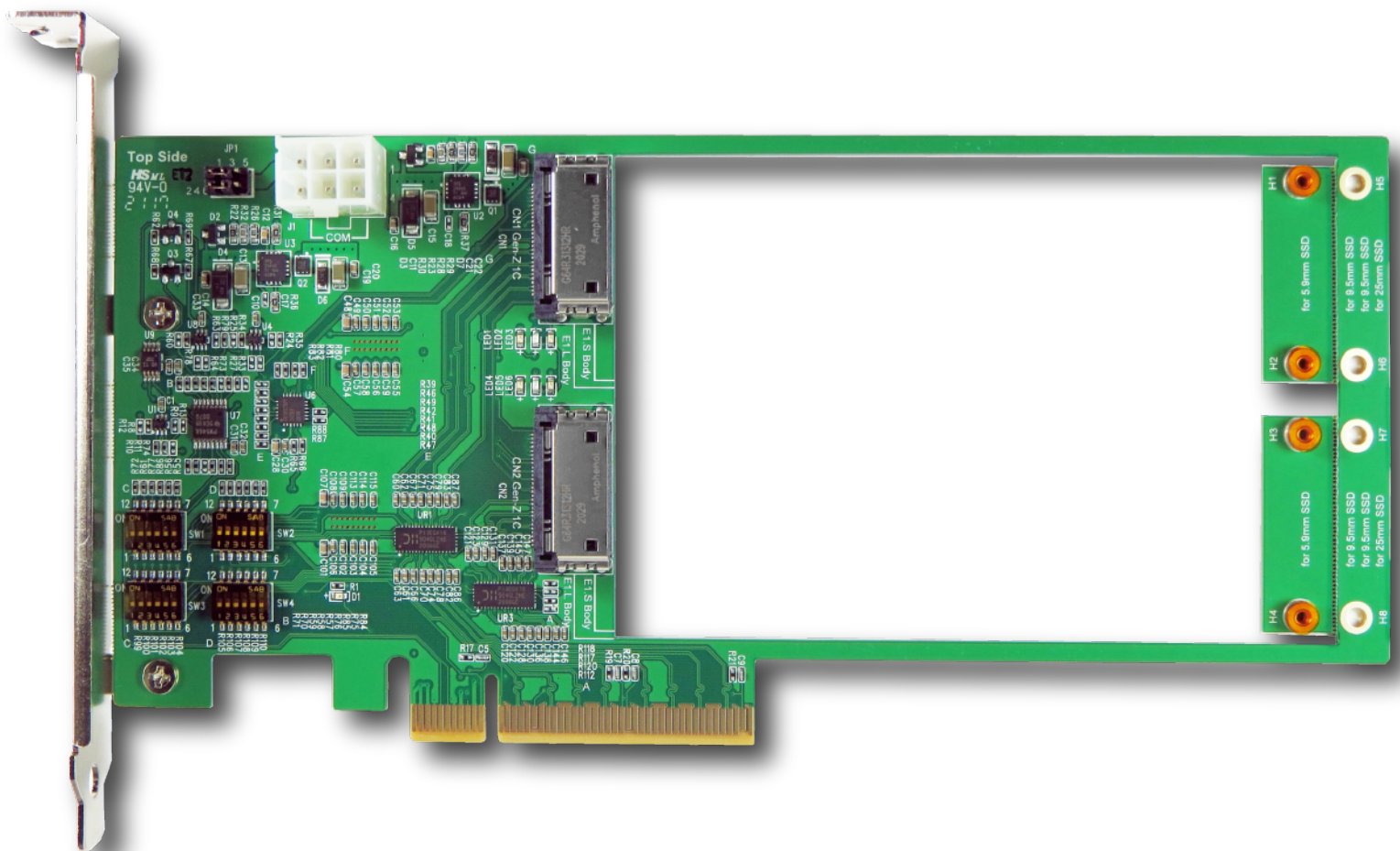


Innocard

Minerva

DP8503

PCIe x8 Gen4 with ReDriver to Gen-Z 1C (EDSFF) dual port



PCIe x8 Gen4 with ReDriver to Gen-Z 1C (EDSFF) dual port

Features

- ※ PCIe x8 can be bifurcated to Gen-Z 1C (EDSFF) dual port
- ※ Built-in EDSFF 1C with latch connector
- ※ Built-in PCIe ReDriver to extend PCIe Gen4, 16GT/s differential pair signals
- ※ Built-in 100MHz Clock buffer to drive longer trace lengths and longer cable
- ※ Built-in SMBus Switch with Reset Function(Address: 0xE2)
- ※ Built-in SMBUS I/O Expander(Fixed Address: 0x41)
- ※ Built-in PERST# Bus Buffer with Open-Drain output to be used over longer trace lengths and over longer cable
- ※ Built-in WAKE# Bus Buffer with Open-Drain output to be used over longer trace lengths and over longer cable
- ※ Built-in CLKREQ# Bus Buffer with Open-Drain output to be used over longer trace lengths and longer over cable
- ※ Built-in PWRBRK# Bus Buffer with Open-Drain output to be used over longer trace lengths and longer over cable

Specifications

- ※ PCI Express Base Specification Rev 4.0
- ※ PCIe_CEM_SPEC_R4_V1_0_08072019_NCB
- ※ Support SSD_Form_Factor_Version1_a
- ※ Compliant with SFF-TA-1002 Specification Version 1.3
- ※ Compliant with SFF-TA-1006 Specification Version 1.4
- ※ Compliant with SFF-TA-1009 Specification Version 3.0
- ※ Compliant with SFF-TA-1020 Specification Version 1.0

Supports the following form factor EDSFF 1C(Gen-Z) 1C SSD

- ※ EDSFF 1C(Gen-Z) E1.S 5.9mm Height
- ※ EDSFF 1C(Gen-Z) E1.S 9.5mm Height
- ※ EDSFF 1C(Gen-Z) E1.S 15mm Height
- ※ EDSFF 1C(Gen-Z) E1.S 25mm Height

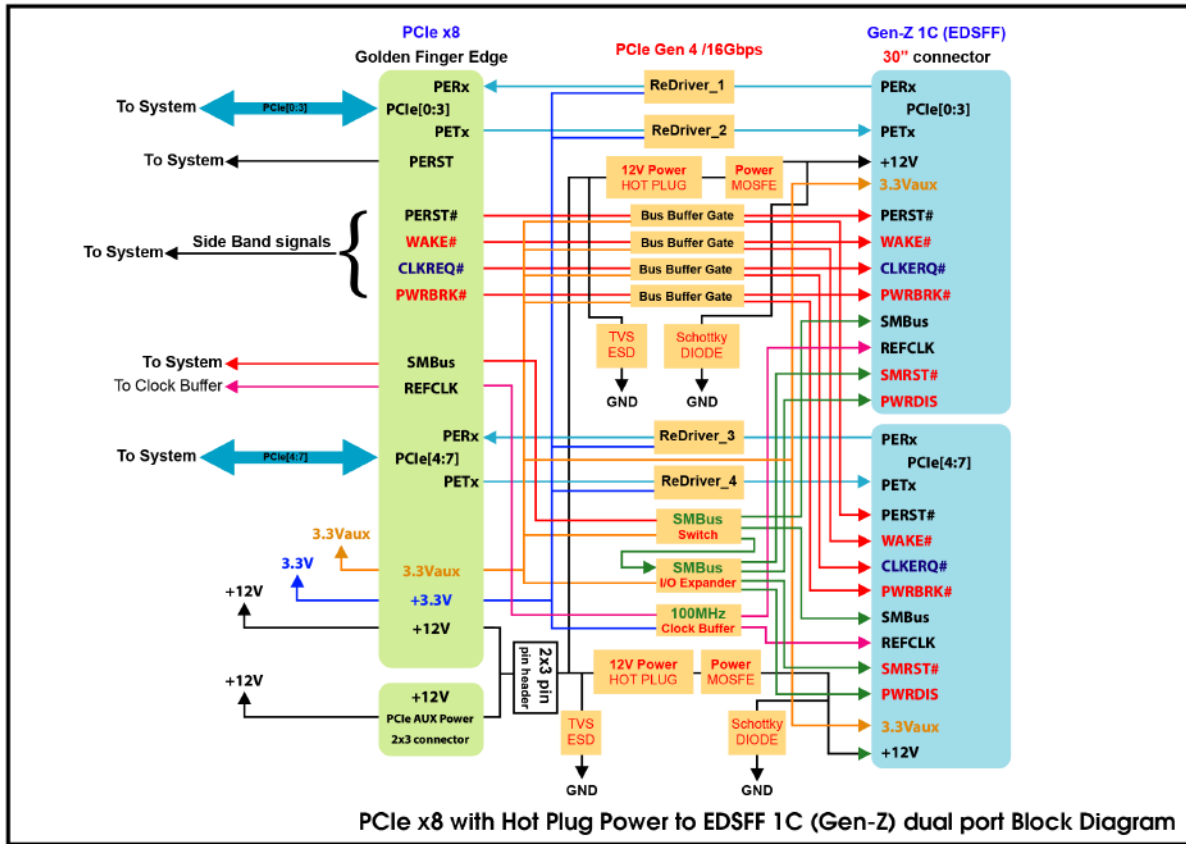
Operating system support

- ※ Windows 7
- ※ Windows 8 &8.1
- ※ Windows 10
- ※ UEFI 2.3.1 or later

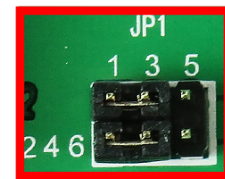
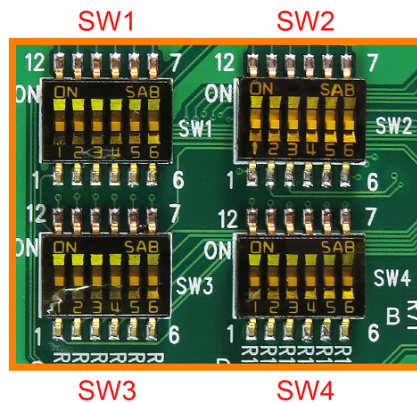
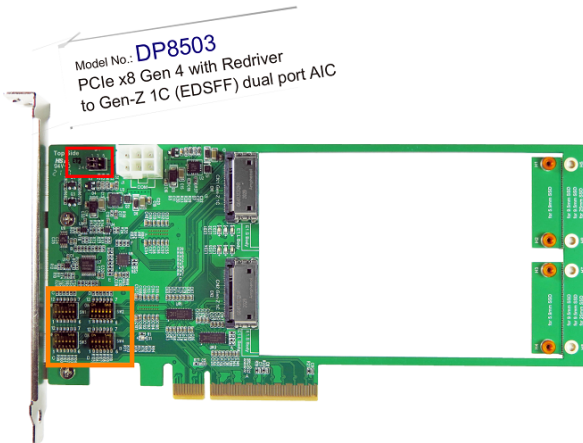
Applications

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

PCIe x8 Gen4 with ReDriver to Gen-Z 1C (EDSFF) dual port



The switch settings of DP8503 are as belows



JP1	
1-3	ON
2-4	ON
3-5	ON
4-6	ON

SW	Pin Range	Setting	Value	Output	
SW1	2-11	Output Swing Setting	on	0	
		FG0	off	1	
SW2	3-10	Flat Gain Setting	on	0	
		FG1	off	1	
SW3	4-9	Equalization Setting	EQ0	on	0
			EQ1	off	1
SW4	5-8	EQ0	on	0	
		EQ1	off	1	
SW4	6-7	EQ2	on	0	
		EQ2	off	1	

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

Default Value : { 1. Swing : High
2. Flat Gain : High
3. Equalization : High

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