# P Series 5 SATA III 6Gb/s 2.5" SSD

## READ 560MB/s<sup>1</sup> WRITE 540MB/s<sup>1</sup>



### INTRODUCTION

The Integral P Series 5 SSD offers exceptional performance levels and great value. It is ideal for use in desktops and laptop computers.

The Performance Series SSD has a great combination of fast data read/write and reliability, along with low power operation - to make this the ideal hard disk drive replacement.

Choose the P Series 5 SSD to boost the performance of your existing hardware and extend its useful life. It will speed up your daily OS boot times and increase the speed of your applications, overall giving you the best experience of Solid State performance computing.

### **KEY BENEFITS**

 Providing an industry-leading bandwidth of more than 560MB/sec transfers, the Integral P Series 5 SSD can approach the limits of the SATA III 6Gb/s interface on large transfers.

 Efficient bad block management and advanced wear levelling algorithm further increases endurance and life expectancy. Drive health is monitored using an SSDspecific set of S.M.A.R.T. attributes. The combination of these techniques provides excellent data protection.

#### **BENEFITS**

• Enhanced performance: faster boot than HDD, faster access to applications, enhanced productivity and increased efficiency

• Sequential Read up to 560MB/s<sup>1</sup>, Write up to 540MB/s<sup>1</sup>

- No mechanical parts
- Highest reliability; less likely to fail than HDD
- Extreme shock resistance
- Zero noise
- No heat generation
- Low power consumption improved battery life on laptops/netbooks

#### **FEATURES**

- 2.5 inch form factor with SATA III 6Gbps interface (backwards compatible with SATA 3Gbps and SATA 1.5Gbps)
- Performance: Faster boot than HDD, Faster access to applications, enhanced productivity and increased efficiency
- Fully compatible with devices and OS that support the SATA standard
- Non-volatile Flash Memory for outstanding data retention - Less likely to fail than HDD
- Ultra-efficient Block Management and Wear Leveling
- Error Correction Code
- Lower Power Consumption
- Shock resistance No moving parts enable the product to be used in tougher conditions
- Silent operation Noiseless and low heat dissipation
- Supports S.M.A.R.T. Self-Monitoring, Analysis and **Reporting Technology**
- RoHS compliant
- CE and FCC tested
- 3 Year Warranty



CAPACITIES & INTERFACE				
Capacities available	120GB, 128GB, 240GB, 256GB, 500GB, 960GB, 1TB			
Form Factor	2.5 Inch			
NAND	3D TLC			
Controller	Phison S11			
Interface	SATA III 6Gbps Also Compatible with SATA II 3Gbps Also compatible with SATA 1.5Gbps			
Sequential Speed (up to) <sup>1</sup>	READ 560MB/s, WRITE 540MB/s (128GB, 256GB = READ 530MB/s, WRITE 510MB/s)			
DIMENSIONS				
Length mm	100.00			
Width mm	69.85			
Height mm	7.0			
Weight	50g			
E-tail Packaged Weight	64g			
E-tail Packaged Dimensions (mm)	L = 133, W = 117, D = 13			
Retail Packaged Weight	86g			
Retail Packaged Dimensions (mm)	L = 136, W = 111, D = 15			
POWER CONSUMPTION				
Power Management	5V			
Power Consumption (mW) <sup>4</sup>	120GB - Read 1,265, Write 1,705, Idle 320 128GB - Read 1,650, Write 1,750, Idle 310 240GB - Read 1,280, Write 2,680, Idle 315 256GB - Read 1,270, Write 1,850, Idle 315 480GB - Read 1,270, Write 2,570, Idle 315 500GB - Read 1,900, Write 2,000, Idle 335 960GB - Read 1,620, Write 1,750, Idle 340 1TB - Read 2,100, Write 2,100, Idle 330			
ENVIRONMENTAL				
Operating Temp <sup>2</sup>	0° - +70°C			
Storage Temp	-40° - +85°C			
Humidity⁵	RH 90% under 40°C (operational)			
FEATURES				
Supports SMART Software	Yes			
Supports TRIM	Yes (OS support required)			
TBW <sup>6</sup>	120GB = 40 128GB = 40 240GB = 100 256GB = 100	480GB = 200 500GB = 200 960GB = 450 1TB = 450		
ECC scheme	LDPC			
MTBF <sup>3</sup>	>2 Million Hours			
Compliancy	CE, FCC, RoHS			
WARRANTY				
3 years				

#### E-tail packaging order codes

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CAPACITY	PART CODE	BARCODE (EAN)
120GB	INSSD120GS625P5	5055288436626
128GB	INSSD128GS625P5	5055288446199
240GB	INSSD240GS625P5	5055288436633
256GB	INSSD256GS625P5	5055288446205
480GB	INSSD480GS625P5	5055288439801
500GB	INSSD500GS625P5	5055288444805
960GB	INSSD960GS625P5	5055288439924
1TB	INSSD1TS625P5	5055288444812

#### Retail packaging order codes

CAPACITY	PART CODE	BARCODE (EAN)
120GB	INSSD120GS625P5R	5055288440081
240GB	INSSD240GS625P5R	5055288440098
480GB	INSSD480GS625P5R	5055288440104
960GB	INSSD960GS625P5R	5055288440111

#### 7mm to 9mm Adapter supplied with packaged product



#### Notes:

- 1. Actual performance may vary and depends on use conditions, host and environment 2. Operating temperature is the drive case temperature as measured by the SMART temperature attribute
- 3. Mean Time Between Failures is estimated based on JEDEC-218/219 standard methodology.
- 4. Power Consumption may differ according to flash configuration and platform
- 5. Humidity test was for 4 hours.
- 6. TBW is a measurement of SSDs expected lifespan, which represents the amount of data written to the device. This is only an estimate and can differ based in user usage behaviour, platform and estimates provided by the flash vendor

All Specifications are subject to change without notice

1GB = 1,000,000,000 Bytes, 1TB = 1,000,000,000,000 Bytes; 1 sector = 512 Bytes.

The total usable capacity of the SSD may be less than the total physical capacity because a small portion of the capacity is used for NAND flash management and maintenance purposes.

