices in directly attached SAS or SATA. Each expander PHY performs SAS and SATA transfer rate at 12.0Gbit/s or 6.0 Gbit/s or 3.0 Gbit/s with individual configurations. The SAS expander IC supports the Serial SCSI Protocol (SSP), SATA Tunneled Protocol (STP) and Serial Management Protocol (SMP). Those are based on SAS protocol and described in the SAS standard V1.0, V1.1, V2.0 and V3.0.

Antrada Technology Co., Ltd.   **www.antrada.com.tw**

廣橋科技股份有限公司
Antrada Technology Co.,Ltd.

SAS Expander Card Hardware

SAS Expander Card Layout

Input from RAID Card

Output to Drive 21-24

Output to Drive 17-20

Output to Drive 13-16

Ext. Input from Host Server

Ext. Output to JBOD Unit

J8

J9

J7

J6

J5

J4

J3

J2

J1

Output to Drive 9-12

Output to Drive 5-8
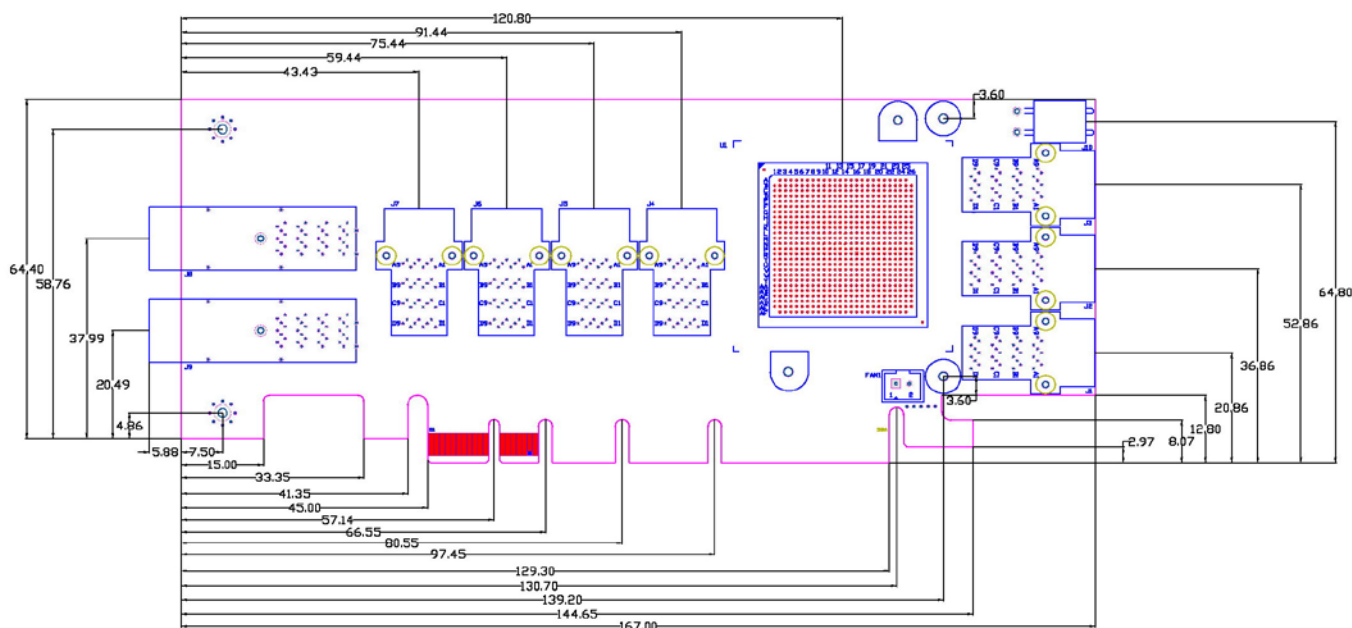
Output to Drive 1-4

Connectors

[J8]：Mini-SAS HD Connector – External Input from Host Server

[J9]：Mini-SAS HD Connector – External Output to JBOD unit

[J7]：Mini-SAS HD Connector – Input from SAS HBA/RAID Card

[J1-J6]：Mini-SAS HD Connectors – Output to SAS/ SATA Drive,
Support SGPIO.

Mechanical Dimension

Antrada Technology Co., Ltd.

廣橋科技股份有限公司
Antrada Technology Co.,Ltd.

Mini-SAS Cables Option

The Mini-SAS backplane provides most benefits to users using the same backplane to support various SAS/SATA RAID card via different conversion cables.

(A) mini SAS HD SFF-8643 to mini SAS HD

(B) mini SAS HD SFF-8644 to mini SAS HD

Antrada Technology Co., Ltd.

www.antrada.com.tw