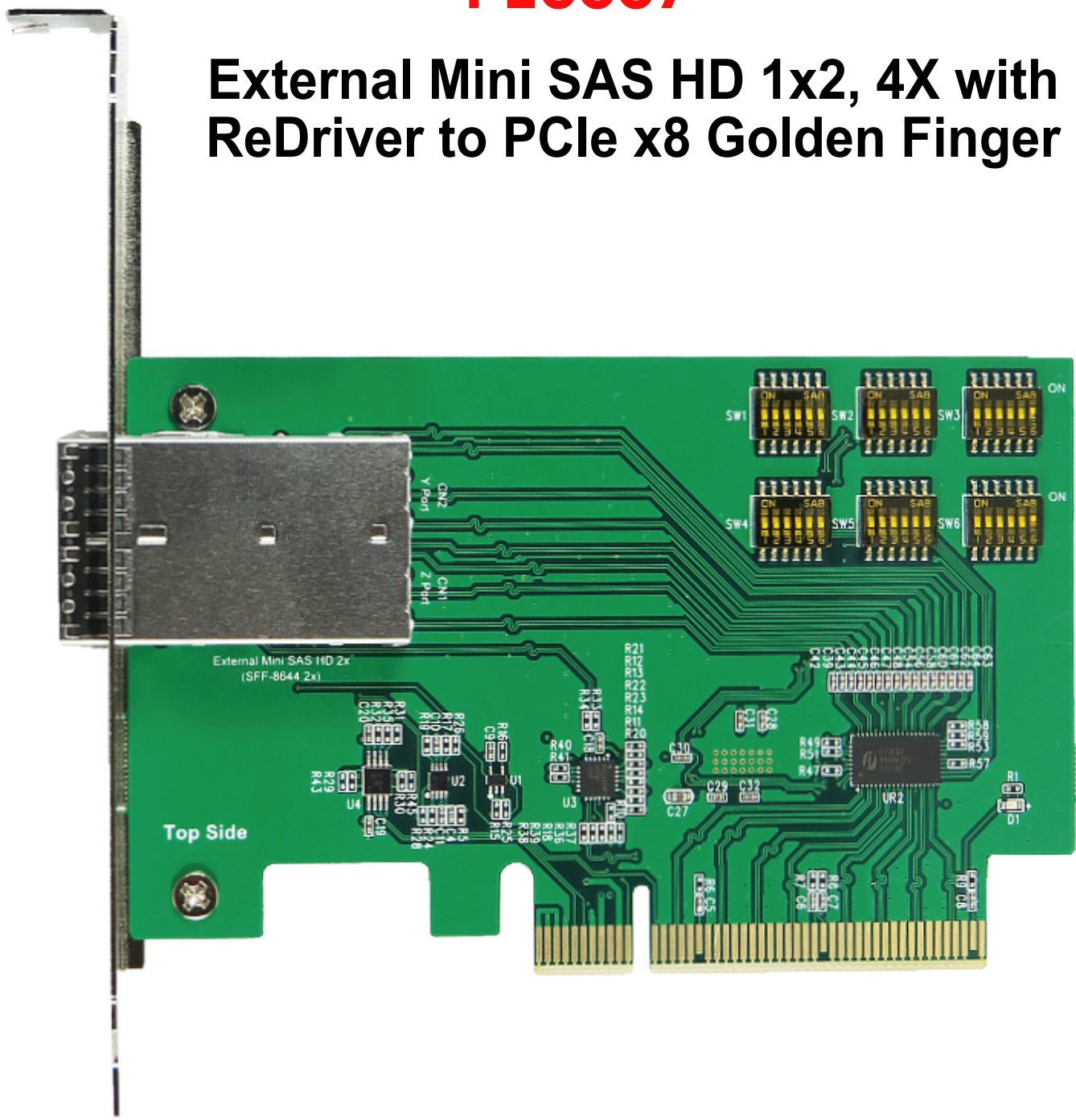


Minerva

PE0807

**External Mini SAS HD 1x2, 4X with
ReDriver to PCIe x8 Golden Finger**



External Mini SAS HD 1x2, 4X with ReDriver to PCIe x8 Golden Finger

Features

- ※ External Mini SAS HD 1x2(4X) to PCIe x8 GF Gen 3 convert
- ※ Built-in SFF-8644 1x2(4X), 30 microinches connector
- ※ Built-in ReDriver to extend PCIe 3.0, 8GT/s differential pair signals 8 lanes data link widths and provides programmable linear equalization, output swing and gain.
- ※ Built-in PCIe 100MHz Clock buffer to drive longer trace length and longer cable length.
- ※ Built-in PCIe SMCLK, SMDAT bidirectional buffer repeater
- ※ Built-in PERST# Bus Buffer Gate to be used over longer trace length and over longer cable length.
- ※ Built-in WAKE# Bus Buffer Gate to be used over longer trace length and over longer cable length.
- ※ Built-in CLKREQ# Bus Buffer Gate to be used over longer trace length and over longer cable length.
- ※ D1 Green LED on indicates AIC ready

Specifications

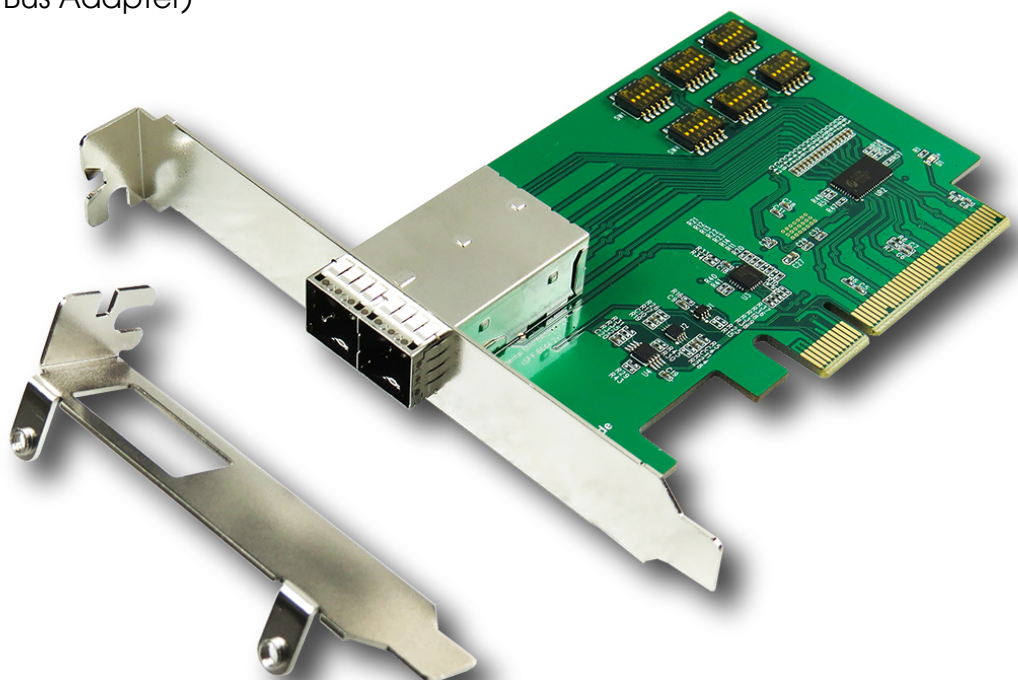
- ※ PCI Express Base Specification Rev 3.0
- ※ PCIe CEM Rev3.0
- ※ PCI_Express_External_Cabling_R3.0a_06042020_NCB

Applications

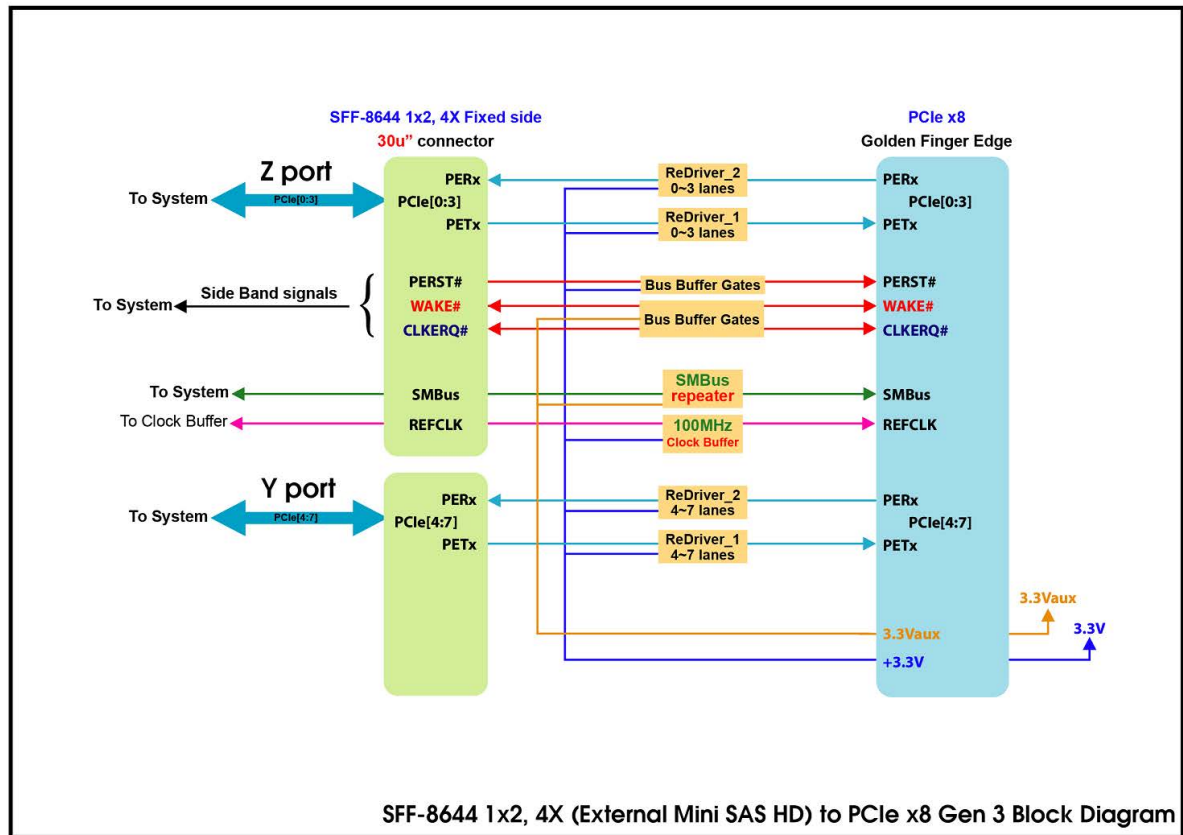
- ※ Rack server
- ※ Microserver and Tower server
- ※ High performance computing
- ※ Hardware accelerator
- ※ Storage Controller HBA(Host Bus Adapter)
- ※ Desktop PC/motherboard



SFF-8644 1x2, 4X



External Mini SAS HD 1x2, 4X with ReDriver to PCIe x8 Golden Finger



The switches settings are as noted below

SW1, SW2, SW3 For UR1 ReDriver Setup
SW4, SW5, SW6 For UR2 ReDriver Setup

Model No.: PE0807
 External Mini SAS HD 8x to
 PCIe x8 Gen3 Adapter

SW1 or SW4

Setting	1-12	EQA0	2-11	EQA1	3-10	EQA2	4-9	EQA3	5-8	EQA4	6-7	SW0
Equalization Setting in Bank A	on	off	on	off	on	off	on	off	on	off	on	off
Output Swing Setting	on	off	on	off	on	off	on	off	on	off	on	off

SW2 or SW5

Setting	1-12	FGA0	2-11	FGA1	3-10	FGA2	4-9	FGA3	5-8	FGA4	6-7	FGA5
Flat Gain in Bank A	on	off	on	off	on	off	on	off	on	off	on	off
Flat Gain in Bank B	on	off	on	off	on	off	on	off	on	off	on	off

SW3 or SW6

Setting	1-12	EQB0	2-11	EQB1	3-10	EQB2	4-9	EQB3	5-8	EQB4	6-7	EQB5
Equalization Setting in Bank B	on	off	on	off	on	off	on	off	on	off	on	off
ReDriver operation	on	off	on	off	on	off	on	off	on	off	on	off

Equalizer Setting (dB)

EQ2	EQ1	EQ0	1.25GHz	2.5GHz	4GHz
0	0	0	0.8	3.4	6.3
0	0	1	1	4	7.3
0	1	0	1.3	4.6	8.2
0	1	1	1.5	5.3	9
1	0	0	2.8	6.2	9.8
1	0	1	3	6.7	10.4
1	1	0	3.2	7.2	11.1
1	1	1	3.5	7.7	11.6
HIZ	0	0	4.4	8.4	12.2
HIZ	0	1	4.6	8.8	12.7
HIZ	1	0	4.8	9.2	13.1
HIZ	1	1	5	9.5	13.5
0	0	HIZ	6	10.3	14
0	1	HIZ	6.2	10.6	14.4
1	0	HIZ	6.4	10.9	14.7
1	1	HIZ	6.6	11.2	15

Output Swing Setting

Setting	0	900mV
1	1000mV	

Flat Gain Setting

FG1	FG0	dB
0	0	-4
0	1	-2
1	0	0
1	1	2

ReDriver operation

Setting	0	Enable UR1 ReDriver
1	Disable UR1 ReDriver	