

M.2 2280 PCIe NVMe SSD – UltimaPro X - Version 2

READ 3300MB/s*
WRITE 3000MB/s*

READ 500K IOPS*
WRITE 410K IOPS*



240
GB

480
GB

960
GB

1920
GB

INTRODUCTION

UltimaPro X M.2 2280 PCIe Gen3x4 NVMe SSD

The UltimaPro X is Integral's extreme performance SSD that can meet your most demanding gaming, graphic design, and video workflow needs.

The UltimaPro X SSD delivers super-fast speeds of up to 3300MB/s* read and 3000MB/s* write, with random read/write IOPS of up to 500K/410K*.

PRODUCT OVERVIEW

- UltimaPro X M.2 PCIe NVMe SSDs are up to four times faster in performance when compared to SATA SSDs and are compatible with most computing hardware and software that support the NVMe standard, including small form factor machines (e.g Intel NUC), Ultrabooks, enthusiast desktops.
- Choose the UltimaPro X M.2 PCIe NVMe SSD to break through the 6Gbps SATA limitation for your extreme performance needs. Specifically engineered to compliment high-specification machines and provide the best gaming and multimedia application performance that is ultra-responsive.
- The UltimaPro X SSD has a high read/write IOPS threshold that makes use of every bit of the SSD's superior hardware, giving you the finest experience in professional solid state computing.
- The UltimaPro X features 256-bit hardware encryption, with support for Trusted Computing Group (TCG) Opal 2.0. This ensures compatibility with 3rd party security software from Independent Software Vendors (ISVs), providing strong data security and assisting compliance with regulations such as the General Data Protection Regulation (GDPR).

KEY BENEFITS:

- An industry-leading PCIe Gen3x4 interface and NVMe 1.2 standard achieving up to 3300MB/s* read and 3000MB/s* write, the Integral UltimaPro X M.2 PCIe NVMe SSDs break through the 6Gbps SATA limitation that takes computing performance to the next level.
- Random read/write IOPS up to of up to 500K/410K*
- Gamers will benefit from faster loading times, exceptional performance and a more enjoyable gaming experience
- Power-users, content editors, graphic designers and general multi-taskers will all benefit from an ultra-responsive system and super-fast boot
- Improved video workflow when used in machines that work with: Digital film recording, live broadcast, video editing, colour correction and visual effects
- Supports SSD enhanced set of S.M.A.R.T. attributes.

BENEFITS:

- Sequential Read up to 3300MB/s*, Write up to 3000MB/s*
- Random Read 500K IOPS*, write 410K IOPS.*
- No mechanical parts
- Highest reliability; less likely to fail than HDD
- Extreme shock resistance
- Zero noise
- No heat generation
- Low power consumption

*Up to performance may vary depending on host device. (960GB model performance)

FEATURES

- PCIe Gen3x4
- Compliant with PCI Express Base Specification Rev 3.1
- Compliant with NVMe 1.3
- 3D TLC NAND flash technology
- Non-volatile Flash Memory for outstanding data retention
- Ultra-efficient Block Management and Wear Levelling
- Supports S.M.A.R.T. - Self-Monitoring, Analysis and Reporting Technology
- 3 Year Warranty

CAPACITIES & INTERFACE	
Capacities available	240GB, 480GB, 960GB, 1920GB
Controller Technology	Phison E12
NAND	3D TLC
Form Factor	M.2 2280
Interface	PCIe (Gen 3x4)
Compliance	Compliant with PCI Express Base Specification Rev 3.1 NVMe 1.3
Sequential Performance up to ¹	240GB READ 3300MB/s, WRITE 1050MB/s 480GB READ 3300MB/s, WRITE 2000MB/s 960GB READ 3300MB/s, WRITE 3000MB/s 1920GB READ 3300MB/s, WRITE 2700MB/s
*Random Performance up to ¹	240GB = READ 160K IOPS, Write 230K IOPS 480GB = READ 350K IOPS, Write 380K IOPS 960GB = READ 500K IOPS, Write 410K IOPS 1920GB = READ 470K IOPS, Write 400K IOPS
DIMENSIONS	
Length mm	80
Width mm	22
Height mm	Double side 3.80
Weight	10g
Packaged Weight	58g
Packaged Dimensions (mm)	L = 114mm, W = 65mm, D = 8mm

POWER CONSUMPTION			
Power Management	+3.3V (+/-5%)		
Power Consumption (mW) ⁵	READ	WRITE	IDLE
	240GB - 5000	3900	<910
	480GB - 5500	4100	<910
	960GB - 6600	5300	<910
1920GB - 5700	5400	<910	
ENVIRONMENTAL			
Operating Temp ²	0° - +70°C		
Storage Temp	-40° - +85°C		
Humidity ⁶	RH 90% under 40°C		
Linear Shock (non-operating)	1500G		
Vibration (non-operational)	Frequency 20Hz~80Hz/Displacement 1.5mm Frequency 80Hz~2000Hz/Acceleration 20G		
FEATURES			
Supports SMART Software	Yes		
Supports TRIM	Yes (OS support required)		
MTBF ³	1.8 Million Hours		
TBW ⁴	240GB - 380 480GB - 800 960GB - 1665 1920GB - 3115		
Compliance	CE, FCC, RoHS		
WARRANTY			
3 years or TBW			

CAPACITY	PART CODE	BARCODE (EAN)
240GB	INSSD240GM280NUPX2	5055288442573
480GB	INSSD480GM280NUPX2	5055288442580
960GB	INSSD960GM280NUPX2	5055288442597
1920GB	INSSD1920GM280NUPX2	5055288442603

Notes:

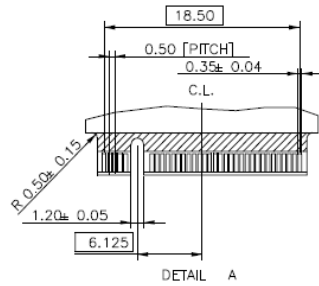
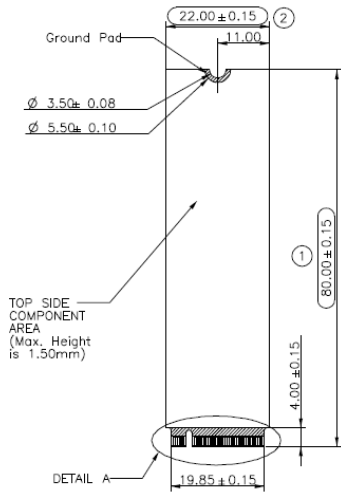
1. Actual performance may vary and depends on use conditions, host and environment
2. Operating temperature is the drive case temperature as measured by the SMART temperature attribute
3. Mean Time Between Failures is estimated based on JEDEC-218/219 standard methodology.
4. TBW (Terabytes Written) DWP (Drive Write Per Day). TBW and DWPD 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
5. Power Consumption may differ according to flash configuration and platform
6. Humidity test was for 4 hours.

All Specifications are subject to change without notice

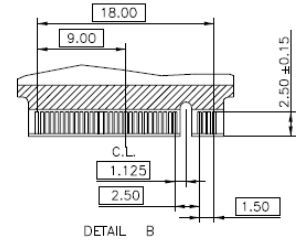
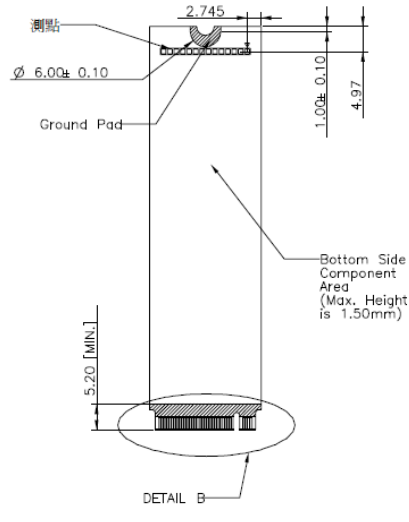
1GB = 1,000,000,000 Bytes, 1TB = 1,000,000,000,000 Bytes; 1 sector = 512 Bytes.

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.

TOP VIEW



BOTTOM VIEW



SIDE VIEW

