

RoHS Compliant

Serial ATA Flash Drive

AST280 Product Specifications



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Version 2.0

Apacer Technology Inc.

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Specifications Overview:

- **Compliance with SATA Revision 3.1**
 - SATA 6.0 Gbps interface
 - Backward compatible with SATA 1.5 and 3.0 Gbps interfaces
- **Capacity**
 - 120GB - 480GB
- **Performance***
 - Sequential read: Up to 560 MB/sec
 - Sequential write: Up to 540 MB/sec
 - Random read (4K): Up to 80,896 IOPS
 - Random write (4K): Up to 75,237 IOPS
- **Flash Management**
 - Global Wear Leveling
 - S.M.A.R.T.
 - Power Failure Management
 - TRIM
- **NAND Flash Type: 3D TLC**
- **MTBF: > 1,500,000 hours**
- **Endurance (in Terabytes Written: TBW)**
 - 120 GB: 70 TBW
 - 240 GB: 140 TBW
 - 480 GB: 280 TBW
- **Temperature Range**
 - Operating:
 - Standard: 0°C to 70°C
 - Storage: -40°C to 70°C
- **Supply Voltage**
 - 3.3V (Operating Voltage)
- **Power Consumption***
 - Active mode:
 - 1,350mW (120GB)
 - 1,400 mW (240GB)
 - 1,450 mW (480GB)
 - Idle mode:
 - 300 mW (120GB)
 - 300 mW (240GB)
 - 300 mW (480GB)
- **Connector Type**
 - Internal NGFF connector (M.2) for SSD usage
- **Form Factor**
 - M.2 2280
 - Dimensions: 80±0.15mm (L) x 22±0.15mm (W) x 2.3±0.08mm (H), unit: mm
- **Shock & Vibration****
 - Shock:1,500 G
 - Frequency/Displacement: 20Hz~80Hz/1.52mm
 - Frequency/Acceleration: 80Hz~2000Hz/20G
- **SATA Power Management Modes**
- **RoHS Compliant**

*Varies from capacities. The values for performances and power consumptions presented are typical and may vary depending on flash configurations or platform settings.

**Non-operating

Part Number Listing

Capacity	Bulk P/N	Retail P/N
120GB	AP120GAST280	AP120GAST280-1
240GB	AP240GAST280	AP240GAST280-1
480GB	AP480GAST280	AP480GAST280-1

Revision History

Revision	Description	Date
1.0	Official release	8/9/2018
2.0	Document layout change	8/20/2018

Global Presence

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