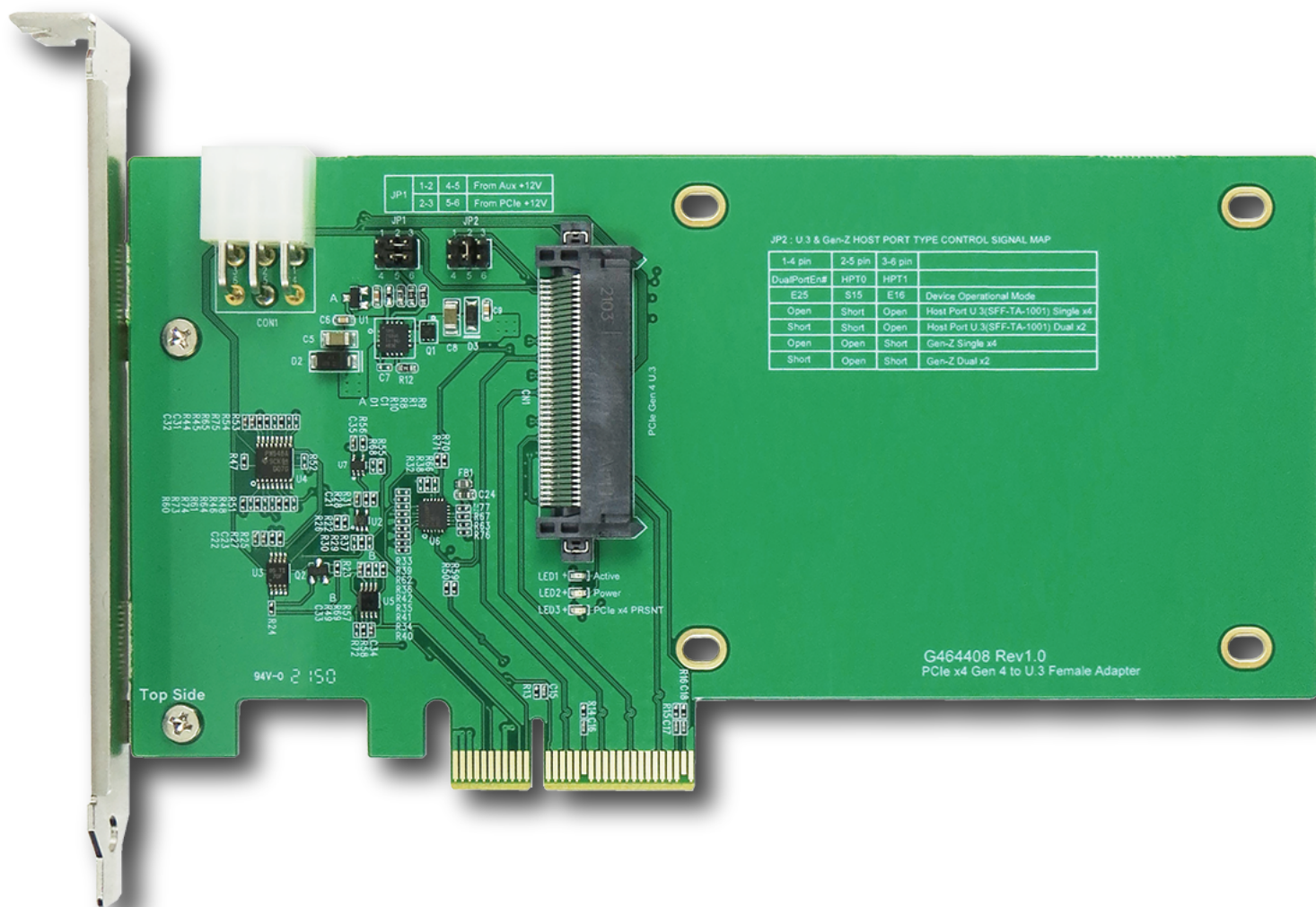




# Minerva

## DP9106

### PCIe x4 Gen4 to U.3 (SFF-8639) AIC



JP2: U.3 & Gen-Z HOST PORT TYPE CONTROL SIGNAL MAP

1-4 pin	2-5 pin	3-6 pin	
DualPortEn#	HPT0	HPT1	
E25	S19	E16	Device Operational Mode
Open	Short	Open	Host Port U.3(SFF-1A-1001) Single x4
Short	Short	Open	Host Port U.3(SFF-1A-1001) Dual x2
Open	Open	Short	Gen-Z Single x4
Short	Open	Short	Gen-Z Dual x2

G464408 Rev1.0  
PCIe x4 Gen 4 to U.3 Female Adapter

# PCIe x4 Gen4 to U.3 (SFF-8639) AIC

## Features

- ※ Supports Server BMC management
- ※ Supports Industrial Grade temperature range
- ※ U.3 (SFF-8639) to PCI Express 4.0 x4 convert
- ※ Built-in SFF-8639, 30u" connector
- ※ Built-in PCIe 100MHz Clock buffer to drive longer trace lengths and longer cable, Address: 0x6C(7 bits)
- ※ Built-in SMBus Switch, Address: 0x71(7 bits)
- ※ Built-in SMBus I/O Expander, Address: 0x41(7 bits) for U.3 SSD PWRDIS control
- ※ Supports PCIe PERST# for OOB(out of band) management to remote U.3 SSD 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 12V Hot Plug Power with eFuse protection for U.3 NVMe SSD
  - ◆ 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
- ※ Support SSD\_Form\_Factor\_Version1\_a
- ※ Compliant with SFF-TA-1001 Specification Version 1.1

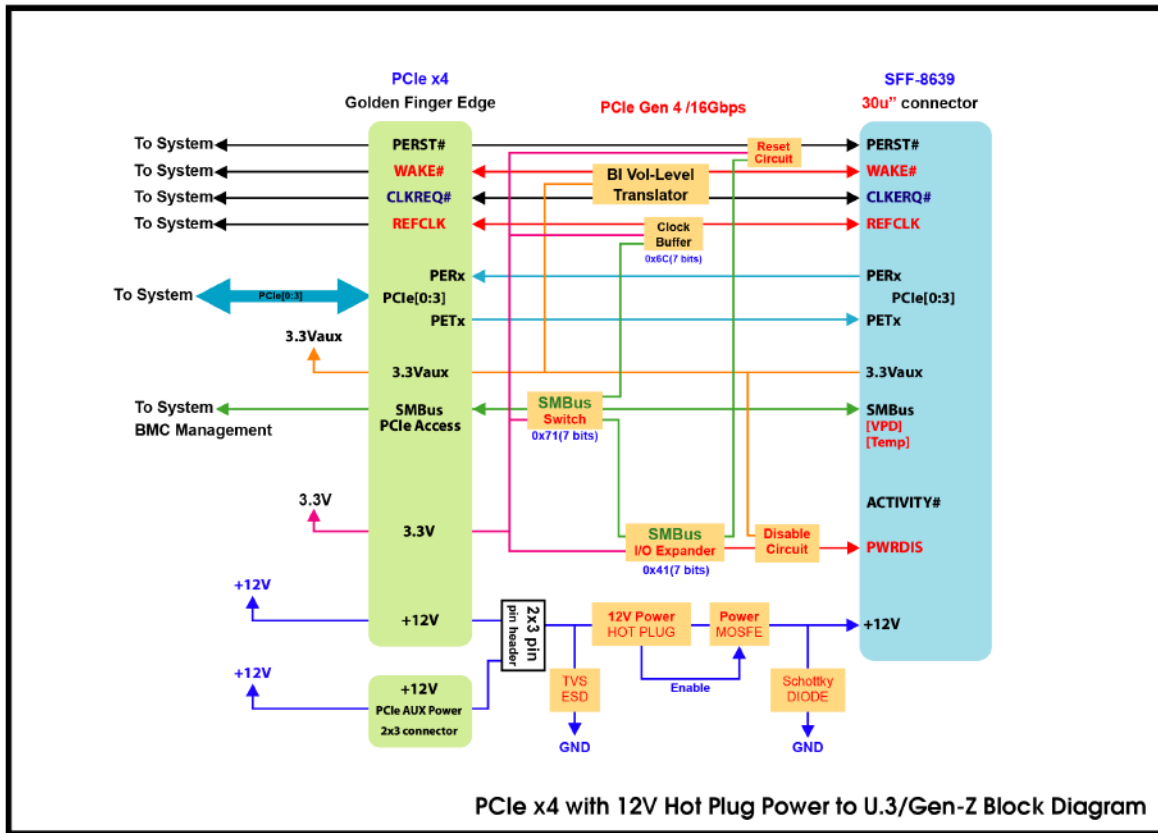
## Operating system support

- ※ 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

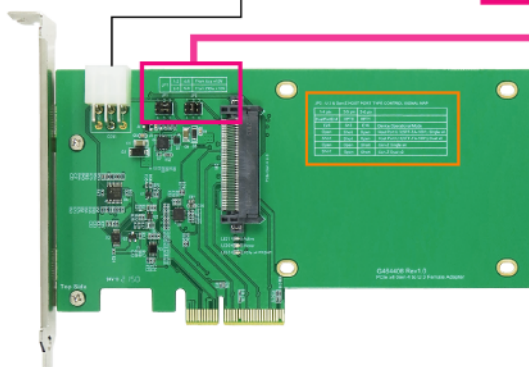
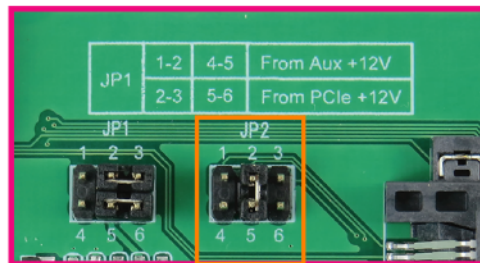
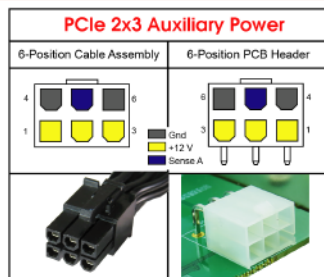
# PCIe x4 Gen4 to U.3 (SFF-8639) AIC



## DP9106 Jumper Application

# DP9106 Jumper Application

PCIe x4 Gen 4 to U.3 / Gen-Z (SFF-8639) AIC



**JP2 : U.3 & Gen-Z HOST PORT TYPE CONTROL SIGNAL MAP**

1-4 pin	2-5 pin	3-6 pin	
DualPortEn#	HPT0	HPT1	
E25	S15	E16	Device Operational Mode
Open	Short	Open	Host Port U.3(SFF-TA-1001) Single x4
Short	Short	Open	Host Port U.3(SFF-TA-1001) Dual x2
Open	Open	Short	Gen-Z Single x4
Short	Open	Short	Gen-Z Dual x2