

RoHS Compliant Serial ATA Flash Drive AST280 Product Specifications



Aug, 2018

Version 2.0

Apacer Technology Inc.

1F, No.32, Zhongcheng Rd., Tucheng Dist., New Taipei City, Taiwan, R.O.C

Tel: +886-2-2267-8000 Fax: +886-2-2267-2261

www.apacer.com

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

Taiwan (Headquarters)

Apacer Technology Inc.

1F., No.32, Zhongcheng Rd., Tucheng Dist.,
New Taipei City 236, Taiwan R.O.C.
Tel: 886-2-2267-8000
Fax: 886-2-2267-2261
amtsales@apacer.com

Japan

Apacer Technology Corp.

6F, Daiyontamachi Bldg., 2-17-12, Shibaura, Minato-Ku,
Tokyo, 108-0023, Japan
Tel: 81-3-5419-2668
Fax: 81-3-5419-0018
jpservices@apacer.com

China

Apacer Electronic (Shanghai) Co., Ltd

Room D, 22/FL, No.2, Lane 600, JieyunPlaza,
Tianshan RD, Shanghai, 200051, China
Tel: 86-21-6228-9939
Fax: 86-21-6228-9936
sales@apacer.com.cn

U.S.A.

Apacer Memory America, Inc.

46732 Lakeview Blvd., Fremont, CA 94538
Tel: 1-408-518-8699
Fax: 1-510-249-9551
sa@apacerus.com

Europe

Apacer Technology B.V.

Science Park Eindhoven 5051 5692 EB Son,
The Netherlands
Tel: 31-40-267-0000
Fax: 31-40-290-0686
sales@apacer.nl

India

Apacer Technologies Pvt Ltd,

Unit No.201, "Brigade Corner", 7th Block
Jayanagar,
Yediyur Circle, Bangalore – 560082, India
Tel: 91-80-4152-9061
Fax: 91-80-4170-0215
sales_india@apacer.com