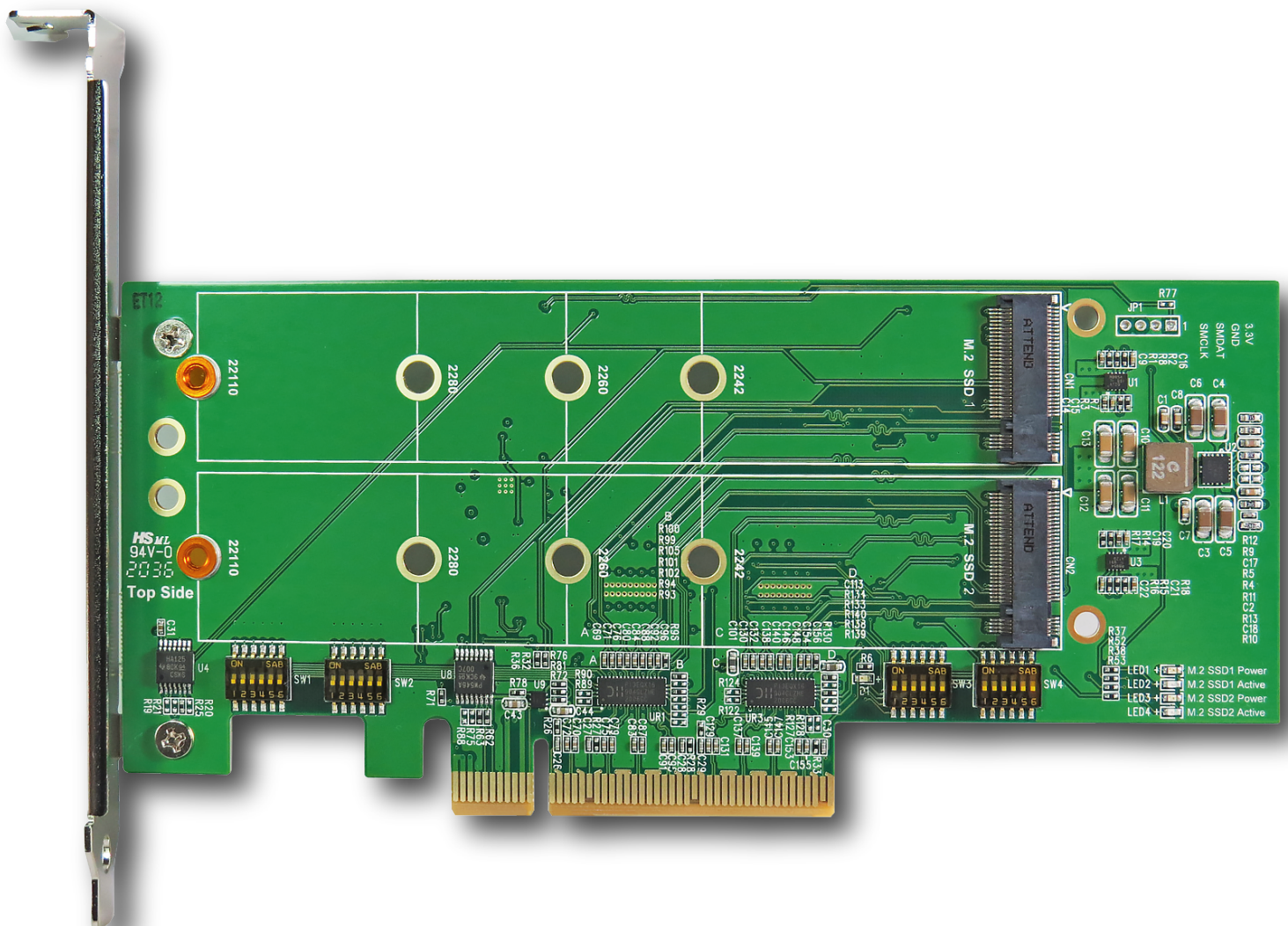


Innocard Minerva

DP8202

PCIe x8 Gen4 with ReDriver to M.2 NVMe SSD Dual Port AIC



Notice:

The Mainboard with CPU and BIOS needs to support bifurcation to ensure PCIe x8 link width to bifurcate two x4 link width for M.2 NVMe SSD.
If not, DP8202 Riser Card only supports PCIe x8 link width

PCIe x8 Gen4 with ReDriver to M.2 NVMe SSD Dual Port AIC

Features

- ※ M.2 NVMe to PCI Express 4.0 conver
- ※ Built-in two M.2 M-key Females connector
- ※ DP8202 can be offered in two x4 data link width configurations
(need CPU and BIOS both support) for dual-port M.2 connector.
- ※ Built- in 100MHz Clock buffer to drive longer trace lengths and longer cable
- ※ Built- in SMCLK, SMDAT bidirectional buffer repeater
- ※ Built- in SMBUS I/O Expander for SMBRST# & PWRDIS control
- ※ Built- in PERST# Bus Buffer Gate to be used over longer trace lengths and over longer cable
- ※ Connect WAKE# from PCIe GF to M.2 connector
- ※ Built- in CLKREQ# Bus Buffer Gate to be used over longer trace lengths and longer over cable
- ※ PWM synchronous buck converter Power IC
 - ◆ 8A maximum output current
 - ◆ Short circuit protection
 - ◆ In-rush current suppression
 - ◆ Thermal shutdown protection
 - ◆ ESD HBM (Human Body Mode)/2KV
- ※ Each M.2 port is with 5A current Load switch Power to protect M.2 NVMe SSD
- ※ LED1, LED3 Green LED on indicates M.2 NVMe SSD power ready
- ※ LED2, LED4 RED LED Blinking indicates M.2 SSD active status

Specifications

- ※ PCI Express Base Specification Rev 4.0
- ※ PCIe_CEM_SPEC_R4_V1_0_08072019_NCB
- ※ Compliant with NVMe Express 1.3
- ※ Support SSD_Form_Factor_Version1_a
- ※ Compliant with PCI Express M.2 Specification Revision 3.0, Version 1.2

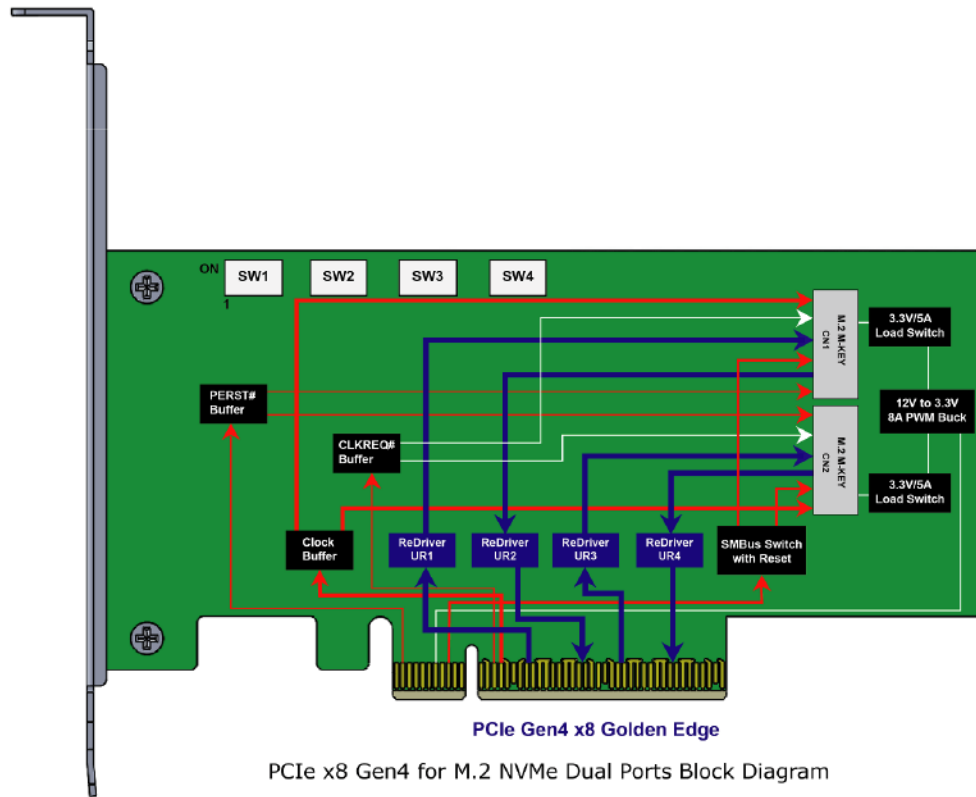
Supports the following form factor M.2NVMe SSD

- ※ Type 2242-D2-B-M: 42mm(L) x 22mm(W)
- ※ Type 2260-D2-B-M: 60mm(L) x 22mm(W)
- ※ Type 2280-D2-B-M: 80mm(L) x 22mm(W)
- ※ Type 22110-D2-B-M: 110mm(L) x 22mm(W)

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 M.2 NVMe SSD Dual Port AIC



The switch settings of DP8202 are as follows

		1		2			3																																																																						
SW1 OR SW2	1-12	Output Swing Setting	on	0	Flat Gain Setting			Equalizer Setting (dB) <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>EQ2</th> <th>EQ1</th> <th>EQ0</th> <th>@1.25GHz</th> <th>@2.5GHz</th> <th>@4GHz</th> <th>@8GHz</th> </tr> </thead> <tbody> <tr><td>0</td><td>0</td><td>0</td><td>0.2</td><td>1.0</td><td>2.3</td><td>5.6</td></tr> <tr><td>0</td><td>0</td><td>1</td><td>0.2</td><td>1.1</td><td>2.6</td><td>6.2</td></tr> <tr><td>0</td><td>1</td><td>0</td><td>1.8</td><td>2.7</td><td>3.9</td><td>7.0</td></tr> <tr><td>0</td><td>1</td><td>1</td><td>2.1</td><td>3.3</td><td>4.8</td><td>8.5</td></tr> <tr><td>1</td><td>0</td><td>0</td><td>3.0</td><td>4.2</td><td>5.8</td><td>9.4</td></tr> <tr><td>1</td><td>0</td><td>1</td><td>3.2</td><td>4.6</td><td>6.5</td><td>10.4</td></tr> <tr><td>1</td><td>1</td><td>0</td><td>4.3</td><td>5.8</td><td>7.8</td><td>11.7</td></tr> <tr><td>1</td><td>1</td><td>1</td><td>4.5</td><td>6.5</td><td>8.8</td><td>13.0</td></tr> </tbody> </table>							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
	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																																																																							
	2-11 OR FG0	Flat Gain Setting	off	1	FG1	FG0	dB																																																																						
	3-10 OR FG1		on	0	0	0	-3.5																																																																						
SW3 OR SW4	4-9	Equalization Setting	on	0	0	1	-2																																																																						
	5-8 OR EQ0		off	1	1	0	-0.5																																																																						
	6-7 OR EQ1	on	0	1	1	1																																																																							
	EQ2	off	1																																																																										

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

