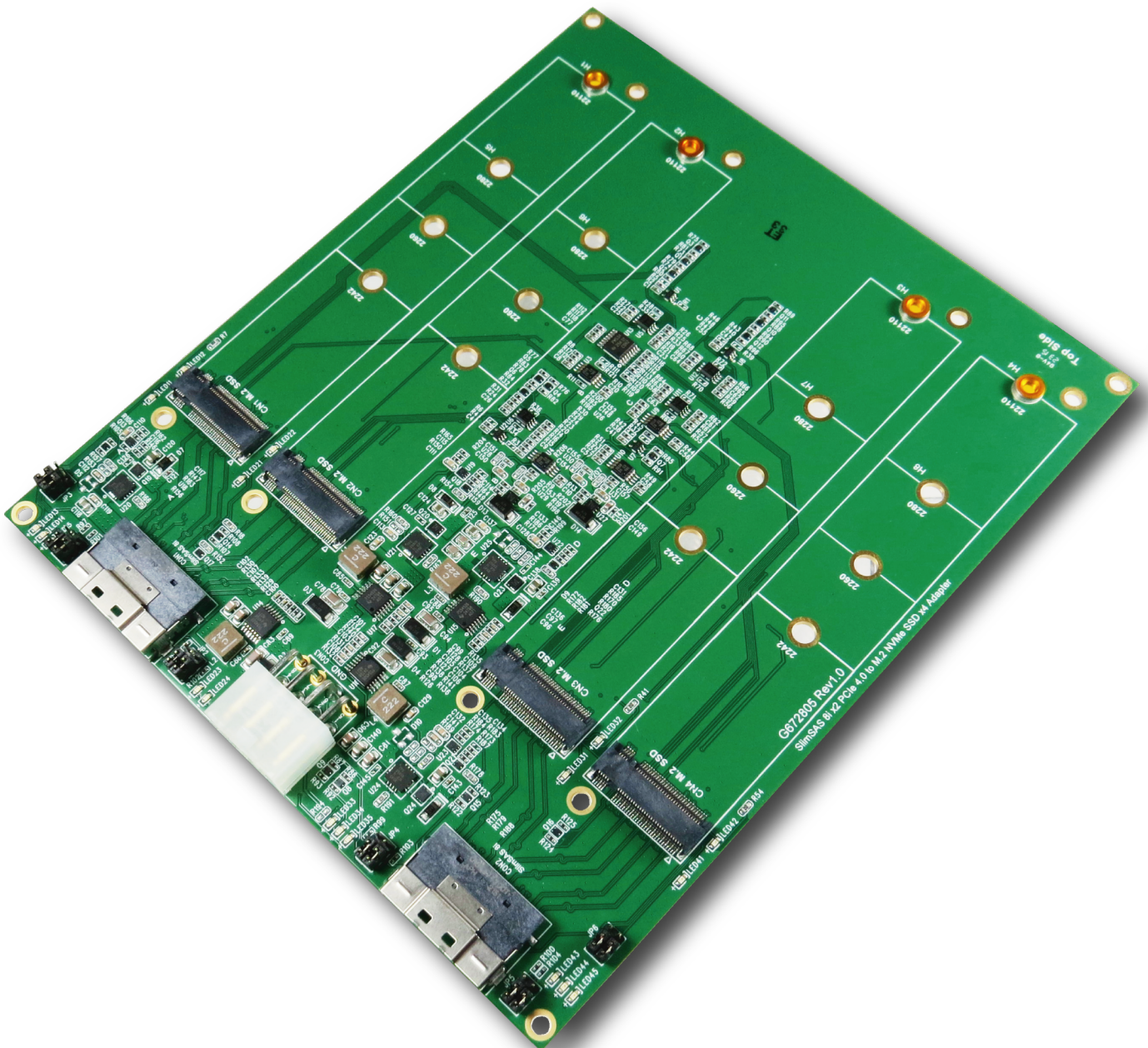


Minerva

GD9608A

SlimSAS 8i x2 PCIe 4.0 for M.2 Quad Port Adapter



SlimSAS 8i x2 PCIe 4.0 for M.2 Quad Port Adapter

Features

- ※ M.2 quad port to SlimSAS 8i(SFF-8654) dual port convert
- ※ Built-in two SFF-8654 8i connector, pin-out defined by SFF-9402 Rev1.1
- ※ Built-in four M.2 M-key connector
- ※ 12V to 3.3V PWM synchronous buck converter Power for individual M.2 connector
 - ◆ 5.5A maximum output current
 - ◆ Over Current Protection
 - ◆ Under Voltage Protection
 - ◆ Under voltage lock out protection (UVLO) monitors
 - ◆ Thermal shutdown protection
 - ◆ ESD Human Body Mode(HBM)/2KV
- ※ Built-in 3.3V Hot Plug Power with eFuse protection for individual M.2 connector
 - ◆ Programmable Current Limit: 6.5A
 - ◆ Programmable Inrush Current Slew Rate
 - ◆ Thermal shutdown protection and fault alert
 - ◆ Back-to-Back (B2B) FET Operation
- ※ Supports M.2 PERST# Signal 3.3V and 1.8V voltage level shift
- ※ Supports M.2 CLKREQ# Signal 3.3V and 1.8V voltage level shift
- ※ Supports M.2 WAKE# Signal 3.3V and 1.8V voltage level shift
- ※ Supports M.2 /1.8V to PCIe/3.3V SMB_CLK, SMBDATA Level Shift
- ※ Supports M.2 /1.8V to PCIe /3.3V SMB_CLK, SMB_DATA isolated, repeater
- ※ LED11, LED21, LED31, LED41 Green LED on indicates M.2 NVMe SSD power ready
- ※ LED12, LED22, LED32, LED42 RED LED Blinking indicates M.2 active status
- ※ LED13, LED23, LED33, LED43 Green OFF indicates PERST# Normal (Function intentionally inverted)
- ※ LED14, LED24, LED34, LED44 Green OFF indicates WAKE# Normal (Function intentionally inverted)
- ※ LED15, LED25, LED35, LED45 Green OFF indicates CLKREQ# Normal (Function intentionally inverted)

Specifications

- ※ Compliant with NVM Express 1.3a
- ※ Support PCI Express Base Specification Rev 4.0
- ※ Compliant with PCI Express M.2 Specification Version 1.2
- ※ Compliant with SFF-TA-1001 Rev1.1
- ※ Compliant with SFF-8654 Rev1.2
- ※ Compliant with SFF-9402 Rev1.1

Supports the following form factor M.2(NGFF) SSD

- ※ Type 2242-D2-B-M: 42mm(L) x 22mm(W)
- ※ Type 2260-D2-B-M: 60mm(L) x 22mm(W)
- ※ Type 2280-D2-B-M: 80mm(L) x 22mm(W)
- ※ Type 22110-D2-B-M: 110mm(L) x 22mm(W)

SlimSAS 8i x2 PCIe 4.0 for M.2 Quad Port Adapter

Supports the following Broadcom series products

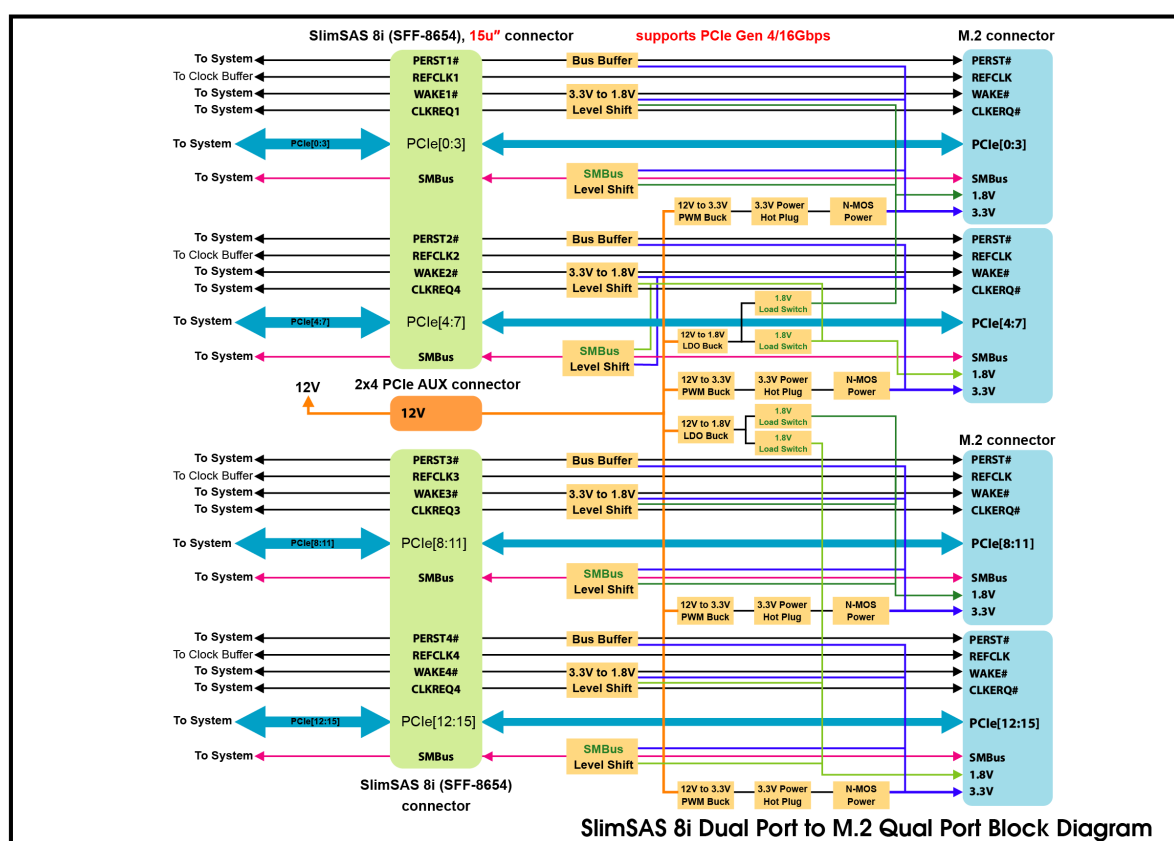
※ Broadcom 96xx PCIe 4.0, 24G SAS MegaRAID and eHBA Tri-Mode Storage Adapters:

MegaRAID 9670W-16i
MegaRAID 9670-24i
MegaRAID 9660-16i
eHBA 9620-16i
eHBA 9600-24i
eHBA 9600-16i
eHBA 9600-8e8i

※ Broadcom 95xx PCIe 4.0 MegaRAID and HBA Tri-Mode Storage Adapters:

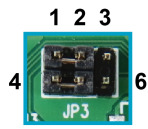
MegaRAID 9560-16i
MegaRAID 9560-8i
MegaRAID 9580-8i8e
HBA 9500-16i
HBA 9500-8i
P411W-32P

Block Diagram

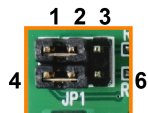


SlimSAS 8i x2 PCIe 4.0 for M.2 Quad Port Adapter

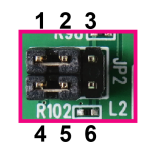
The switches settings are as noted below



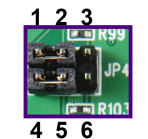
JP3 For M.2/CN1 & M.2/CN2--3.3V & 1.8V SETUP			
1-2	Short	3.3V_SSD1(M.2/CN1)	Default
2-3	Short	1.8V_SSD1(M.2/CN1)	
4-5	Short	3.3V_SSD2(M.2/CN2)	Default
5-6	Short	1.8V_SSD2(M.2/CN2)	



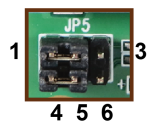
JP1 For M.2/CN1 SETUP			
1-2	Short	no define	Default
2-3	Short	For Broadcom setup	
4-5	Short	CLKREQ1# tied to CN1_M.2 pin52	Default
5-6	Short	For Broadcom setup	



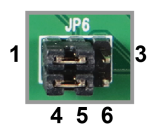
JP2 For M.2/CN2 SETUP			
1-2	Short	no define	Default
2-3	Short	For Broadcom setup	
4-5	Short	CLKREQ2# tied to CN2_M.2 pin52	Default
5-6	Short	For Broadcom setup	



JP4 For M.2/CN3 SETUP			
1-2	Short	no define	Default
2-3	Short	For Broadcom setup	
4-5	Short	CLKREQ3# tied to CN3_M.2 pin52	Default
5-6	Short	For Broadcom setup	



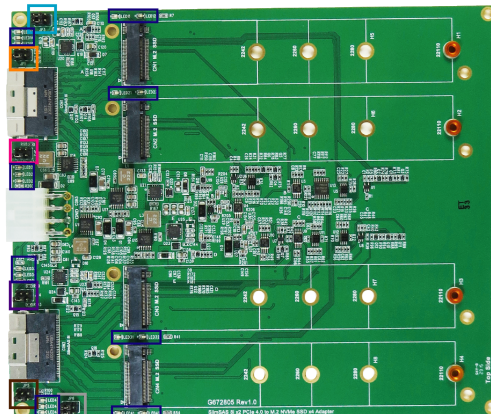
JP5 For M.2/CN2 SETUP			
1-2	Short	no define	Default
2-3	Short	For Broadcom setup	
4-5	Short	CLKREQ4# tied to CN4_M.2 pin52	Default
5-6	Short	For Broadcom setup	



JP6 For M.2/CN3 & M.2/CN4--3.3V & 1.8V SETUP			
1-2	Short	3.3V_SSD3(M.2/CN3)	Default
2-3	Short	1.8V_SSD3(M.2/CN3)	
4-5	Short	3.3V_SSD4(M.2/CN4)	Default
5-6	Short	1.8V_SSD4(M.2/CN4)	

M.2/CN1 LED	
LED11	M.2/CN1: 3.3V
LED12	M.2/CN1: Active
LED13	M.2/CN1: PERST#
LED14	M.2/CN1: WAKE#
LED15	M.2/CN1: CLKREQ#

M.2/CN2 LED	
LED21	M.2/CN2: 3.3V
LED22	M.2/CN2: Active
LED23	M.2/CN2: PERST#
LED24	M.2/CN2: WAKE#
LED25	M.2/CN2: CLKREQ#



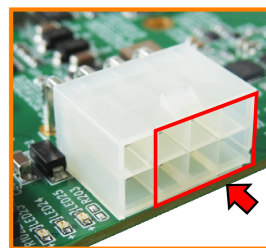
M.2/CN3 LED	
LED31	M.2/CN3: 3.3V
LED32	M.2/CN3: Active
LED33	M.2/CN3: PERST#
LED34	M.2/CN3: WAKE#
LED35	M.2/CN3: CLKREQ#

M.2/CN4 LED	
LED41	M.2/CN4: 3.3V
LED42	M.2/CN4: Active
LED43	M.2/CN4: PERST#
LED44	M.2/CN4: WAKE#
LED45	M.2/CN4: CLKREQ#

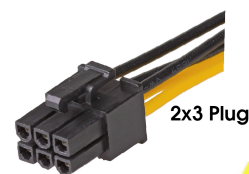
GD9608A 2x4 Auxiliary Power Connector

PCIe 2x4 Auxiliary Power PCIe_CEM_SPEC_R4_V1_0		
6-Position Cable Assembly	8-Position Cable Assembly	8-Position PCB Header

2x3 Plug Mating with a 2x4 Receptacle



2x4 Receptacle



2x3 Plug

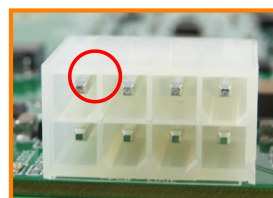
OR



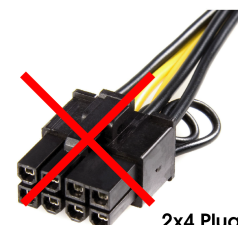
2x4 Plug

OK

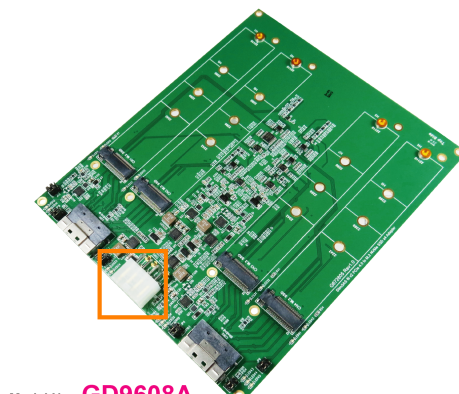
2x4 Plug is **Physically Prevented** from Mating with a 2x4 Receptacle



2x4 Receptacle



2x4 Plug



Model No.: **GD9608A**
SlimSAS 8i dual port **PCIe4.0** to M.2 NVMe SSD 4-Port Adapter