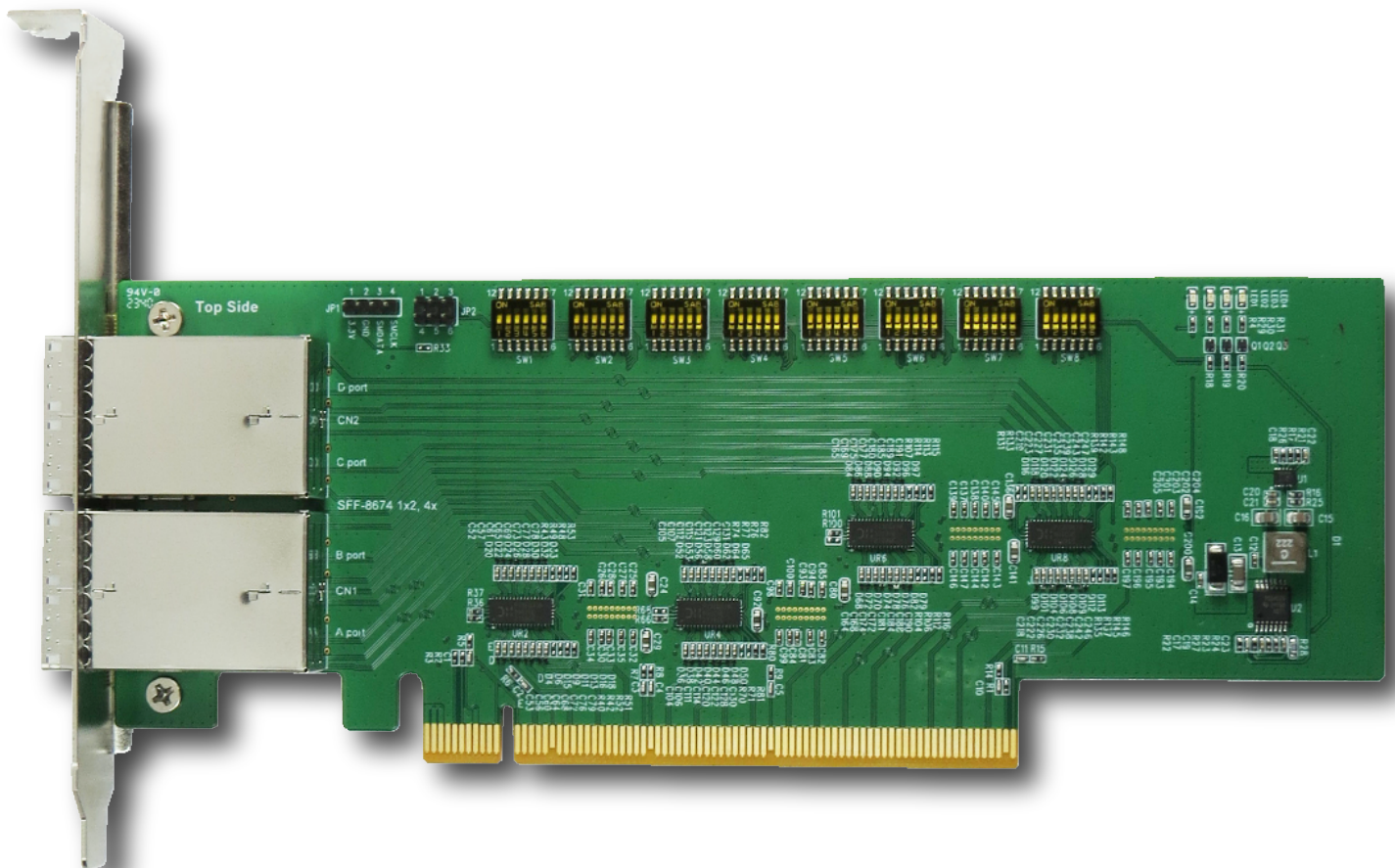


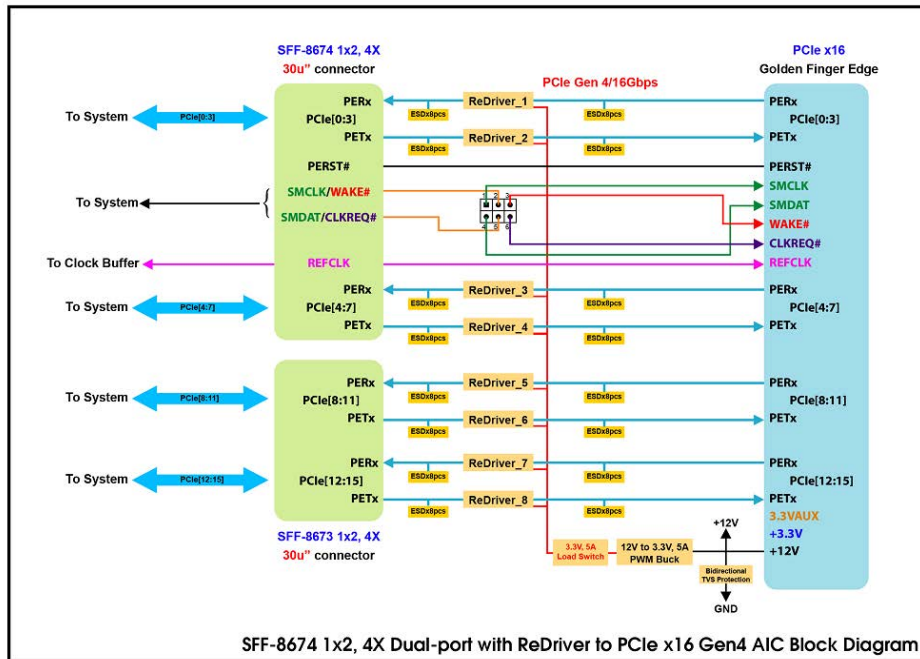
Innocard Minerva

DP7606

**External Mini SAS HD 1x2, 4X (SFF-8674) Dual-port
with ReDriver to PCIe x16 Gen4 AIC**



SFF-8674 1x2, 4X Dual-port with ReDriver to PCIe x16 Gen4 AIC



Features

- ※ External Mini SAS HD 1x2, 4X(SFF-8674) dual port to PCIe x16 Gen4 convert
- ※ Built-in SFF-8674 1x2, 4X dual port connector with 30u\"(0.38um) min Au mating area plating
- ※ Input +12V with TVS protection
- ※ Built-in 12V to 3.3V_IN, 5.5A PWM Power controller
- ※ Built-in 3.3V_IN Power Load Switch for ReDriver controller Power Protection.
- ※ PCIe 4.0 16-lane signals input and output with ESD protection
- ※ Built-in ReDriver to extend PCIe 4.0, 16GT/s 16 lanes differential pair signals and may provides programmable linear equalization, output swing and flat gain
- ※ The PCIe 16 lanes can be bifurcated into four x4 link width, or two x8 link width to support different system topologies
- ※ LED1 Green LED on indicates AIC ready
- ※ LED2 Red OFF indicates WAKE# Normal (Function intentionally inverted)
- ※ LED3 Red OFF indicates CLKREQ# Normal (Function intentionally inverted)
- ※ LED4 Red OFF indicates PERST# Normal (Function intentionally inverted)

Specifications

- ※ PCI Express Base Specification Rev 4.0
- ※ PCIe_CEM_SPEC_R4_V1_0_08072019_NCB
- ※ Compliant with SFF-8614 Rev3.5
- ※ Compliant with PCI_Express_External_Cabling_R3.0a_06042020_NCB

Applications

- ※ Rack server
- ※ Microserver and Tower server
- ※ High performance computing
- ※ Hardware accelerator
- ※ Storage Controller HBA(Host Bus Adapter)
- ※ Desktop PC/motherboard

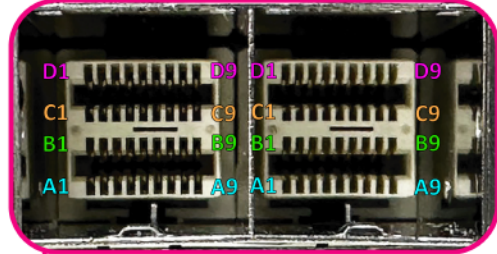


PCIe x16 Gen4 with ReDriver to SFF-8674 1x2, 4X Dual-port AIC

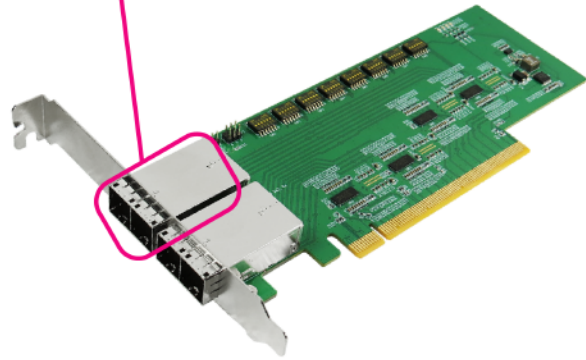
The following figure shows SFF-8674 1x2, 4X pin out

SFF-8674 1x1, 4X pin define

Device			
Pin#	Net	Pin#	Net
C1	SMDAT/CLKREQ#	D1	NC
C2	SMCLK/WAKE#	D2	NC
C3	GND	D3	GND
C4	PERp0	D4	PERp1
C5	PERn0	D5	PERn1
C6	GND	D6	GND
C7	PERp3	D7	PERp2
C8	PERn3	D8	PERn2
C9	GND	D9	GND
A1	REFCLKn	B1	NC
A2	REFCLKp	B2	PERST#
A3	GND	B3	GND
A4	PETp0	B4	PETp1
A5	PETn0	B5	PETn1
A6	GND	B6	GND
A7	PETp3	B7	PETp2
A8	PETn3	B8	PETn2
A9	GND	B9	GND



PCIe 4.0 SFF-8674 1x2, 4X 30μ" Au plating connector



Model No.: **DP7606**
SFF-8674 1x2, 4X Dual-port with ReDriver to PCIe x16 Gen4 Adapter

The switches settings are as noted below

Model No.: **DP7606**
SFF-8674 1x2, 4X Dual-port with ReDriver to PCIe x16 Gen4 Adapter

JP1 SETUP

1-2	ON	SMCLK1	Default
4-5	ON	SMDAT1	setup
2-3	ON	WAKE1#	
5-6	ON	CLKREQ1#	

JP2

SW1

SW2

SW3

SW4

SW5

SW6

SW7

SW8

SW	Pin	Setting	Value
SW1	1-12	Output Swing Setting	on 0 800 mVp-p
			off 1 1200 mVp-p
SW2	2-11	Flat Gain Setting	on 0
			off 1
SW3	3-10	Flat Gain Setting	on 0
			off 1
SW4	3-10	Flat Gain Setting	on 0
			off 1
SW5	4-9	Equalization Setting	on 0
			off 1
SW6	EQ0	Equalization Setting	on 0
			off 1
SW7	5-8	Equalization Setting	on 0
			off 1
SW8	EQ1	Equalization Setting	on 0
			off 1
	6-7	Equalization Setting	on 0
			off 1
	EQ2	Equalization Setting	on 0
			off 1

Flat Gain Setting			
FG1	FG0	dB	
0	0	-3.5	
0	1	-2	
1	0	-0.5	
1	1	1	

Equalizer Setting (dB)						
EQ2	EQ1	EQ0	@1.25GHz	@2.5GHz	@4GHz	@8GHz
0	0	0	0.2	1.0	2.3	5.6
0	0	1	0.2	1.1	2.6	6.2
0	1	0	1.8	2.7	3.9	7.0
0	1	1	2.1	3.3	4.8	8.5
1	0	0	3.0	4.2	5.8	9.4
1	0	1	3.2	4.6	6.5	10.4
1	1	0	4.3	5.8	7.8	11.7
1	1	1	4.5	6.5	8.8	13.0

Default Value : {

- 1. Swing : High
- 2. Flat Gain : High
- 3. Equalization : High