

Form Factor	Model Number	Capacity	LBA Count (512B Size)
2.5"	TRUSTA TD5S30-001T9T5S2521D02X	1920GB	3,750,748,848
	TRUSTA TD5S30-003T8T5S2521D02X	3840GB	7,501,476,528

Features	Environmental Specifications
Serial ATA 6GB/s interface	Temperature Range
Compliant with ATA-8 Standard	- Operating (by SMART) 0°C ~ 70°C
Compliant with SATA Revision 3.2	- Non-Operating -40°C ~ 85°C
Power Loss Protection (by On-board Circuit)	Shock (Non-Operating, Half Sine) 1500G / 0.5ms
AES-128/256	Vibration
TCG Opal 2.01	- Non-Operating, Sine 20G / 20 ~ 2000Hz
	Humidity (Non-Operating) 5 ~ 95%

Drive Configuration	Reliability Specifications
Interface SATA	UBER < 1 Error per 10 ¹⁷ Bits Read
NAND SanDisk BiCS5 eTLC	MTBF 2,000,000 hours
Protocol SATA Revision 3.2	Endurance Up to 7,008 TB
Sector Size 512B	Data Retention 3 Months (40°C)

Performance (Typ.)	Quality of Service (Latency)
Data Transfer Rate (128KB Data Size, Up to)	Average Latency (4KB Data Size, Sustained, QD1, Typical)
Sequential Read Up to 530 MB/s	Random Read 105 us
Sequential Write Up to 510 MB/s	Random Write 36 us
Data I/O Speed (4KB Data Size, Sustained, Up to)	
Random Read Up to 80K IOPS	
Random Write Up to 50K IOPS	

Form Factor	Model Number	Capacity	LBA Count (512B Size)
U.2	TRUSTA TD7P40-003T8T5U2022D02X	3840GB	7,501,476,528
	TRUSTA TD7P40-007T6T5U2022D02X	7680GB	15,002,931,888

Features	Environmental Specifications
PCI Express Gen4 x 4 Lane (Single Port)	Temperature Range
PCI Express Base Specification Rev. 4.0	- Operating (by SMART) 0°C ~ 70°C
NVM Express Specification Rev. 1.4	- Non-Operating -40°C ~ 85°C
Power Loss Protection (by On-board Circuit)	Shock (Non-Operating, Half Sine) 1500G / 0.5ms
Thermal Throttling	Vibration
Secure Boot, Crypto Erase	- Non-Operating 3.13Grms / 5 ~ 800Hz
TCG Opal SSC v2.01	Humidity 5 ~ 95%

Drive Configuration	Reliability Specifications
Interface PCIe Gen4x4	UBER < 1 Error per 10 ¹⁷ Bits Read
NAND SanDisk BiCS5 eTLC	MTBF 2,500,000 hours
Protocol NVMe v1.4	Endurance 1.0 DWPD (5 Years Assumed)
Sector Size 512B, 4KiB	Data Retention 3 Months (40°C)

Performance (Typ.)	Quality of Service (Latency)
Data Transfer Rate (128KB Data Size, Up to)	Average Latency (4KB Data Size, Sustained, QD1, Typical)
Sequential Read Up to 7400 MB/s	Random Read 72 us
Sequential Write Up to 5050 MB/s	Random Write 12 us
Data I/O Speed (4KB Data Size, Sustained, Up to)	
Random Read Up to 1300K IOPS	
Random Write Up to 200K IOPS	

Form Factor	OP	Part Number	Capacity	LBA Count (512B Size)
U.2	OP7	T7P5-001T9T5U2001D040	1920GB	3,750,748,848
		T7P5-003T8T5U2001D040	3840GB	7,501,476,528
		T7P5-007T6T5U2001D040	7680GB	15,002,931,888
	OP28	T7P5-001T6T7U2001D040	1600GB	3,125,627,568
		T7P5-003T2T7U2001D040	3200GB	6,251,233,968
		T7P5-006T4T7U2001D040	6400GB	12,502,446,768

Features	Environmental Specifications
PCI Express Gen5 x 4 Lane (Single Port)	Temperature Range
PCI Express Base Specification Rev. 5.0 Compliant	- Operating (by SMART) 0°C ~ 70°C
NVM Express Specification Rev. 2.0c Compliant	- Non-Operating -40°C ~ 85°C
Power Loss Protection (by On-board Circuit)	Shock (Non-Operating, Half Sine) 1500G / 0.5ms
Thermal Throttling	Vibration
SMBus Basic Management (Out of Band)	- Non-Operating, Sine 20G / 20 ~ 2000Hz
Secure Boot, Crypto Erase	- Non-Operating, Random 3.13Grms / 5 ~ 800Hz
Security AES GCM 256bits, SHA2-512, RSA-4096	- Operating, Random 1.8Grms / 5 ~ 500Hz
TCG Opal SSC v2.01	Humidity (Non-Operating) 5 ~ 95%

Drive Configuration	Reliability Specifications
Interface PCIe Gen5x4	UBER < 1 Error per 10 ¹⁷ Bits Read
NAND SanDisk BiCS6 eTLC	MTBF 2.5 Mhrs
Protocol NVMe v2.0c	Endurance 1.0 DWPD / 3.0 DWPD (5 Years Assumed)
Sector Size 512B, 512B+8B, 4KiB, 4KiB+8B, 4KiB+64B	
	Data Retention 3 Months (40°C)

Performance (Typ.)	Quality of Service (Latency)
Data Transfer Rate (128KB Data Size, Up to)	Average Latency (4KB Data Size, Sustained, QD1, Typical)
Sequential Read 13,100 MB/s (512B LBAF)	Random Read 75 us
13,500 MB/s (4KiB LBAF)	Random Write 10 us
Sequential Write 10,400 MB/s (512B LBAF)	
10,300 MB/s (4KiB LBAF)	
Data I/O Speed (4KB Data Size, Sustained, Up to)	
Random Read 3,100 KIOPS (512B LBAF)	
3,200 KIOPS (4KiB LBAF)	
Random Write 470 KIOPS (OP7)	
870 KIOPS (OP28)	

Form Factor	OP	Part Number	Capacity	LBA Count (512B Size)
E1.S, 9.5mm/15mm/25mm	OP7	T7P5-001T9T5E1S01D04X	1920GB	3,750,748,848
		T7P5-003T8T5E1S01D04X	3840GB	7,501,476,528
		T7P5-007T6T5E1S01D04X	7680GB	15,002,931,888
	OP28	T7P5-001T6T7E1S01D04X	1600GB	3,125,627,568
		T7P5-003T2T7E1S01D04X	3200GB	6,251,233,968
		T7P5-006T4T7E1S01D04X	6400GB	12,502,446,768

Features	Environmental Specifications
PCI Express Gen5 x 4 Lane (Single Port)	Temperature Range
PCI Express Base Specification Rev. 5.0 Compliant	- Operating (by SMART) 0°C ~ 70°C
NVM Express Specification Rev. 2.0c Compliant	- Non-Operating -40°C ~ 85°C
Power Loss Protection (by On-board Circuit)	Shock (Non-Operating, Half Sine) 1500G / 0.5ms
Thermal Throttling	Vibration
SMBus Basic Management (Out of Band)	- Non-Operating, Sine 20G / 20 ~ 2000Hz
Secure Boot, Crypto Erase	- Non-Operating, Random 3.13Grms / 5 ~ 800Hz
Security AES GCM 256bits, SHA2-512, RSA-4096	- Operating, Random 1.8Grms / 5 ~ 500Hz
TCG Opal SSC v2.01	Humidity (Non-Operating) 5 ~ 95%

Drive Configuration	Reliability Specifications
Interface PCIe Gen5x4	UBER < 1 Error per 10 ¹⁷ Bits Read
NAND SanDisk BiCS6 eTLC	MTBF 2.5 Mhrs
Protocol NVMe v2.0c	Endurance 1.0 DWPD / 3.0 DWDP (5 Years Assumed)
Sector Size 512B, 512B+8B, 4KiB, 4KiB+8B, 4KiB+64B	
	Data Retention 3 Months (40°C)

Performance (Typ.)	Quality of Service (Latency)
Data Transfer Rate (128KB Data Size, Up to)	Average Latency (4KB Data Size, Sustained, QD1, Typical)
Sequential Read 13,100 MB/s (512B LBAF) 13,500 MB/s (4KiB LBAF)	Random Read 75 us
	Random Write 10 us
Sequential Write 10,400 MB/s (512B LBAF) 10,300 MB/s (4KiB LBAF)	
Data I/O Speed (4KB Data Size, Sustained, Up to)	
Random Read 3,100 KIOPS (512B LBAF) 3,200 KIOPS (4KiB LBAF)	
Random Write 470 KIOPS (OP7) 870 KIOPS (OP28)	

Form Factor	OP	Part Number	Capacity	LBA Count (512B Size)
E3.S	OP7	T7P5-001T9T5E3S01D040	1920GB	3,750,748,848
		T7P5-003T8T5E3S01D040	3840GB	7,501,476,528
		T7P5-007T6T5E3S01D040	7680GB	15,002,931,888
	OP28	T7P5-001T6T7E3S01D040	1600GB	3,125,627,568
		T7P5-003T2T7E3S01D040	3200GB	6,251,233,968
		T7P5-006T4T7E3S01D040	6400GB	12,502,446,768

Features	Environmental Specifications
PCI Express Gen5 x 4 Lane (Single Port)	Temperature Range
PCI Express Base Specification Rev. 5.0 Compliant	- Operating (by SMART) 0°C ~ 70°C
NVM Express Specification Rev. 2.0c Compliant	- Non-Operating -40°C ~ 85°C
Power Loss Protection (by On-board Circuit)	Shock (Non-Operating, Half Sine) 1500G / 0.5ms
Thermal Throttling	Vibration
SMBus Basic Management (Out of Band)	- Non-Operating, Sine 20G / 20 ~ 2000Hz
Secure Boot, Crypto Erase	- Non-Operating, Random 3.13Grms / 5 ~ 800Hz
Security AES GCM 256bits, SHA2-512, RSA-4096	- Operating, Random 1.8Grms / 5 ~ 500Hz
TCG Opal SSC v2.01	Humidity (Non-Operating) 5 ~ 95%

Drive Configuration	Reliability Specifications
Interface PCIe Gen5x4	UBER < 1 Error per 10 ¹⁷ Bits Read
NAND SanDisk BiCS6 eTLC	MTBF 2.5 Mhrs
Protocol NVMe v2.0c	Endurance 1.0 DWPD / 3.0 DWPD (5 Years Assumed)
Sector Size 512B, 512B+8B, 4KiB, 4KiB+8B, 4KiB+64B	Data Retention 3 Months (40°C)

Performance (Typ.)	Quality of Service (Latency)
Data Transfer Rate (128KB Data Size, Up to)	Average Latency (4KB Data Size, Sustained, QD1, Typical)
Sequential Read 13,100 MB/s (512B LBAF)	Random Read 75 us
13,500 MB/s (4KiB LBAF)	Random Write 10 us
Sequential Write 10,400 MB/s (512B LBAF)	
10,300 MB/s (4KiB LBAF)	
Data I/O Speed (4KB Data Size, Sustained, Up to)	
Random Read 3,100 KIOPS (512B LBAF)	
3,200 KIOPS (4KiB LBAF)	
Random Write 470 KIOPS (OP7)	
870 KIOPS (OP28)	