P Series 4 SATA III 6Gb/s 2.5" SSD

READ 565MB/s*
WRITE 530MB/s*

120 GB　240 GB　480 GB　960 GB

INTRODUCTION

The Integral P Series 4 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 4 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 565MB/sec transfers, the Integral P Series 4 SSD can approach the limits of the SATA III 6Gb/s interface on large transfers.

• A robust ECC algorithm corrects up to 120 bits error in 2K Byte data. Efficient bad block management and reduced write amplification further increases endurance. Drive health is monitored using an SSD-specific 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

• **Read up to 565MB/s*, Write up to 530MB/s***

• **No mechanical parts**

- Highest reliability; less likely to fail than HDD

- Extreme shock resistance

- Zero noise

- No heat generation

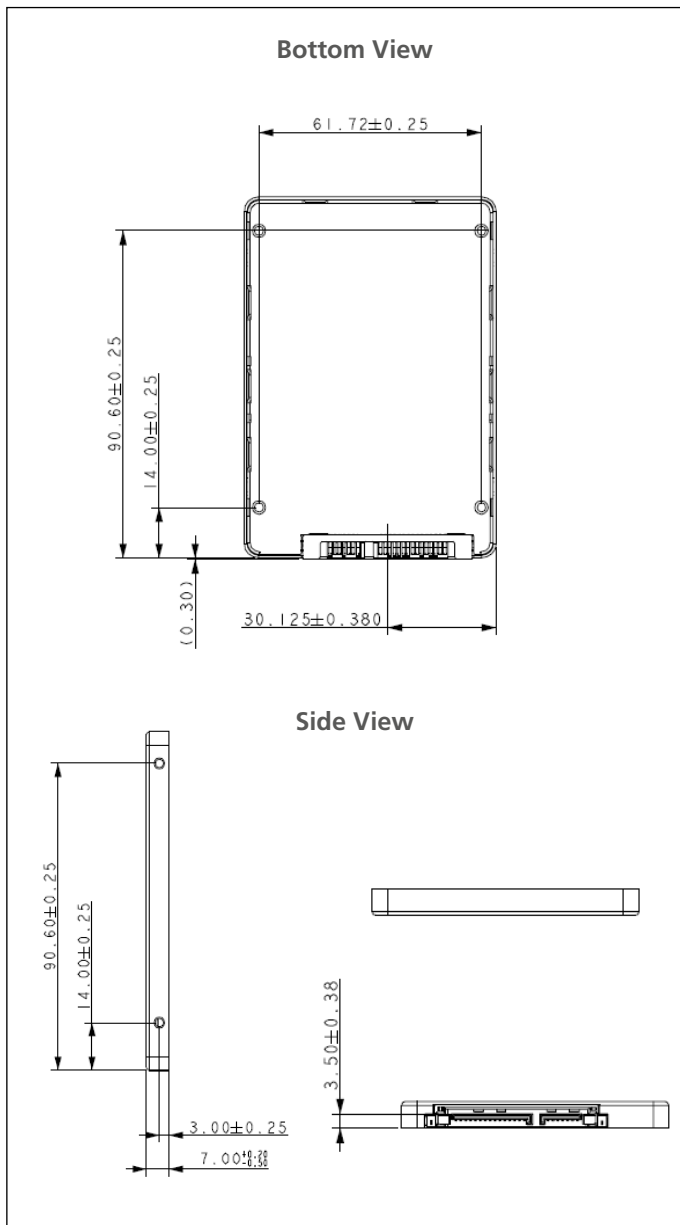• **Low power consumption -** improved battery life on laptops/netbooks

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**

Technical Features

• SATA III 2.5"

• TRIM (OS support required)

• S.M.A.R.T. option

• CE and FCC certified and RoHs compliant

7mm to 9mm Adapter supplied with packaged product

Bottom View

Side View

CAPACITIES & INTERFACE	
Capacities available	120GB, 240GB, 480GB, 960GB
Form Factor	2.5 Inch
NAND	TLC
Controller	Phison S10
Interface	SATA III 6Gbps Also Compatible with SATA II 3Gbps Also compatible with SATA 1.5Gbps
Sequential Speed (up to)*	120GB = READ 560MB/s, WRITE 420MB/s 240GB = READ 565MB/s, WRITE 490MB/s 480GB = READ 565MB/s, WRITE 530MB/s 960GB = READ 560MB/s, WRITE 500MB/s
DIMENSIONS	
Length mm	100.00
Width mm	69.85
Height mm	7.0
Weight	50g
Packaged Weight	64g
Packaged Dimensions (mm)	L = 133, W = 117, D = 13
POWER CONSUMPTION	
Power Management	5V
Power Consumption (mW)***	120GB - Read 2,290, Write 2,730, Idle 175 240GB - Read 2,290, Write 2,730, Idle 175 480GB - Read 2,510, Write 5,260, Idle 185 960GB - Read 2,620, Write 3,655, Idle 195
ENVIRONMENTAL	
Operating Temp	0° - +70°C
Storage Temp	-40° - +85°C
Humidity****	RH 90% under 40°C (operational)
FEATURES	
Supports SMART Software	Yes
Supports TRIM	Yes (OS support required)
ECC scheme	Corrects up to 120 bits error in 2K Byte data
MTBF	>2 Million Hours
Compliancy	CE, FCC, RoHS
WARRANTY	
3 years	

CAPACITY	PART CODE	BARCODE (EAN)
120GB	INSSD120GS625M7XP4	5055288428560
240GB	INSSD240GS625M7XP4	5055288428577
480GB	INSSD480GS625M7XP4	5055288429246
960GB	INSSD960GS625M7XP4	5055288429253

*Based on internal testing measured under ambient temperature. Sequential R/W is measured using ATTO.

***Power Consumption may differ according to flash configuration, SDR configuration, and platform.

****Humidity test was for 4 hours

E&OE. Product design and specification subject to change or modification without notice.

REVISION HISTORY WITH SEQUENTIAL READ AND WRITE PERFORMANCE*		
16nm MLC	**A19nm TLC**	**15nm TLC**
120GB Before August 2015 Phison S9 + 16nm MLC Read 545MBs, Write 440MBs"	From August 2015 Phison S10 + A19nm TLC Read 565MBs, Write 429MBs"	From November 2015 Phison S10 + 15nm TLC Read 560MBs, Write 420MBs"
240GB Before August 2015 Phison S8 + 16nm MLC Read 550MBs, Write 520MBs"	From August 2015 Phison S10 + A19nm TLC Read 565MBs, Write 500MBs"	From December 2015 Phison S10 + 15nm TLC Read 565MBs, Write 490MBs"
480GB Before August 2015 Phison S8 + 16nm MLC Read 550MBs, Write 500MBs"	From August 2015 Phison S10 + A19nm TLC Read 565MBs, Write 530MBs"	From February 2016 Phison S10 + 15nm TLC Read 565MBs, Write 530MBs"
960GB Before September 2015 Phison S8 + 16nm MLC Read 550MBs, Write 490MBs"	From September 2015 Phison S10 + A19nm TLC Read 565MBs, Write 530MBs"	From January 2016 Phison S10 + 15nm TLC Read 560MBs, Write 500MBs"

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