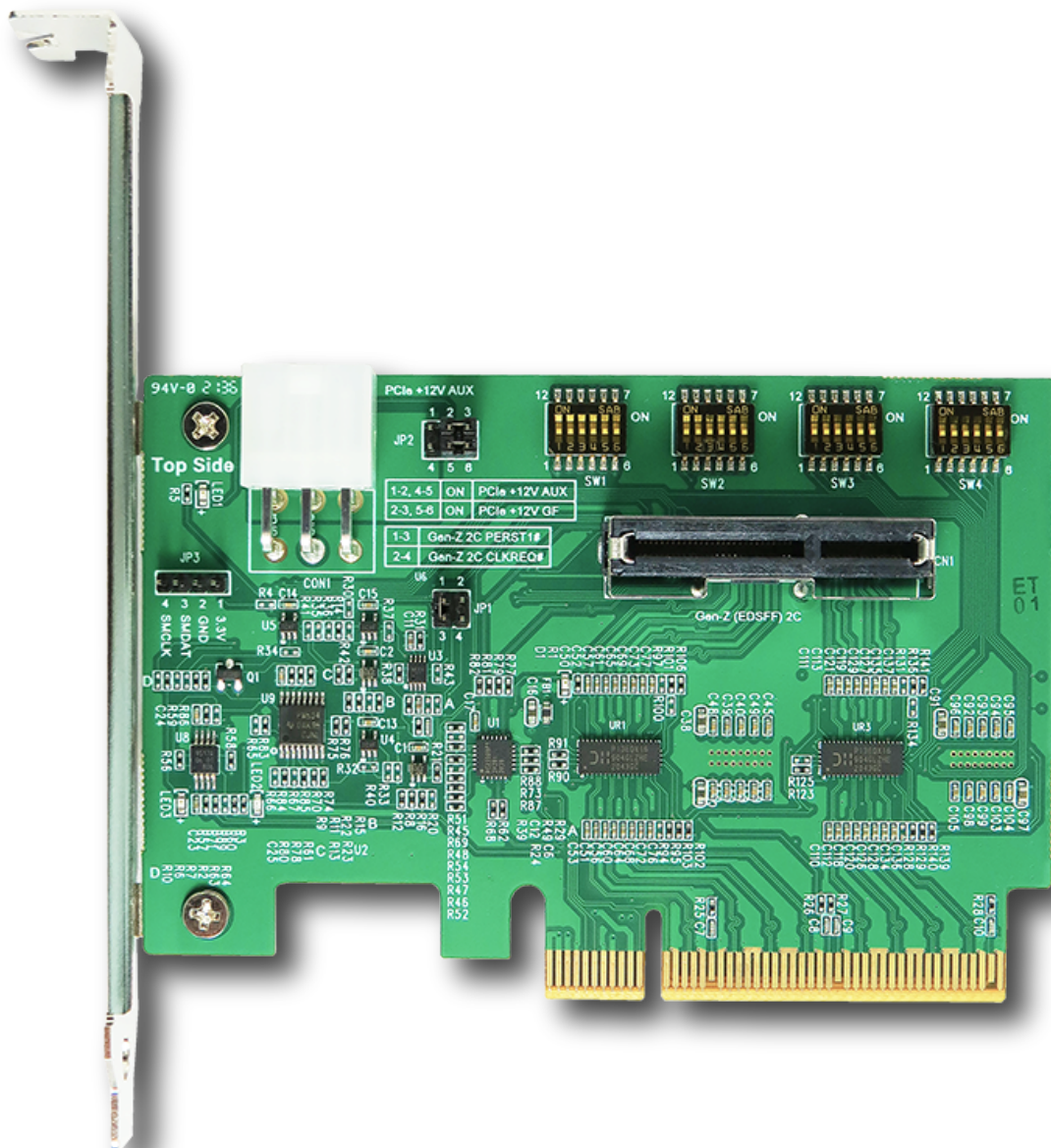


Innocard Minerva

DP8507

PCIe x8 Gen4 with ReDriver to Gen-Z 2C (EDSFF) AIC



PCIe x8 Gen4 with ReDriver to Gen-Z 2C (EDSFF) AIC

Features

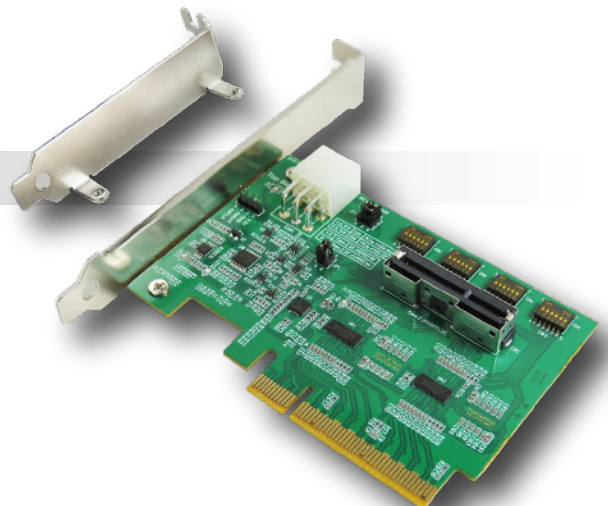
- ※ Supports Server BMC management
- ※ Supports Industrial Grade temperature range
- ※ The card should be compliant with PCIe 4.0 CEM spec
- ※ Built-in EDSFF 2C with latch connector
- ※ Built-in PCIe ReDriver to extend PCIe Gen4, 8-Lane data width link signals
- ※ Built-in PCIe 100MHz Clock buffer to drive longer trace lengths and longer cable, Address: 0x6C(7 bits) for BMC management
- ※ Built-in SMBus I/O Expander, Address: 0x21(7 bits) for Gen-Z 2C PWRDIS control
- ※ Supports PCIe PERST0# for OOB(out of band) management to remote Gen-Z 2C Reset
- ※ Supports PCIe PERST1# for OOB(out of band) management to remote Gen-Z 2C Reset
- ※ Built-in WAKE# bidirectional voltage-level translator for Open-Drain output to be used over longer trace lengths and over longer cable - Latch-Up Performance Exceeds 100 mA Per JESD 78, Class II
- ※ Built-in CLKREQ# bidirectional voltage-level translator for Open-Drain output to be used over longer trace lengths and longer over cable - Latch-Up Performance Exceeds 100 mA Per JESD 78, Class II
- ※ Built-in PWRBRK# Bus Buffer with Open-Drain output to be used over longer trace lengths and longer over cable
- ※ Built-in 12V Hot Plug Power with eFuse protection for Gen-Z 2C
 - ◆ Programmable Current Limit: 6.5A
 - ◆ Programmable Inrush Current Slew Rate
 - ◆ Thermal shutdown protection and fault alert
 - ◆ Back-to-Back (B2B) FET Operation
- ※ Built-in 12V input with 400W TVS(TRANSIENT VOLTAGE SUPPRESSOR) ESD protection
- ※ Built-in 12V output with 30-V, N channel NexFET power MOSFET, 32 m ohm
- ※ Built-in 12V output with SCHOTTKY BARRIER Power Rectifier

Specifications

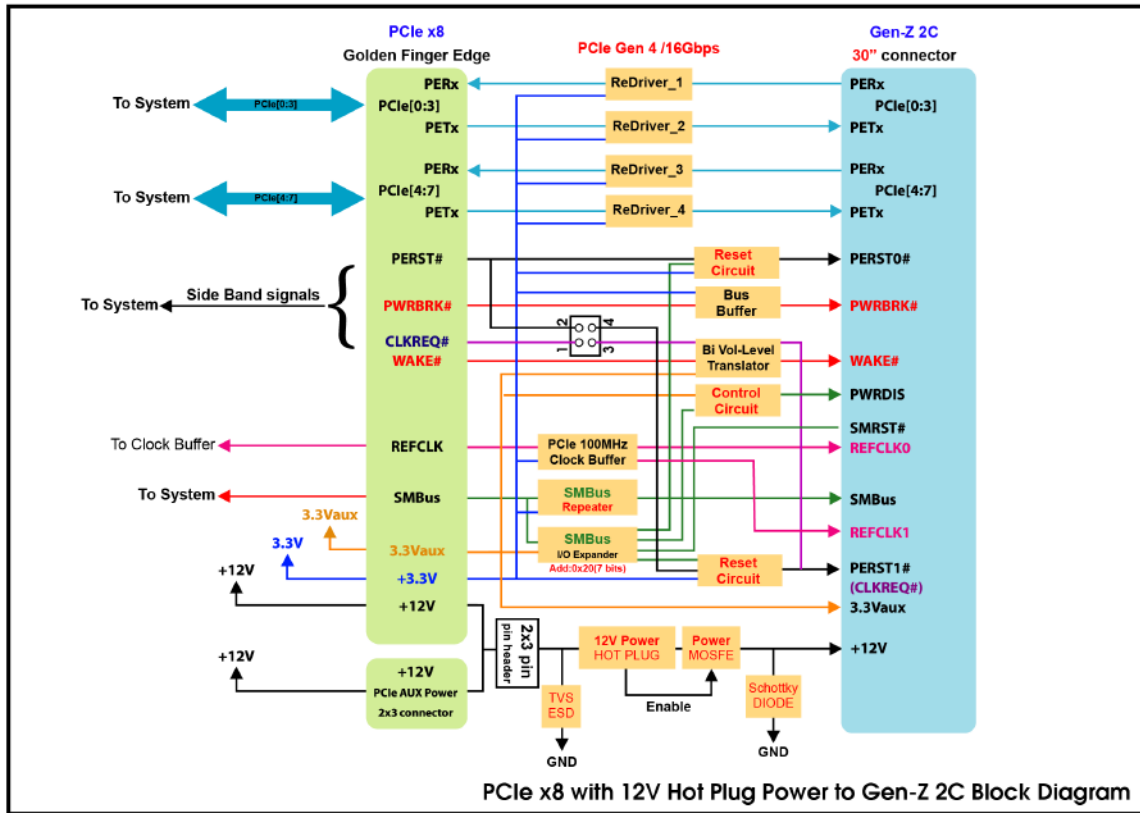
- ※ PCI Express Base Specification Rev 4.0
- ※ PCIe_CEM_SPEC_R4_V1_0_08072019_NCB
- ※ Compliant with SFF-TA-1002 Specification Version 1.3
- ※ Compliant with SFF-TA-1006 Specification Version 1.4
- ※ Compliant with SFF-TA-1009 Specification Version 3.0
- ※ Compliant with SFF-TA-1020 Specification Version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

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 2C (EDSFF) AIC



The switches settings are as noted below

Model No.: DP8507
PCIe x8 Gen 4 with Redriver
to Gen-Z 2C (EDSFF) AIC

SW1

SW2

SW3

SW4

JP2

1-2, 4-5	ON	PCIe +12V AUX
2-3, 5-8	ON	PCIe +12V GF

JP1

1-3	Gen-Z 2C PERST1#
2-4	Gen-Z 2C CLKREQ#

1

1-12	Output Swing Setting	on	0	800 mVp-p
		off	1	1200 mVp-p

2

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

3

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

www.minerva.com.tw

www.minerva.com.tw

page.3