MEMXPRO M.2 2280 PCIe PC32 Series

40K endurance SLC mode, sustained high speed PCIe Gen3 x4

Industrial 3D TLC 40K P/E cycle



Features

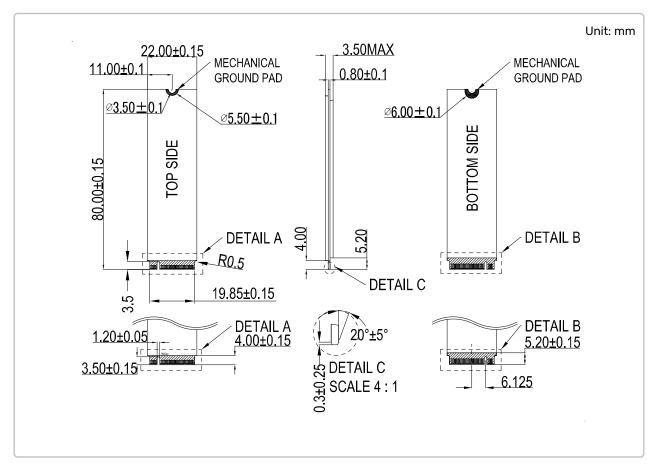
- PCIe Gen3x4 M.2 2280 with NVMe 1.3 supported
- Read/Write speeds of up to 3257/2981 MB/s
- Random Performance of up to 215K/186K IOPS
- Industrial Micron 3D TLC, up to 40K P/E Cycles
- Sustained write performance, no speed dropping
- End-to-end data path protection with CRC parity, better safe and data guard features
- LDPC ECC for improved data integrity
- Support thermal throttling
- Built-in OCP/OVP Protection
- 30u" thickness Gold finger

Specification

Product Model	M.2 2280 PCIe PC32	
Interface	PCIe Gen 3 X 4	
Form Factor	M.2 2280	
Controller	SMI SM2262EN	
Flash Type	3D TLC (Original Micron B17)	
P/E Cycle	40,000 (SLC mode)	
Max. Channel	8	
Density	80GB ~320GB	
Sequential R/W (Q32T1) (MB/sec, Max.)	3250/2980	
Operating Temperature	0°C~+70°C/-25°C~+85°C/-40°C~+85°C	
Max. Power Consumption	TBD	
Dimension (L x W x H/mm)	80x22x3.5	
Operating Voltage	3.3V±5%	
Storage Temperature	-55°C~+95°C	
Security Option*	AES 256-bit Encryption TCG Opal 2.0 compliant Built-in H/W SHA256 and TRNG	
External DRAM Buffer	✓	
Thermal Sensor	✓	
NVMe 1.3	✓	
Vibration	20G (7~2KHz)	
Shock Resistance	1500G@0.5ms	
MTBF	>3 million hours	
	*• The functions will be activated by specific firmware versions	

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Dimensions



Ordering Information

Capacity	Commercial (0°C~70°C)	Extended (-25°C~+85°C)	Industrial (-40°C~+85°C)
80GB	FP28P-80GMCS624C1	FP28P-80GMCS624E1	FP28P-80GMCS624W1
160GB	FP28P-A6GMCS624C1	FP28P-A6GMCS624E1	FP28P-A6GMCS624W1
320GB	FP28P-C2GMCS628C1	FP28P-C2GMCS628E1	FP28P-C2GMCS628W1

Tip: End-to-end data path protection Encode Encode MEMXPRO SSD controller solutions incorporate full data error detection Host with recovery engines to provide enhanced data integrity throughout the Decode Encode Decode entire Host-to-NAND-to-Host data path. No error Data will be sent to host! The data recovery algorithm can Encode Encode effectively detect any error in the SSD Read flow w/encode data path, including hardware (i.e. ASIC) errors, firmware errors and memory Host

Decode



errors arising in SRAM, DRAM or NAND.

Decode

Decode

Decode