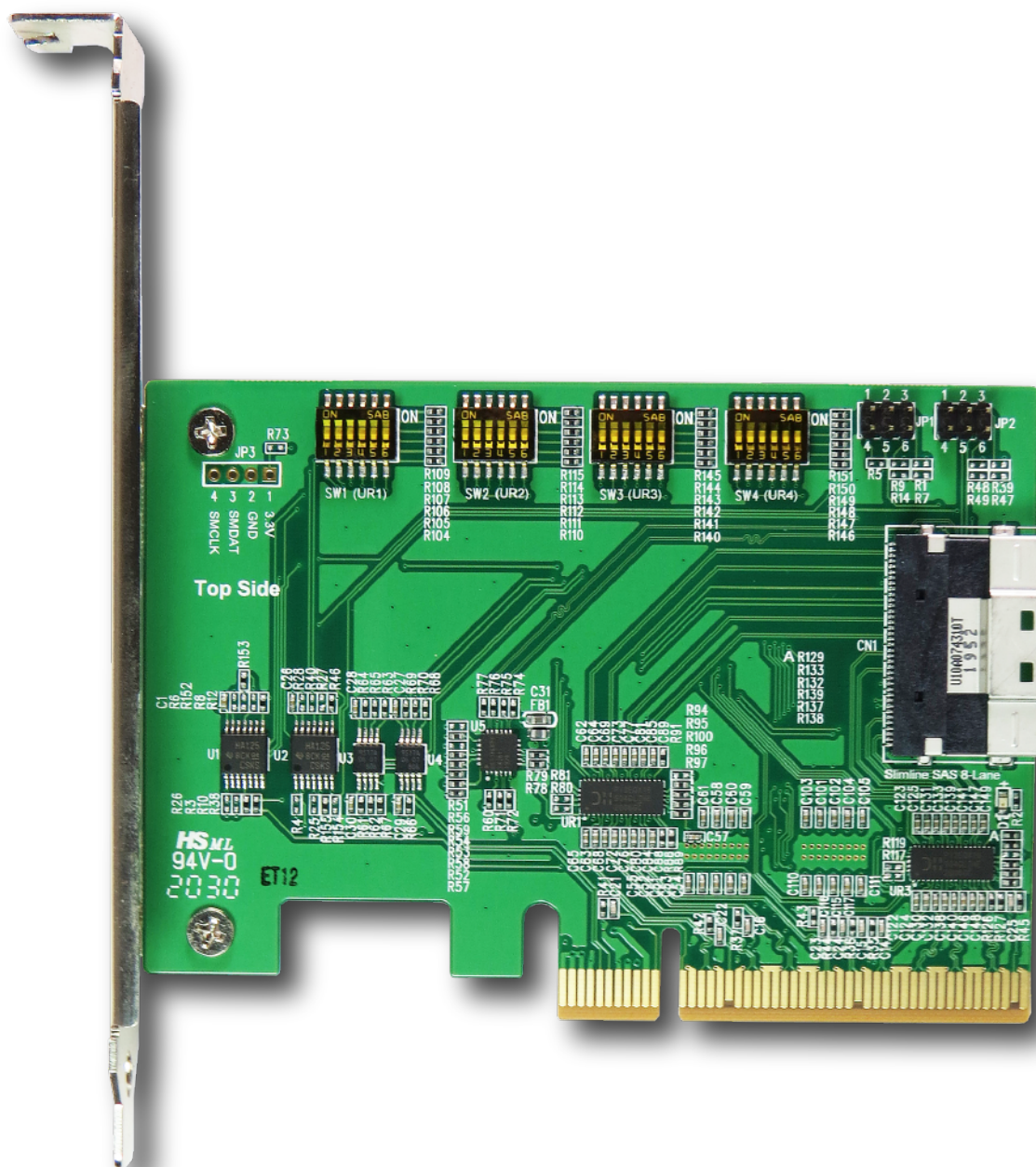




# Minerva

## DP8401

PCIe x8 Gen4 with ReDriver to SlimSAS 8i (SFF-8654) Add-in Card



# PCIe x4 Gen4 with ReDriver to SlimSAS 8i Add-in Card

## Features

- ※ SlimSAS 8i (SFF-8654) to PCI Express 4.0 convert
- ※ Built-in SFF-8654 8i connector, pin-out defined by SFF-9402 Rev1.1
- ※ Built-in PCIe ReDriver to extend PCIe Gen4, 16GT/s 8 Lanes differential pair signals
- ※ Built-in PCIe 100MHz Clock buffer to drive longer trace length and longer length cable
- ※ Built-in PCIe SMCLK, SMDAT bidirectional buffer repeater
- ※ Built-in PERST# Bus Buffer Gate to be used over longer trace lengths and over longer cable
- ※ Built-in WAKE# Bus Buffer Gate to be used over longer trace lengths and over longer cable
- ※ Built-in CLKREQ# Bus Buffer Gate to be used over longer trace lengths and longer over cable
- ※ Built-in PWRBRK# Bus Buffer Gate to be used over longer trace lengths and longer over cable
- ※ D1 Green LED on indicates AIC ready

## Specifications

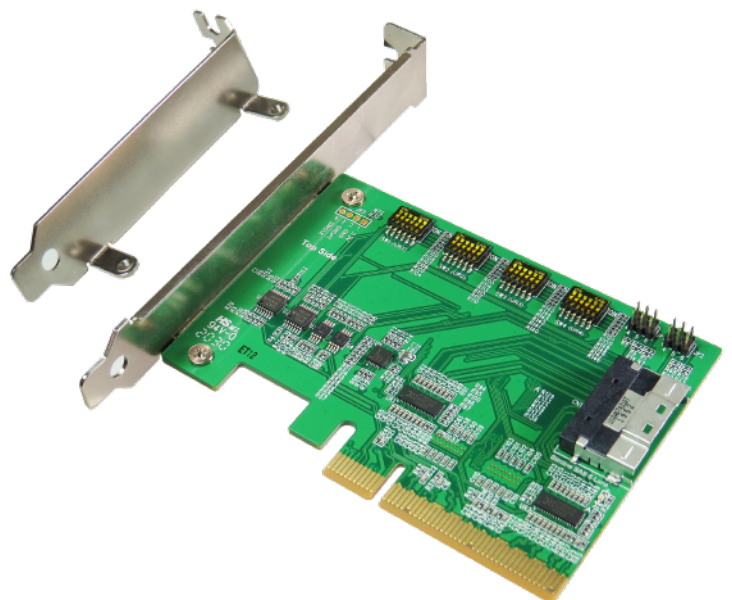
- ※ PCI Express Base Specification Rev 4.0
- ※ PCIe\_CEM\_SPEC\_R4\_V1\_0\_08072019\_NCB
- ※ Support SSD\_Form\_Factor\_Version1\_a
- ※ Compliant with SFF-8654 Specification Version 1.2

## Operating system support

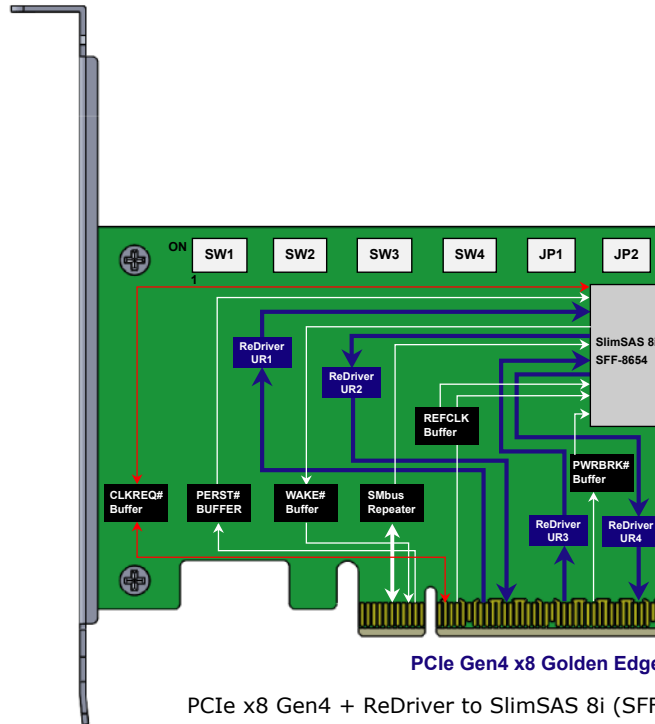
- ※ Windows 7
- ※ Windows 8 &8.1
- ※ Windows 10
- ※ UEFI 2.3.1 or later

## Applications

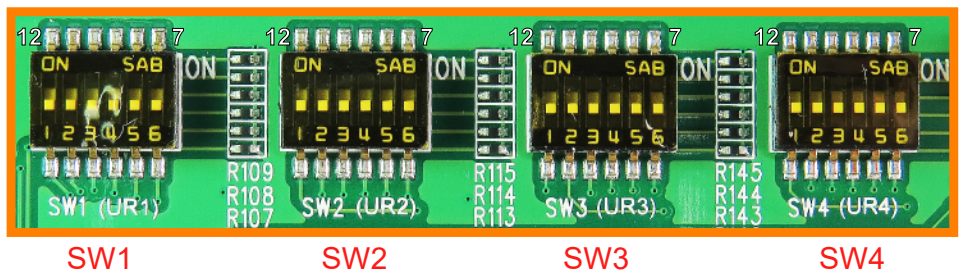
- ※ Rack server
- ※ Microserver and Tower server
- ※ High performance computing
- ※ Hardware accelerator
- ※ Storage Controller HBA(Host Bus Adapter)
- ※ Desktop PC/motherboard



# PCIe x4 Gen4 with ReDriver to SlimSAS 8i Add-in Card



## The switch settings of DP8401 are as follows



SW1 OR SW2 OR SW3 OR SW4	Pin Range	Setting	1	
			on	0
	1-12	Output Swing Setting	on	0
			off	1
	2-11	Flat Gain Setting	on	0
	FG0		off	1
	3-10		on	0
	FG1	off	1	
	4-9	Equalization Setting	on	0
	EQ0		off	1
	5-8		on	0
	EQ1		off	1
	6-7	on	0	
	EQ2	off	1	

2		
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

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