

# MemxPro M.2 2280 SATA PB31 Series

SLC like, 20K+ P/E cycles



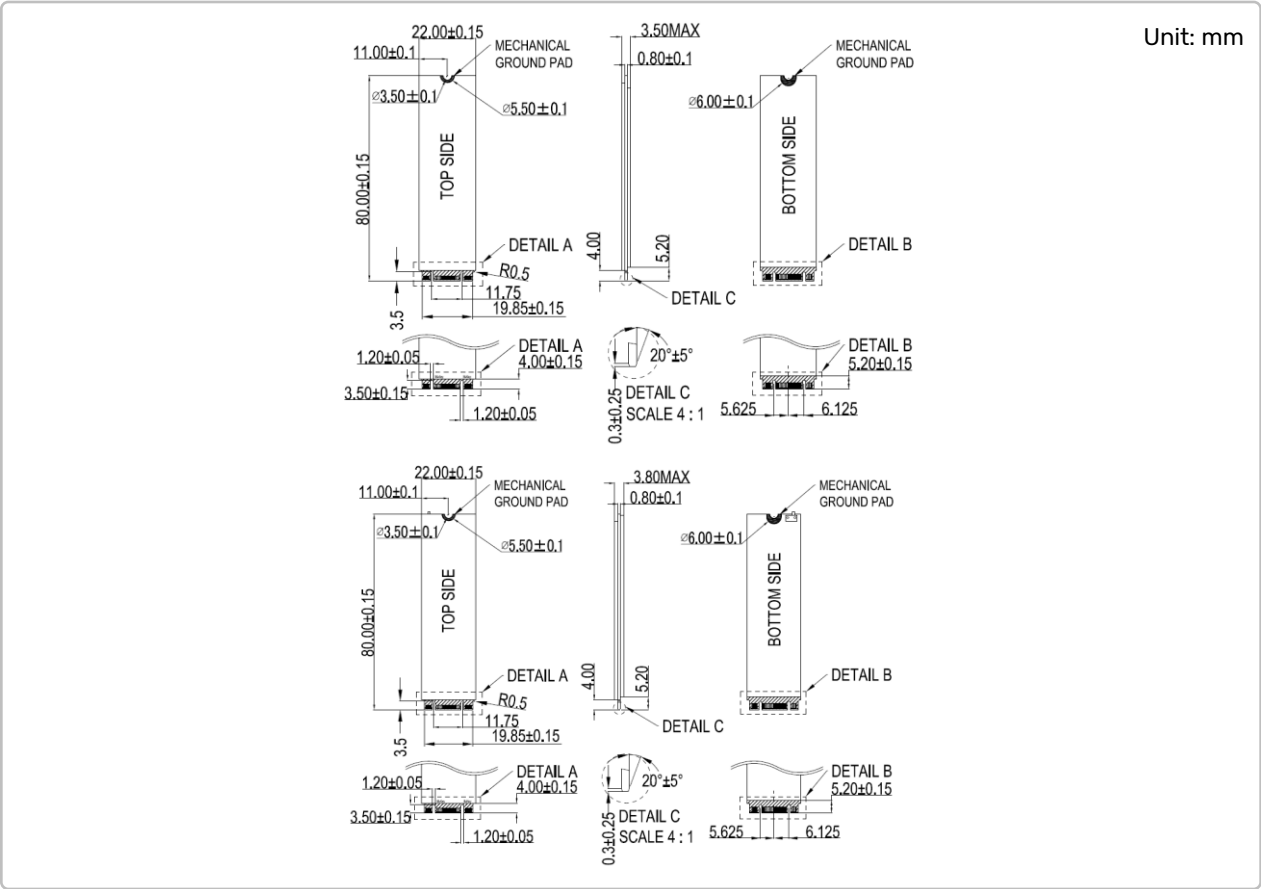
## Features

- M.2 (NGFF) standard of 22mm wide, 80mm long
- StrongMLC, DRAM inside, up to 128capacity
- Commercial/extended/wide temp. solutions
- Built-in ECC and OCP/OVP
- NCQ/TRIM/SMART support
- mSMART storage device monitoring

## Specification

Product Model	M.2 2220 SATA PB31
Interface	SATA III
Form Factor	M.2 SATA (2280/S2/D2)
Flash Type	StrongMLC
P/E Cycle	20,000 times
Max. Channel	4
Density	64GB/128GB
Sequential R/W (MB/sec, max.)	550/443
Operating Temperature	0°C~+70°C/-25°C~+85°C/-40°C~+85°C
Max. Power Consumption	3.96W (3.3Vx1200mA)
Dimension (L x W x H/mm)	22x80x2.15 / 22x80x3.5
Operating Voltage	3.3V±5%
Storage Temperature	-55°C~+95°C
External DRAM Buffer	N/A
Thermal Sensor	✓
DEVSLP Mode	<5mW
ATA Security	✓
S.M.A.R.T.	✓
TRIM	✓
Vibration	20G (7~2KHz)
Shock Resistance	1500G@0.5ms
MTBF	>3 million hours

Dimensions



Ordering Information

Brand	Capacity	Commercial (0°C~70°C)	Extended (-25°C~85°C)	Industrial (-40°C~+85°C)
Toshiba	64GB	FP28S-64GTBS464C1	FP28S-64GTBS464E1	FP28S-64GTBS464W1
	128GB	FP28S-A2GTBS464C1	FP28S-A2GTBS464E1	FP28S-A2GTBS464W1

StrongMLC/StrongTLC

Specific firmware technology enables high-quality MLC/TLC to perform SLC mode. Benefits: (1) boosts performance & endurance (2) budget friendly compare to SLC.

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		01	001	0001
	1	10	010	0010
		11	011	0011
Flash type	SLC/SMLC/STLC	MLC	TLC	QLC
P/E cycle	Industrial: 60~100K StrongMLC: 20K StrongTLC: 40K	Industrial: 3K	Consumer: 500~1.5K Industrial: 3K & 10K	Consumer: 500 ~ 1K
Bit	1	2	3	4
Write Speed	▶▶▶▶▶	▶▶▶▶▶	▶▶▶▶▶	▶▶▶▶▶
Durability	▲▲▲▲▲	▲▲▲▲▲	▲▲▲▲▲	▲▲▲▲▲
Price	SLC: \$\$\$\$\$\$ SMLC/STLC: \$\$\$\$	\$\$\$\$\$	\$\$ \$\$\$	\$\$\$\$\$