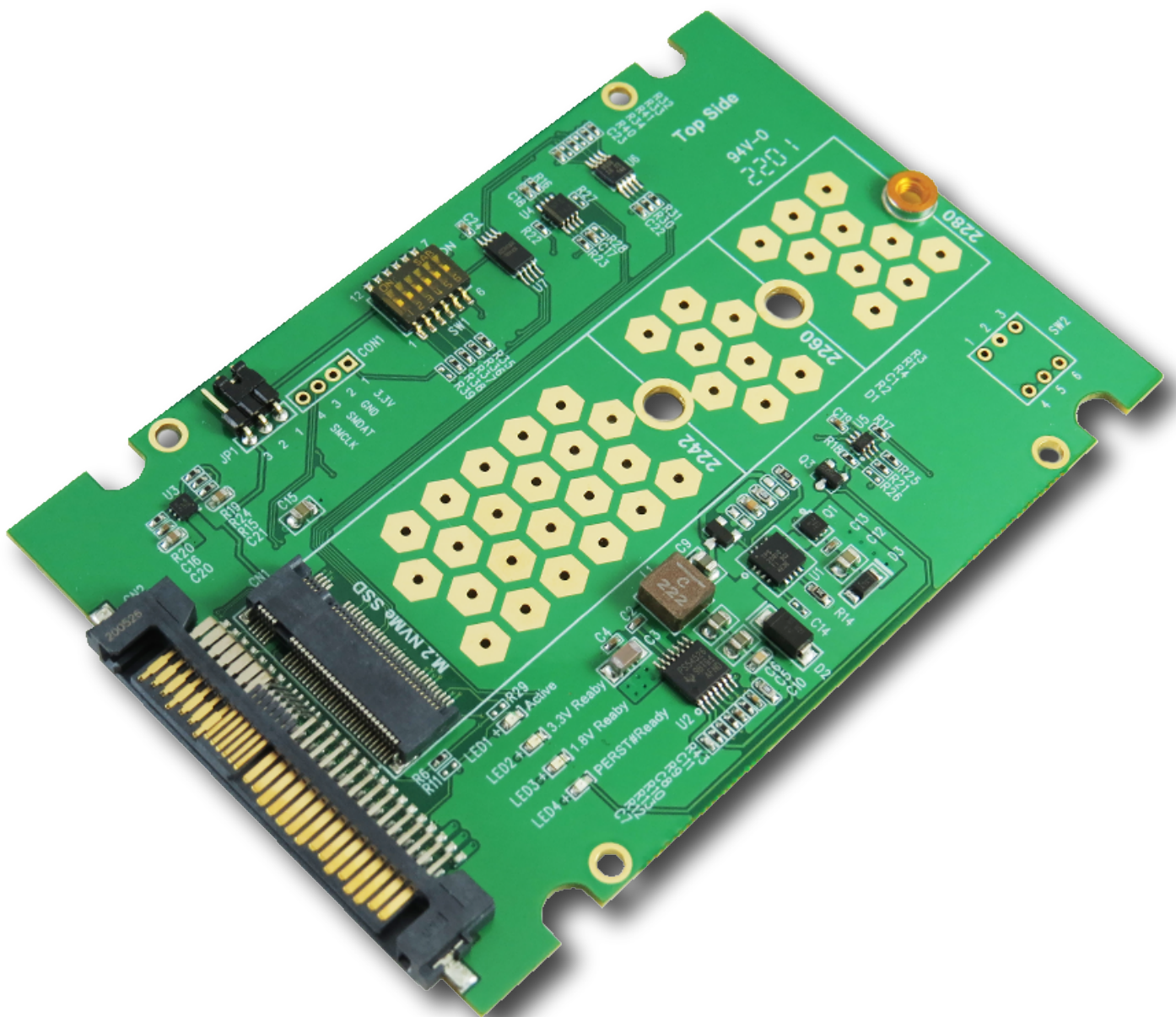


Innocard

Minerva

GD1402A

PCIe Gen4 U.3(SFF-8639) to M.2 NVMe Adapter



PCIe Gen4 U.3(SFF-8639) to M.2 NVMe Adapter

Features

- ※ M.2 NVMe to U.3(SFF-8639) convert
- ※ Built-in SFF-8639, 30u" connector, pin-out defined by SFF-9402 Rev1.1
- ※ 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 Hot Plug Power with eFuse protection for M.2 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 3.3V input with 400W TVS(TRANSIENT VOLTAGE SUPPRESSOR) ESD protection
- ※ Built-in 3.3V output with 30-V, N channel NexFET power MOSFET, 32 m ohm
- ※ Built-in 3.3V output with SCHOTTKY BARRIER Power Rectifier
- ※ Supports M.2 3.3V&1.8V supply
- ※ Supports M.2 VIO_CFG Signal
- ※ Supports M.2 PERST# Signal 3.3V and 1.8V Voltage-Level Translator
- ※ Supports M.2 CLKREQ# Signal 3.3V and 1.8V Switching Translator
- ※ Supports M.2 WAKE# Signal 3.3V and 1.8V Translator
- ※ Supports PWRDIS Signal from U.3 pin to M.2 pin
- ※ Supports M.2 /1.8V to U.3/3.3V SMBCLK, SMBDATA Level Shift
- ※ Supports M.2 /1.8V to U.3 /3.3V SMBCLK, SMBDATA isolated, repeater
- ※ Supports M.2 /1.8V to U.3 /3.3V SMBCLK, SMBDATA Hot-Swap
- ※ Built-in SMBus EEPROM 64KB
- ※ LED1 RED Blinking indicates M.2 active status
- ※ LED2 GREEN ON indicates 3.3V power ready
- ※ LED3 GREEN ON indicates 1.8V power ready
- ※ LED4 RED ON indicates PERST# signals ready

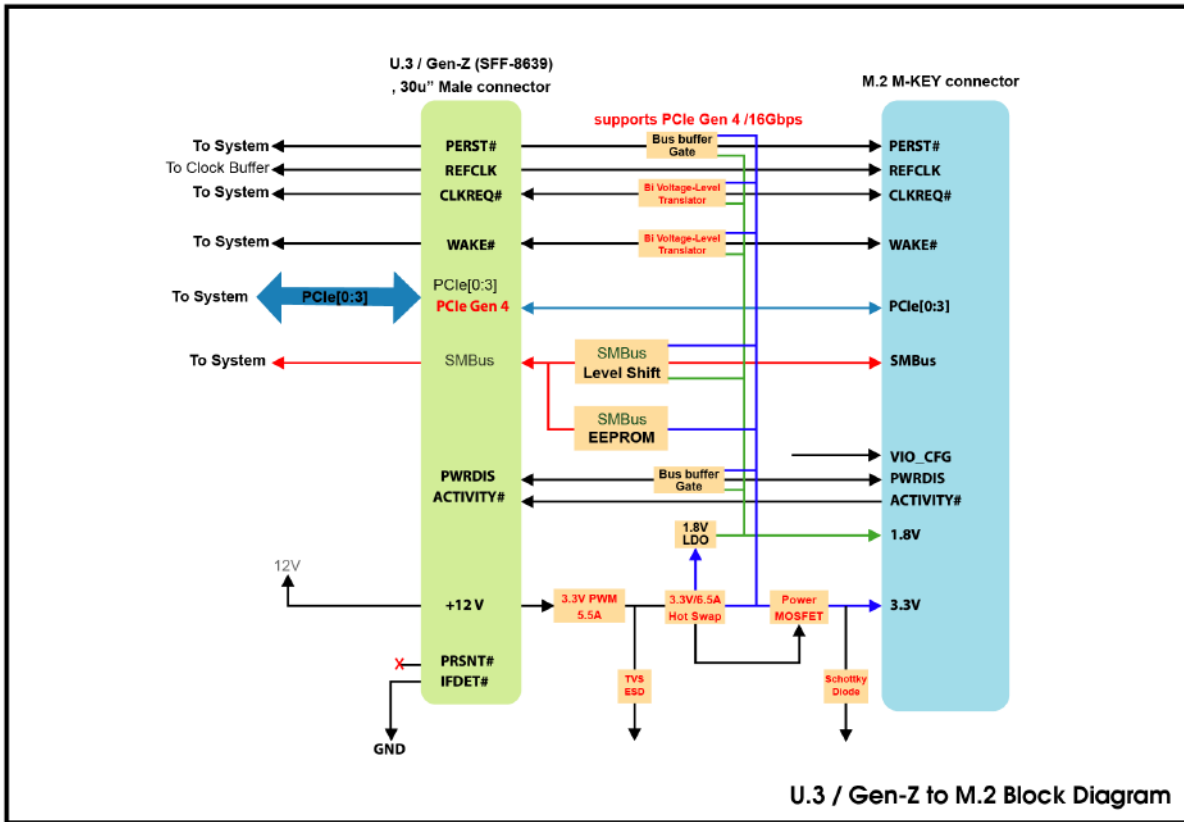
Specifications

- ※ Compliant with NVM Express 1.3a
- ※ Support PCI Express Base Specification Rev 4.0
- ※ Support SSD_Form_Factor_Version1_a
- ※ Compliant with PCI Express M.2 Specification Version 1.2
- ※ Compliant with PCIe SFF-8639 Module Specification Rev 3.0
- ※ 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)

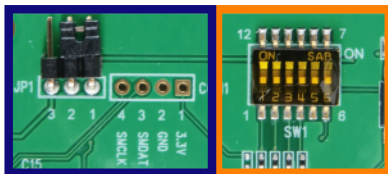
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The switches settings are as noted below

For sideband supply voltage

JP1	1 - 2	on	3.3V
	2 - 3	on	1.8V



SW1: OFF--Hi(1)/ON--Low(0) or SW1: OFF--OPEN/ON--GND						
SMBus EEPROM Address Setup: POS 1-12, POS 2-11, POS 3-10						
SMBus EEPROM Write Enable/Protection: POS 4-9						
U.3 & Gen-Z DEVICE TYPE ENCODING						
Position	POS 1-12	POS 2-11	POS 3-10	POS 4-9	POS 5-8	
Address	A0 pin	A1 pin	A2 pin			
Default(Hi)	1	1	1			
SMBus EEPROM Address : 0xAE(1010111)						
Default(Hi)				1		
SMBus EEPROM Write protection						
SFF-8639					P4 pin	
					IfDet#	
U.3 DEVICE TYPE ENCODING					GND	
Gen-Z DEVICE TYPE ENCODING					OPEN	

