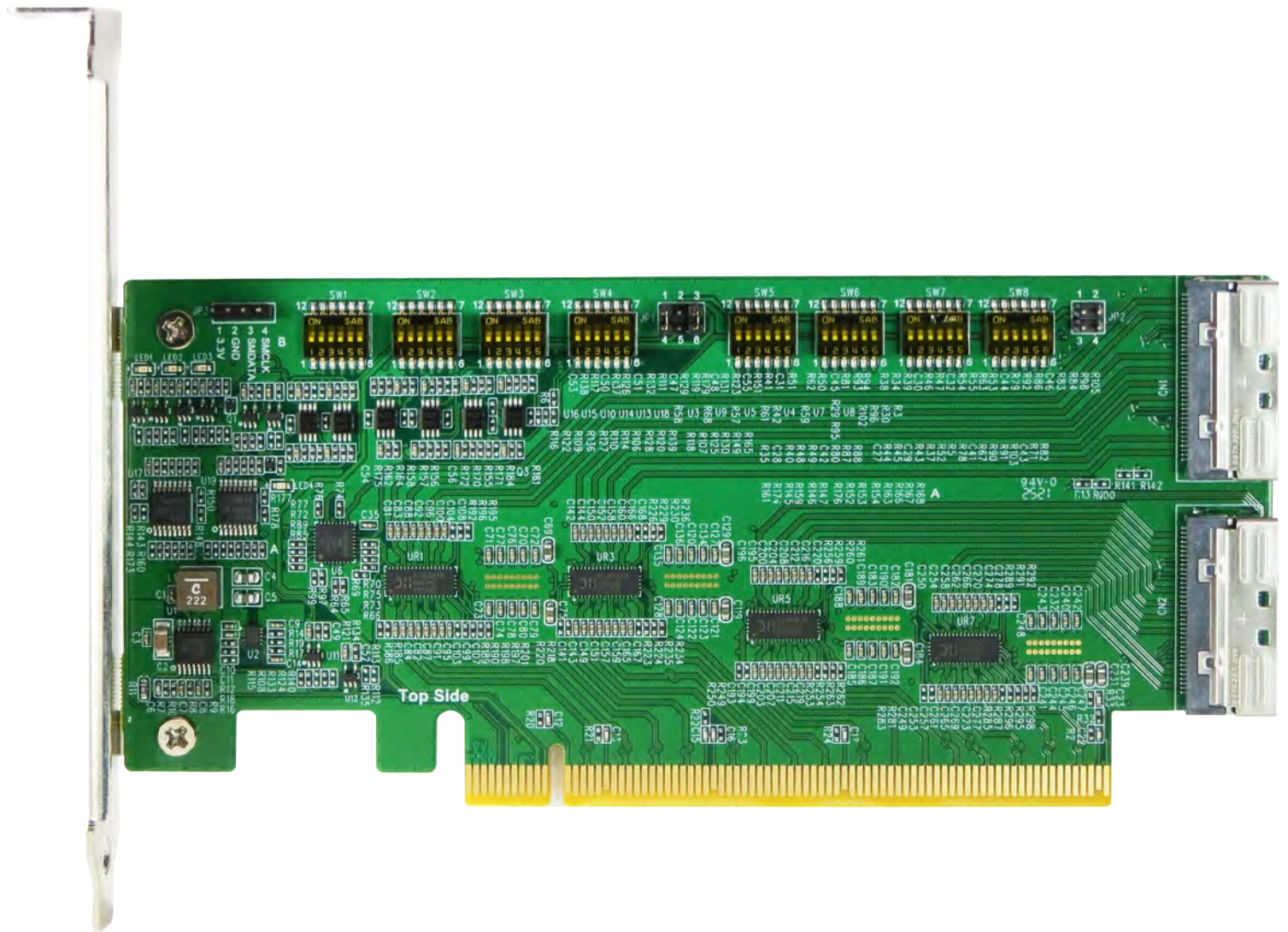


Minerva

DP7808

PCIe x16 Gen4 with ReDriver to MCIO 74P Dual port AIC



PCIe x16 Gen4 with ReDriver to MCIO 74P Dual port AIC

Features

- ※ MCIO 74P(SFF-TA-1016) to PCIe x16 Gen4 convert
- ※ Built-in MCIO 74P connector x2pcs
- ※ Built-in ReDriver to extend PCIe 4.0, 16GT/s 16 lanes differential pair signals data link width.
- ※ The PCIe 16 lanes can be bifurcated into four x4 link width to support different system topologies
- ※ Built-in PCIe 100MHz Clock buffer(Address: 0x6C) for MCIO 74P(SFF-TA-1016) dual port to drive longer cable length
- ※ Built-in SMBus Switch(Address: 0x70) with Reset Function for MCIO 74P(SFF-TA-1016) SMBus communication
- ※ Built-in SMBus I/O Expander(Address: 0x20) for OOB(out of band) management to remote MCIO 74P(SFF-TA-1016) Reset signals.
- ※ Supports PCIe PERST# management to control MCIO 74P(SFF-TA-1016) Reset signals.
- ※ Built-in PERST# Bus Buffer to be used more cable length.
- ※ Built-in WAKE# Auto-Bidirectional Bus Buffer to be used more cable length.
- ※ Built-in CLKREQ# Auto-Bidirectional Bus Buffer to be used more cable length.
- ※ Built-in PWRBRK# Bus Buffer to be used more cable length.
- ※ Built-in 12V to 3.3V, 5.5A PWM Power controller
- ※ Built-in 3.3V Power Load Switch for ReDriver controller Power Protection.
- ※ The WAKE# signals power supply can choose +3.3V or 3.3VAUX, the default is 3.3VAUX
- ※ LED1 Green LED on indicates AIC ready
- ※ LED2 Red ON to OFF indicates PERST# Normal (Function intentionally inverted)
- ※ LED3 Red ON to OFF indicates PERST# Normal (Function intentionally inverted)
- ※ LED4 Red ON to OFF indicates PERST# Normal (Function intentionally inverted)

Specifications

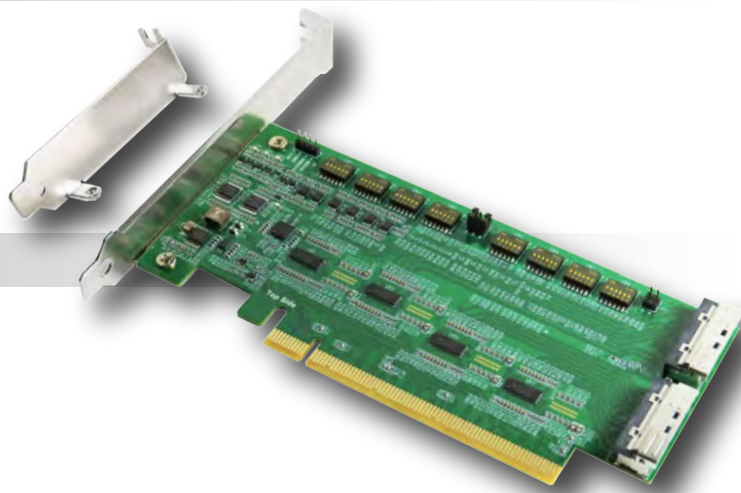
- ※ PCI Express Base Specification Rev 4.0
- ※ PCIe_CEM_SPEC_R4_V1_0_08072019_NCB
- ※ Compliant with Support SFF-9402 Rev1.1
- ※ Compliant with SFF-8654 Specification Version 1.2

Operating system support

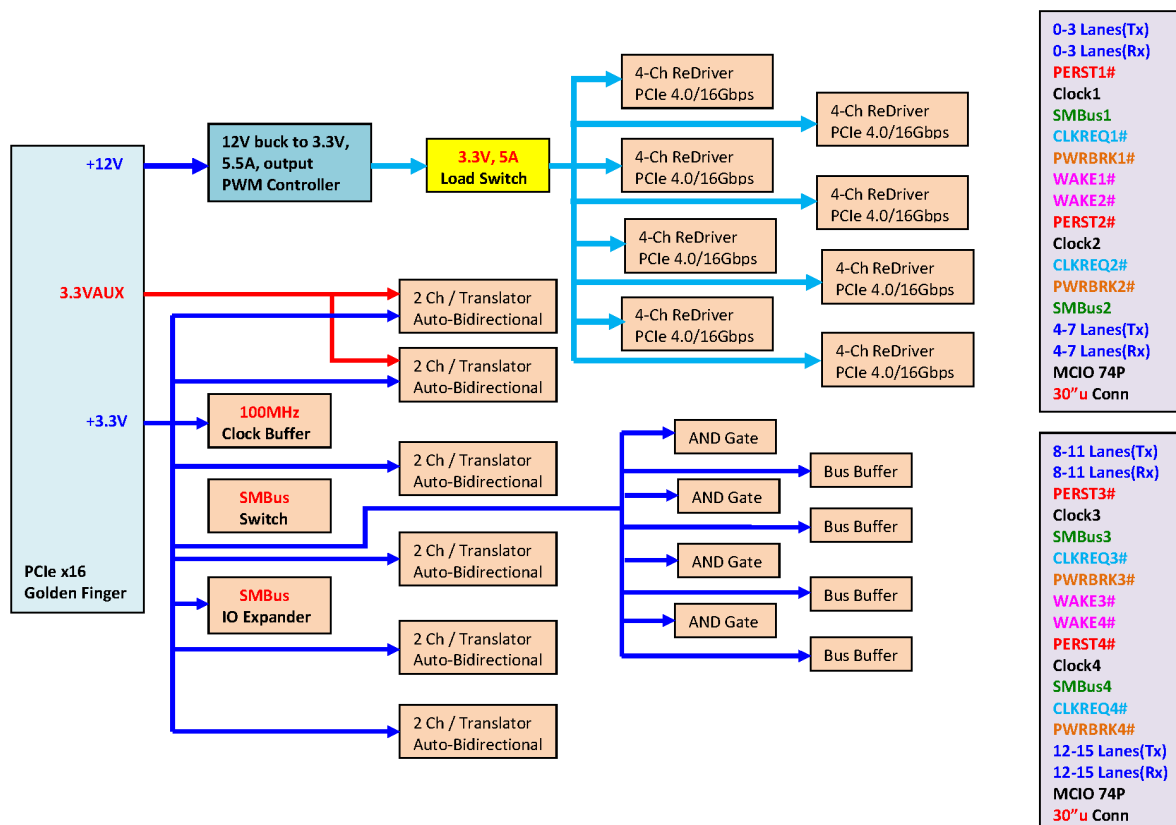
- ※ Windows 7
- ※ Windows 8 & 8.1
- ※ Windows 10
- ※ Windows 11
- ※ UEFI 2.3.1 or later

Applications

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



DP7808 PCIe x16 Gen4 with ReDriver to MCIO 74P Dual Port Block Diagram



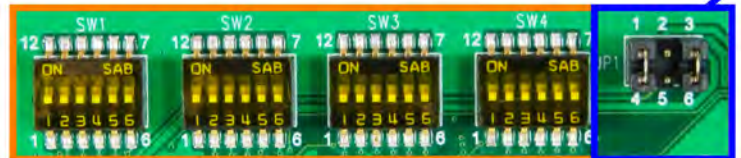
PCIe x16 Gen4 with ReDriver to MCIO 74P Dual port AIC

The switches settings are as noted below

Default setup

Model No.: **DP7808**

PCIe x16 **Gen4** with Redriver to MCIO 74P Dual Ports AIC



SW1	1-12	Output Swing Setting	on	0	800 mVp-p
			off	1	1200 mVp-p
SW2	2-11	Flat Gain Setting	on	0	
SW3	FG0		off	1	
SW4	FG1	on	0		
SW5	4-9	off	1		
SW6	EQ0	on	0		
SW7	EQ1	off	1		
SW8	6-7	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