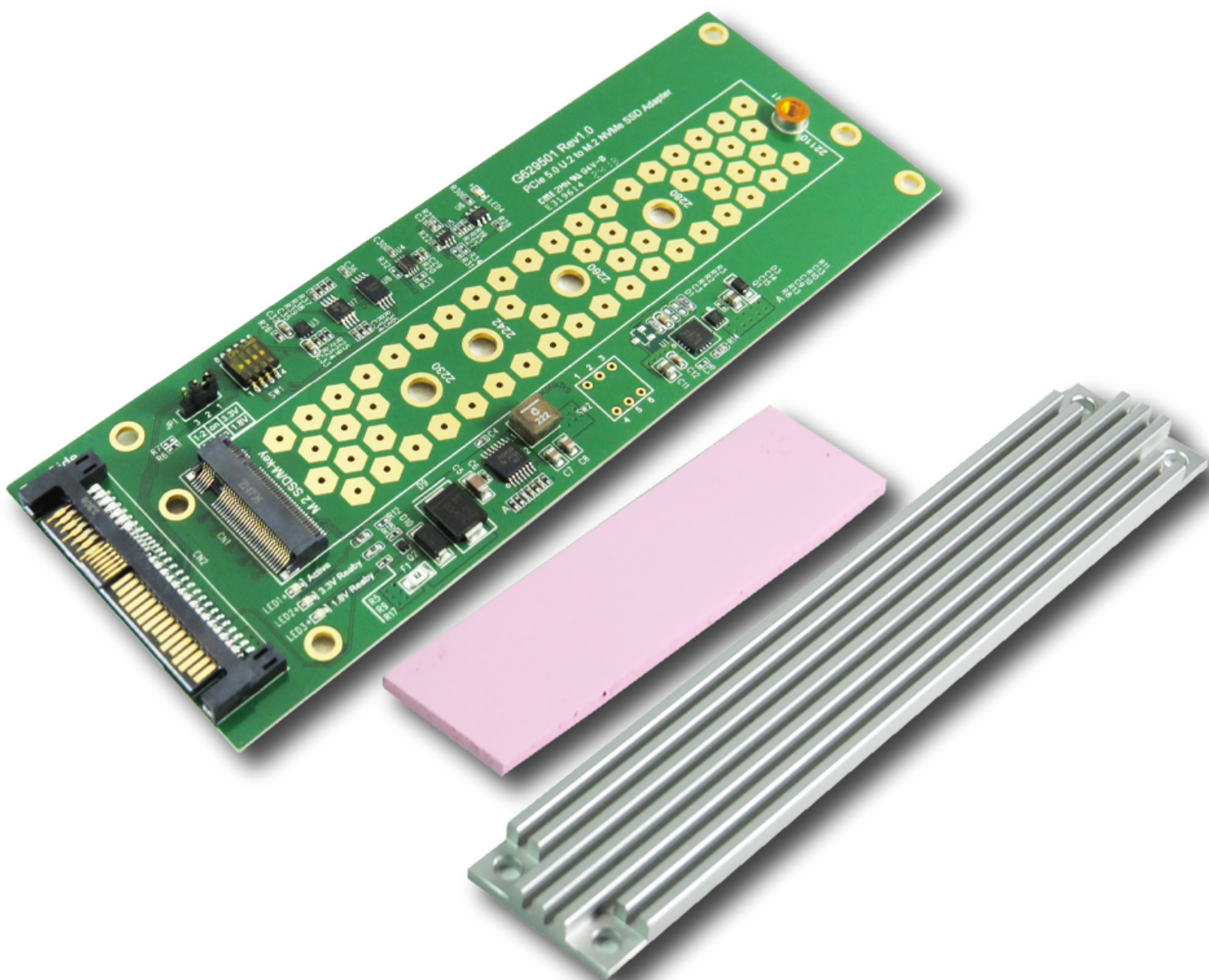




Minerva

GE0146A

U.2 PCIe 5.0 to M.2 NVMe Adapter



U.2 PCIe 5.0 to M.2 NVMe Adapter

Features

- ※ M.2 NVMe to U.2(SFF-8639) convert
- ※ Built-in SFF-8639 connector, pin-out defined by SFF-9402 Rev1.1
- ※ 12V Input power rail built-in 5A FUSE
- ※ 12V Input power rail with 400W Bidirectional TVS
- ※ 12V Input power rail built-in 5A Schottky barrier rectifier
- ※ PWM 12V to 3.3V synchronous buck converter Power for M.2 NVMe SSD
 - ◆ 5.5A maximum output current
 - ◆ Output Discharge Control
 - ◆ The output overcurrent protection(OCP)
 - ◆ Undervoltage lock out protection(UVLO) monitor
 - ◆ Over/Under Voltage Protection
 - ◆ Thermal shutdown protection
 - ◆ ESD HBM (Human Body Mode)/500V
- ※ Built-in 3.3V Hotswap Power controller with programmable Inrush Slew rate, support a maximum continuous current of 6.5A for M.2 SSD protection
- ※ Built-in 3.3V output with 30-V, N channel NexFET power MOSFET, 32m ohm with Reverse current protection
- ※ Supports M.2 CLKREQ#, WAKE# Voltage level shift between 3.3V or 1.8V
- ※ Supports M.2 /1.8V to U.2/3.3V SMBus Level Shift, isolated and repeater
- ※ Built-in SMBUS EEPROM 64KB
- ※ LED1 RED LED Blinking indicates M.2 active status
- ※ LED2 Green LED on indicates 3.3V power ready
- ※ LED3 Green LED on indicates 1.8V power ready
- ※ LED4 Red LED indicates on to off for PCIe PERST# signals implementation

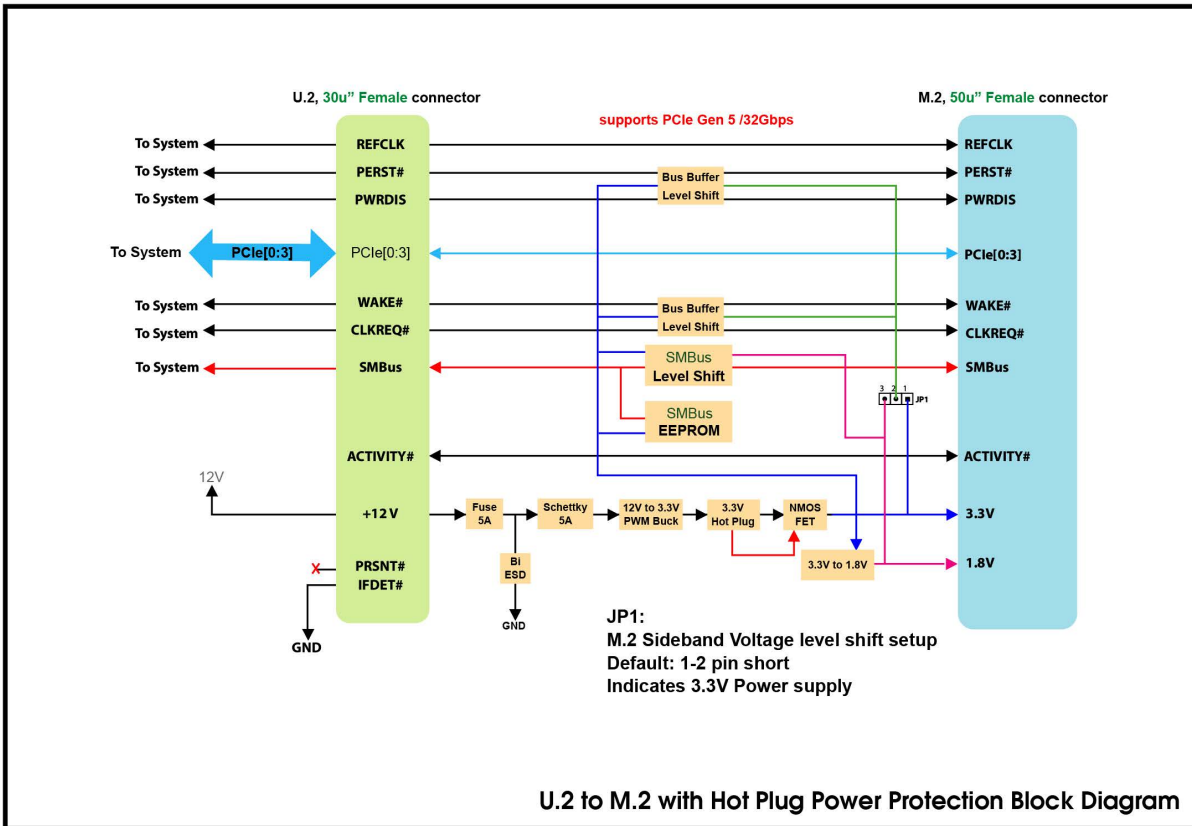
Specifications

- ※ Compliant with NVM Express 2.0
- ※ Support PCI Express Base Specification Rev 5.0
- ※ Support SSD_Form_Factor_Version1_a
- ※ Compliant with PCI_Express_M.2_Spec_Rev5.1_05012024_NCB
- ※ Compliant with PCIe SFF-8639 Module Specification Rev 5.0
- ※ Compliant with SFF-TA-1001 Rev1.1

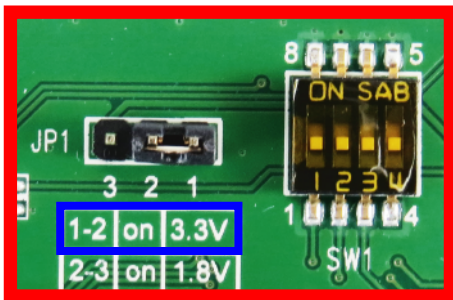
Supports the following form factor M.2(NGFF) SSD:

- ※ 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: 80mm(L) x 22mm(W)

U.2 PCIe 5.0 to M.2 NVMe Adapter



The switches settings are as noted below



EEPROM : 24AA256T SETUP

SW1	POS1	POS2	POS3	POS4
	A0 pin	A1 pin	A2 pin	WP pin
Default(Hi)	1	1	1	1
I2C Address : 0xAE (1010111)				
OFF--Hi(1)	ON--Low(0)	Write-Protection		

JP1 Jumper setup:

M.2 Sideband Voltage level shift setup
Default : 1-2 pin short
Indicates 3.3V Power supply

Model No.: **GE0146A**

U.2 PCIe 5.0 to M.2 NVMe SSD Adapter

