

MEMXPRO M.2 2280 SATA EB31 Series

SLC like, 20K+ P/E cycles



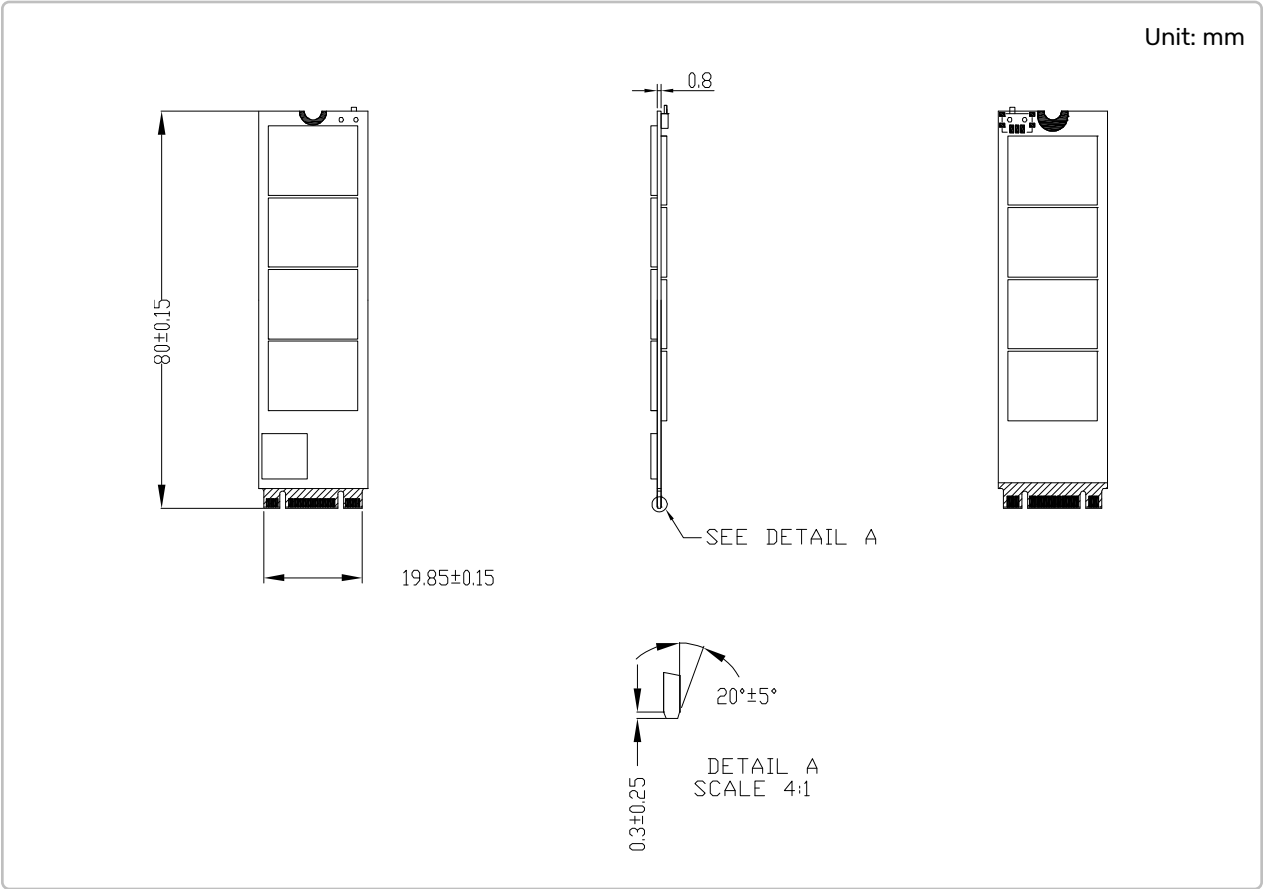
Features

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

Specification

Product Model	M.2 2280 EB31
Interface	SATA III
Form Factor	M.2 SATA (2280/S2/D2)
Flash Type	StrongMLC
P/E Cycle	20,000 times
Max. Channel	4
Density	16GB~128GB
Sequential R/W (MB/sec, max.)	514/421
Operating Temperature	0°C~+70°C/-25°C~+85°C/-40°C~+85°C
Max. Power Consumption	3.3W (3.3Vx1.0A)
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	32GB	FE28S-32GTBS4X2C2	FE28S-32GTBS4X2E2	FE28S-32GTBS4X2W2
	64GB	FE28S-64GTBS4X4C2	FE28S-64GTBS4X4E2	FE28S-64GTBS4X4W2
	128GB	FE28S-A2GTBS4X4C2	FE28S-A2GTBS4X4E2	FE28S-A2GTBS4X4W2

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
		010	010	0010
		011	0100	0011
	1	10	100	1000
		11	101	1001
			110	1010
			111	1011
				1100
				1101
				1110
				1111
Flash type	SLC/SMC/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: \$\$\$\$\$ SMC/STLC: \$\$\$\$	\$\$\$\$\$	\$\$ \$\$\$	\$\$\$\$\$