



T A M M U Z T A M M U Z T
A M M U Z T A M M U Z T A
M M U Z T A M M U Z T A M
M U Z T A M M U Z T A M M
U Z T A M M U Z T A M M U
Z T A M M U Z T A M M U Z
T A M M U Z T A M M U Z T
A M M U Z T A M M U Z T A
M M U Z T A M M U Z T A M
M U Z T A M M U Z T A M M
U Z T A M M U Z T A M M U
Z T A M M U Z T A M M U Z

YOUR TRUSTWORTHY STORAGE PARTNER

TAMMUZ

T A M M U Z T
A M M U Z T A
M M U Z T A M

ABILITY MAKES BELIEF.

U Z T A M M U
Z T A M M U Z

YOUR TRUSTWORTHY STORAGE PARTNER

INDEX

ABOUT TAMMUZ	5
SOLID STATE DRIVE	9
EXTERNAL SSD	15
MEMORY MODULE	17
USB FLASH DRIVE	21
MEMORY CARD	23

ABOUT TAMMUZ

Company Status

Corporation Name

Tammuz International Co., Ltd.

Employee

10 people

Date of Establishment 2015.01.05

Corporate registration No. 106-87-11301

Main products

SSD

RAM

Industrial Storage Devices

Semiconductor Packaging

2018 Sales Revenue (USD)

\$ 12,452,539

HISTORY

2015

- 2015.01. Established RAON T&I Co., Ltd.
- 2015.03. Launch the brand 'TAMMUZ'

2016

- 2016.03. Launch the TAMMUZ SSD
- 2016.03. Established Tammuz International Co., Ltd.
- 2016.08. Launch the TAMMUZ RAM
- 2016.11. Launch the TAMMUZ External ODD

2017

- 2017.02. Launch the TAMMUZ External SSD

2018

- 2018.01. Changing of Corporation Name :
RAON T&I Co., Ltd → Tammuz International Co., Ltd.
- 2018.04. Launch the TAMMUZ USB Flash Drive
- 2018.08. Launch the TAMMUZ Industrial SSD
- 2018.08. Launch the TAMMUZ Industrial RAM

2019

- ▶▶▶ TAMMUZ Intellectual property Registration
(USA, Indonesia, Singapore)
- Domestic Laboratory Establishment
- Designated as a 'Promising Export Firm' by Republic of Korea
- Launch made in Korea SSD TAMMUZ GK Series

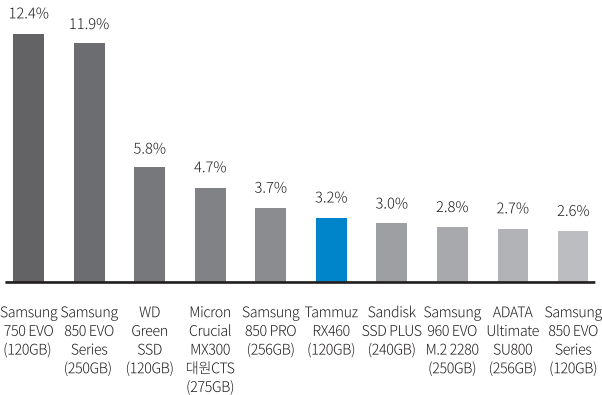
STORAGE DEVICE MARKET SIZE AND DOMESTIC MARKET SHARE OF TAMMUZ

Size of Market

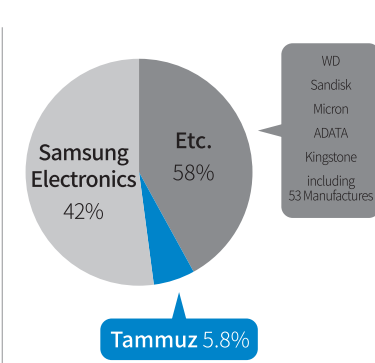
	Market	2013	2014	2015	2016	2017	2018	2019	CAGR(%)
Industrial	World Market	440.4	432.5	458.2	578.1	727.0	891.4	1026.0	15.14%
	Domestic Market	12.2	13.8	16.1	18.7	22.1	25.3	28.6	15.25%
General	World Market	1100.0	1450.0	1760.0	1980.0	2350.0	2841.2	3435.0	20.90%
	Domestic Market	30.5	46.2	61.9	64.2	71.5	80.8	95.8	21.02%
Total	World Market	1540.4	1882.5	2218.2	2558.1	3077.0	3732.6	4461.0	19.34%
	Domestic Market	42.7	60.0	78.0	82.9	93.6	106.1	124.4	19.51%

Reference: Enterprise&Counsumer SSDs Worldwide and Domestic Market Size, Source: "I supply Korea IDC" References, KISTI rewrite (Unit: ten million)

2017 Market Share of Each SSD Products



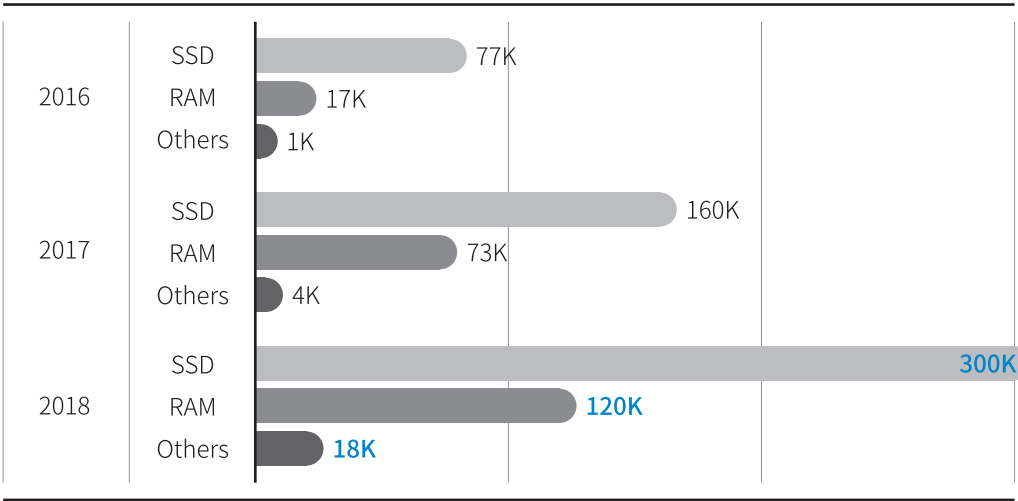
2017 Market Share of Each SSD Manufacture



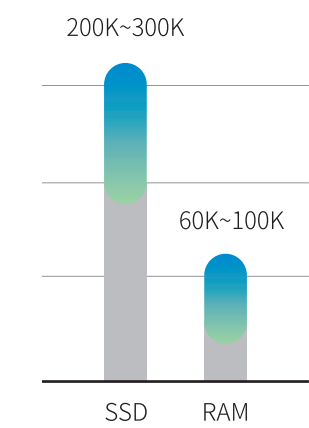
Reference: Research of Danawa (Based on Sales amount 01.2017 ~ 12.2017)

TAMMUZ SALES VOLUME

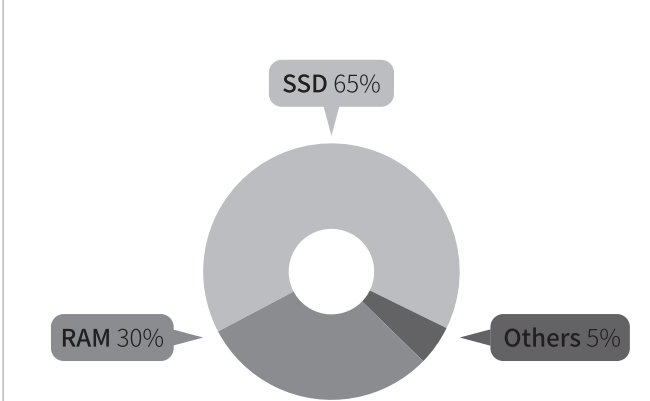
Annual Sales Amount (Unit : pcs)



Prodcution Ability (per month)



2018 Average Sales Record for Each Products



SOLID STATE DRIVE

Meet SSD with reasonable price and high performance that TAMMUZ suggests with confidence. You can experience superior speed that is different from HDD even if it is just installed. SSD is not selective but essential because files with high capacity increase these days.

WARRANTY

3

YEARS



NEW ARRIVAL !

GK300 & GK Series

MADE IN KOREA



GK300

SPECIFICATION

Interface

Controller

NAND

MTBF

Impact Resistance

Operating Temperature

Dimensions

2.5inch SATA 6Gb/s (Backward compatibility)

AS2258

3D TLC

1,500,000 hours

1,500G/0.5ms

0°C to 70°C

100 x 69.8 x 7 (mm)

FEATURE

Built-in 32MB SDRAM

Made in KOREA

Tammuz Private Software

TRIM

Garbage Collection

S.M.A.R.T.

ECC

SLC Caching

Wear-leveling

ONFI

RAID Protection

LDPC

CAPACITY

120GB

128GB

240 GB

256 GB

480 GB

512 GB

1 TB

(MAX) SEQUENTIAL READ

500MB/s

500MB/s

550 MB/s

550 MB/s

550 MB/s

550 MB/s

550 MB/s

(MAX) SEQUENTIAL WIRTE

400MB/s

400MB/s

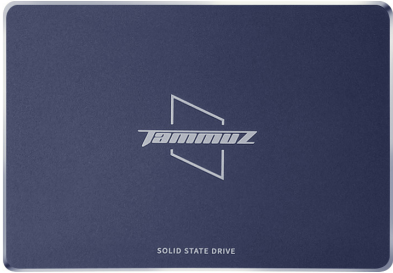
500 MB/s

500 MB/s

500 MB/s

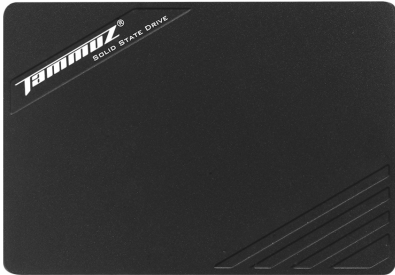
500 MB/s

500 MB/s



GK500

SPECIFICATION	Interface	2.5inch SATA 6Gb/s (Backward compatibility)						
	Controller	AS2258						
	NAND	3D MLC						
	MTBF	1,500,000 hours						
	Impact Resistance	1,500G/0.5ms						
	Operating Temperature	0°C to 70°C						
	Dimensions	100 x 69.8 x 7 (mm)						
FEATURE	Built-in 32MB SDRAM	S.M.A.R.T.			RAID Protection			
	Made in KOREA	ECC			LDPC			
	Tammuz Private Software	SLC Caching						
	TRIM	Wear-leveling						
	Garbage Collection	ONFI						
CAPACITY	120GB	128GB	240 GB	256 GB	480 GB	512 GB	1 TB	
(MAX) SEQUENTIAL READ	500MB/s	500MB/s	550 MB/s	550 MB/s	550 MB/s	550 MB/s	550 MB/s	
(MAX) SEQUENTIAL WIRTE	400MB/s	400MB/s	500 MB/s	500 MB/s	500 MB/s	500 MB/s	500 MB/s	



RX460	SPECIFICATION	Interface	2.5inch SATA 6Gb/s (Backward compatibility)			
		Controller	88NV1120			
		NAND	3D TLC			
		MTBF	1,500,000 hours			
		Impact Resistance	1,500G/0.5ms			
		Operating Temperature	0°C to 70°C			
		Dimensions	100 x 69.5 x 7 (mm)			
	FEATURE	TRIM	SLC Caching			
		Garbage Collection	Wear-leveling			
		S.M.A.R.T.	ONFI			
		DEVSLP				
		ECC				
CAPACITY		120 GB	128 GB	240 GB	256 GB	480 GB 512 GB
(MAX)	SEQUENTIAL READ	530 MB/s	530 MB/s	530 MB/s	530 MB/s	530 MB/530 MB/s
(MAX)	SEQUENTIAL WIRTE	400 MB/s	400 MB/s	400 MB/s	400 MB/s	460 MB/460 MB/s



GKM330	SPECIFICATION	Interface	M.2 2280 SATA 6Gb/s (Backward compatibility)		
		Controller	AS2258		
		NAND	3D TLC		
		MTBF	1,500,000 hours		
		Impact Resistance	1,500G/0.5ms		
		Operating Temperature	0°C to 70°C		
		Dimensions	80 x 22 x 2.25 (mm)		
	FEATURE	Built-in 32MB SDRAM	S.M.A.R.T.	RAID Protection	
		Made in KOREA	ECC	LDPC	
		Tammuz Private Software	SLC Caching		
		TRIM	Wear-leveling		
		Garbage Collection	ONFI		
CAPACITY		128 GB	256 GB	512 GB	1 TB
(MAX)	SEQUENTIAL READ	500 MB/s	550 MB/s	550 MB/s	550 MB/s
(MAX)	SEQUENTIAL WIRTE	450 MB/s	500 MB/s	500 MB/s	500 MB/s



RX550	SPECIFICATION	Interface	2.5inch SATA 6Gb/s (Backward compatibility)			
		Controller	SM2258XT			
		NAND	3D TLC			
		MTBF	1,500,000 hours			
		Impact Resistance	1,500G/0.5ms			
		Operating Temperature	0°C to 70°C			
		Dimensions	100 x 69.5 x 7 (mm)			
	FEATURE	TRIM	SLC Caching			
		Garbage Collection	Wear-leveling			
		S.M.A.R.T.	ONFI			
		DEVSLP				
		ECC				
CAPACITY		120GB	128GB	240GB	256GB	480GB 512GB1TB
(MAX)	SEQUENTIAL READ	560MB/s	560MB/s	560MB/s	560MB/s	560MB/560MB/s
(MAX)	SEQUENTIAL WIRTE	465MB/s	465MB/s	465MB/s	465MB/s	490MB/490MB/s



GKM530	SPECIFICATION	Interface	M.2 2280 SATA 6Gb/s (Backward compatibility)		
		Controller	AS2258		
		NAND	3D MLC		
		MTBF	1,500,000 hours		
		Impact Resistance	1,500G/0.5ms		
		Operating Temperature	0°C to 70°C		
		Dimensions	80 x 22 x 2.25 (mm)		
	FEATURE	Built-in 32MB SDRAM	S.M.A.R.T.	RAID Protection	
		Made in KOREA	ECC	LDPC	
		Tammuz Private Software	SLC Caching		
		TRIM	Wear-leveling		
		Garbage Collection	ONFI		
CAPACITY		128 GB	256 GB	512 GB	1 TB
(MAX)	SEQUENTIAL READ	500 MB/s	550 MB/s	550 MB/s	550 MB/s
(MAX)	SEQUENTIAL WIRTE	450 MB/s	500 MB/s	500 MB/s	500 MB/s



RX550 PRO	SPECIFICATION	Interface	2.5inch SATA 6Gb/s (Backward compatibility)			
		Controller	SM2258G			
		NAND	3D TLC			
		MTBF	1,500,000 hours			
		Impact Resistance	1,500G/0.5ms			
		Operating Temperature	0°C to 70°C			
		Dimensions	100 x 69.85 x 7 (mm)			
	FEATURE	DRAM Cache	ECC			
		TRIMM	SLC Caching			
		Garbage Collection	Wear Leveling			
		S.M.A.R.T.	ONFI			
		DEVSLP				
CAPACITY		250 GB	500 GB	1 TB		
(MAX)	SEQUENTIAL READ	570 MB/s	570 MB/s	570 MB/s		
(MAX)	SEQUENTIAL WIRTE	520 MB/s	520 MB/s	520 MB/s		
(MAX)	DRAM CACHE	256 MB	512 MB	512 MB		



M550XT	SPECIFICATION	Interface	M.2 2280 SATA 6Gb/s (Backward compatibility)		
		Controller	SMI2258XT		
		NAND	3D TLC		
		MTBF	1,500,000 hours		
		Impact Resistance	1,500G/0.5ms		
		Operating Temperature	0°C to 70°C		
		Dimensions	80 x 22 x 2.25 (mm)		
	FEATURE	TRIM	SLC Caching		
		Garbage Collection	Wear-leveling		
		S.M.A.R.T.	ONFI		
		DEVSLP	RAID Protection		
		ECC	LDPC		
CAPACITY		128 GB	256 GB	512 GB	1 TB
(MAX)	SEQUENTIAL READ	550 MB/s	550 MB/s	550 MB/s	560 MB/s
(MAX)	SEQUENTIAL WIRTE	470 MB/s	490 MB/s	490 MB/s	510 MB/s



GKX320	SPECIFICATION	Interface	mSATA SATA6Gb/s (Backward compatibility)			
		Controller	AS2258			
	FEATURE	NAND	3D TLC			
		MTBF	1,500,000 hours			
		Impact Resistance	1,500G/0.5ms			
		Operating Temperature	0°C to 70°C			
		Dimensions	50 x 30 x 3.5 (mm)			
		Built-in 32MB SDRAM	S.M.A.R.T.	RAID Protection		
		Made in KOREA	ECC	LDPC		
	CAPACITY	128 GB	256 GB	512 GB	1 TB	
		(MAX) SEQUENTIAL READ	500 MB/s	550 MB/s	550 MB/s	550 MB/s
	CAPACITY	128 GB	256 GB	512 GB	1 TB	
		(MAX) SEQUENTIAL WIRTE	450 MB/s	500 MB/s	500 MB/s	500 MB/s



GKX520	SPECIFICATION	Interface	mSATA SATA6Gb/s (Backward compatibility)			
		Controller	AS2258			
	FEATURE	NAND	3D MLC			
		MTBF	1,500,000 hours			
		Impact Resistance	1,500G/0.5ms			
		Operating Temperature	0°C to 70°C			
		Dimensions	50 x 30 x 3.5 (mm)			
		Built-in 32MB SDRAM	S.M.A.R.T.	RAID Protection		
		Made in KOREA	ECC	LDPC		
	CAPACITY	128 GB	256 GB	512 GB	1 TB	
		(MAX) SEQUENTIAL READ	500 MB/s	550 MB/s	550 MB/s	550 MB/s
	CAPACITY	128 GB	256 GB	512 GB	1 TB	
		(MAX) SEQUENTIAL WIRTE	450 MB/s	500 MB/s	500 MB/s	500 MB/s



MX390	SPECIFICATION	Interface	mSATA SATA6Gb/s (Backward compatibility)			
		Controller	SM2258XT			
	FEATURE	NAND	3D TLC			
		MTBF	1,500,000 hours			
		Impact Resistance	1,500G/0.5ms			
		Operating Temperature	0°C to 70°C			
		Dimensions	50 x 30 x 3.5 (mm)			
		TRIM	Wear-leveling			
		Garbage Collection	ONFI			
	CAPACITY	64 GB	128 GB	256 GB	512 GB	1 TB
		(MAX) SEQUENTIAL READ	550 MB/s	550 MB/s	550 MB/s	560 MB/s
	CAPACITY	64 GB	128 GB	256 GB	512 GB	1 TB
		(MAX) SEQUENTIAL WIRTE	310 MB/s	470 MB/s	490 MB/s	510 MB/s



M720 PRO	SPECIFICATION	Interface	M.2 2280 PCIe3x4(32GT/S) NVMe 1.3		
		Controller	PS5012-E12		
	FEATURE	NAND	3D TLC		
		MTBF	1,800,000 hours		
		Impact Resistance	1,500G/0.5ms		
		Operating Temperature	0°C to 70°C		
		Dimensions	80 x 22 x 2.3 (mm)		
		DRAM Cache	DEVSLP	RAID Protection	
		AES256	ECC	LDPC	
	CAPACITY	256 GB	512 GB	1 TB	
		(MAX) SEQUENTIAL READ	3,000 MB/s	3,400 MB/s	3,400 MB/s
	CAPACITY	256 GB	512 GB	1 TB	
		(MAX) SEQUENTIAL WIRTE	1,000 MB/s	2,000 MB/s	2,000 MB/s
	CAPACITY	256 GB	512 GB	1 TB	
		(MAX) SEQUENTIAL WIRTE	256 MB	256 MB	512 MB x2



M740	SPECIFICATION	Interface	M.2 2280 PCIe3x4(32GT/S) NVMe 1.3		
		Controller	SM2263XT		
	FEATURE	NAND	3D TLC		
		MTBF	1,500,000 hours		
		Impact Resistance	1,500G/0.5ms		
		Operating Temperature	0°C to 70°C		
		Dimensions	80 x 22 x 2.3 (mm)		
		TRIM	SLC Caching		
		Garbage Collection	Wear-leveling		
	CAPACITY	128 GB	256 GB	512 GB	1 TB
		(MAX) SEQUENTIAL READ	1,900 MB/s	2,000 MB/s	2,100 MB/s
	CAPACITY	128 GB	256 GB	512 GB	1 TB
		(MAX) SEQUENTIAL WIRTE	600 MB/s	1,200 MB/s	1,700 MB/s



PORTABLE SSD

Meet SSD with reasonable price and high performance that TAMMUZ suggests with confidence. You can experience superior speed that is different from HDD even if it is just installed. SSD is not selective but essential because files with high capacity increase these days.



EX1

SPECIFICATION	Interface		
	Support OS	Power Supply	Operating Temperature
	USB3.1 Gen1(5Gb/s) Micro B	5V±0.5V	0°C to 55°C
	Win XP/7/8/10, MAC OS X 10.5 (or above)		
	Color	Black	
	Material	Aluminum alloy	
	Dimension	80 x 53 x 9 (mm)	
FEATURE	USB3.1 Gen1 Micro B to A Cable		
	Backward compatibility	DEVSLP	RAID Protection
	Anodized Case	ECC	LDPC
	TRIM	SLC Caching	
	Garbage Collection	Wear-leveling	
CAPACITY		128 GB	256 GB
(MAX) SEQUENTIAL READ		400 MB/s	420 MB/s
(MAX) SEQUENTIAL WIRTE		300 MB/s	400 MB/s



EX2

SPECIFICATION	Interface		
	Support OS	Power Supply	Operating Temperature
	USB3.1 Gen1(5Gb/s) Micro B	5V±0.5V	0°C to 55°C
	Win XP/7/8/10, MAC OS X 10.5 (or above)		
	Color	Black / Rose Gold	
	Material	Aluminum alloy	
	Dimension	67.4 x 67.4 x 9.8 (mm)	
FEATURE	USB3.1 Gen1 Micro B to A Cable		
	Backward compatibility	DEVSLP	RAID Protection
	Anodized Case	ECC	LDPC
	TRIM	SLC Caching	
	Garbage Collection	Wear-leveling	
CAPACITY		128 GB	256 GB
(MAX) SEQUENTIAL READ		400 MB/s	400 MB/s
(MAX) SEQUENTIAL WIRTE		160 MB/s	300 MB/s

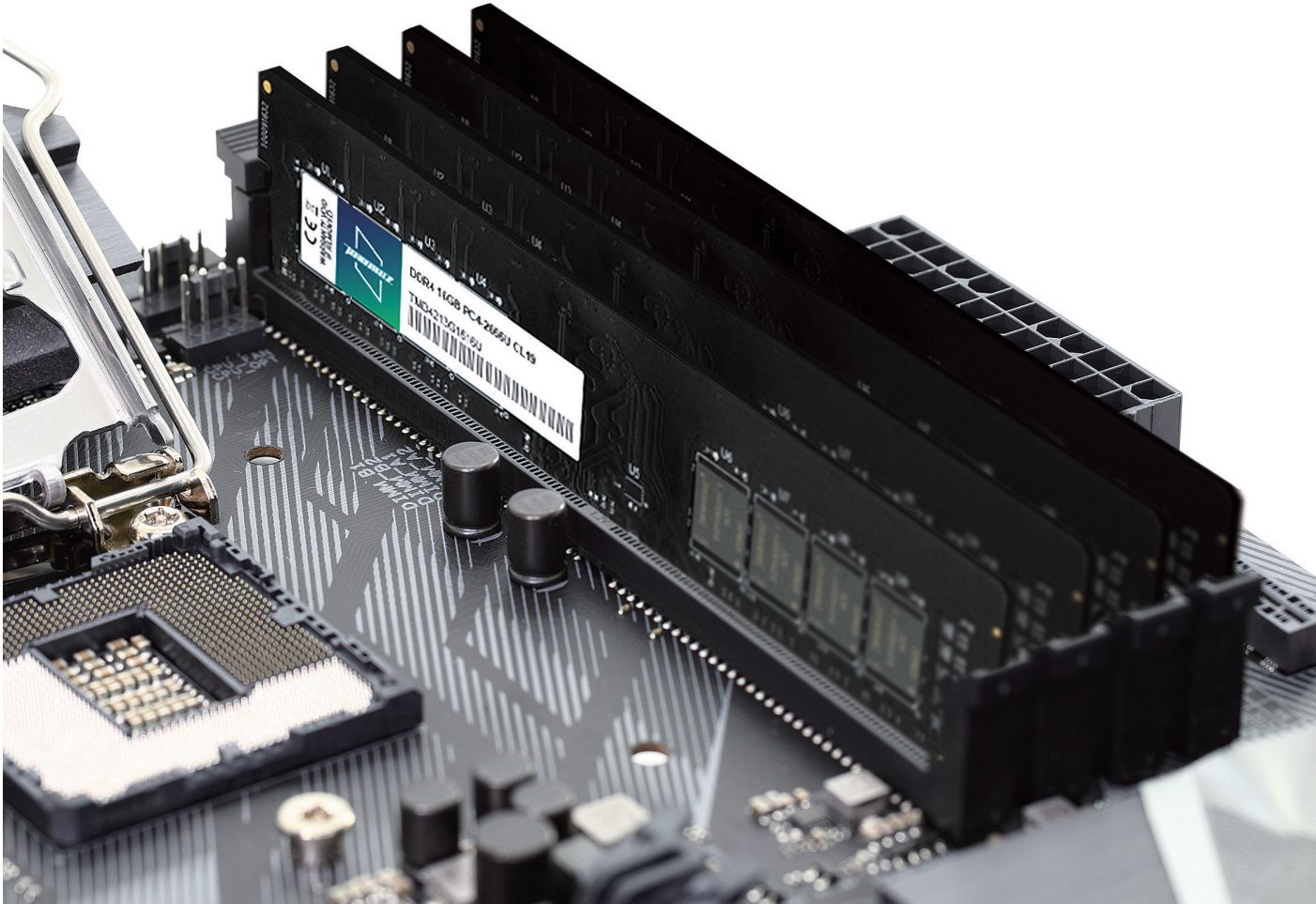


EX3

SPECIFICATION	Interface		
	Support OS	Power Supply	Operating Temperature
	USB3.1 Gen2(10Gb/s) Type C	5V±0.5V	0°C to 55°C
	Win XP/7/8/10, MAC OS X 10.5 (or above)		
	Color	Black / Silver	
	Material	Aluminum alloy	
	Dimension	100 x 34 x 8 (mm)	
FEATURE	USB3.1 Gen2 C to C Cable		
	Backward compatibility	DEVSLP	RAID Protection
	Anodized Case	ECC	LDPC
	Garbage Collection	SLC Caching	
CAPACITY		256 GB	512 GB
(MAX) SEQUENTIAL READ		540 MB/s	540 MB/s
(MAX) SEQUENTIAL WIRTE		500 MB/s	510 MB/s

MEMORY MODULE

The exceleent cost-effective TAMMUZ DDR4 memory with superior speed and stability provides nonstop and comfortable work environment through distinguished function and speed from existing DDR memory even if it operates game with high specification, video with high capacity, 3D rendering and program with high specification.



DDR SODIMM

		DDR PC-266 (2100)	DDR PC-333 (2700)	DDR PC-400 (3200)
	Speed	DDR-266MHz	DDR-333MHz	DDR-400MHz
	Bandwidth	PC-2100	PC-2700	PC-3200
	Voltage	2.5V	2.5V	2.5V
	Timing	CL 2.5	CL 2.5	CL 3
	Dimensions	68 x 30 (mm)	68 x 30 (mm)	68 x 30 (mm)
	Capacity & Chip Density	512MB 64Mb x8 8IC 1GB 64Mb x8 16IC	512MB 64Mb x8 8IC 1GB 64Mb x8 16IC	512MB 64Mb x8 8IC 1GB 64Mb x8 16IC

DDR UDIMM

		DDR PC-266 (2100)	DDR PC-333 (2700)	DDR PC-400 (3200)
	Speed	DDR-266MHz	DDR-333MHz	DDR-400MHz
	Bandwidth	PC-2100	PC-2700	PC-3200
	Voltage	2.5V	2.5V	2.5V
	Timing	CL 2.5	CL 2.5	CL 3
	Dimensions	133 x 30 (mm)	133 x 30 (mm)	133 x 30 (mm)
	Capacity & Chip Density	512MB 64Mb x8 8IC 1GB 64Mb x8 16IC	512MB 64Mb x8 8IC 1GB 64Mb x8 16IC	512MB 64Mb x8 8IC 1GB 64Mb x8 16IC

DDR2 SODIMM

		DDR2 PC2-533 (4200)	DDR2 PC2-667 (5300)	DDR2 PC2-800 (6400)
	Speed	DDR2-533MHz	DDR2-667MHz	DDR2-800MHz
	Bandwidth	PC2-4200	PC2-5300	PC2-6400
	Voltage	1.8V	1.8V	1.8V
	Timing	CL 4	CL 5	CL 5
	Dimensions	68 x 30 (mm)	68 x 30 (mm)	68 x 30 (mm)
	Capacity & Chip Density	1GB 128Mb x8 8IC 2GB 128Mb x8 16IC	1GB 128Mb x8 8IC 2GB 128Mb x8 16IC	1GB 128Mb x8 8IC 2GB 128Mb x8 16IC

DDR2 UDIMM

		DDR2 PC2-533 (4200)	DDR2 PC2-667 (5300)	DDR2 PC2-800 (6400)
	Speed	DDR2-533MHz	DDR2-667MHz	DDR2-800MHz
	Bandwidth	PC2-4200	PC2-5300	PC2-6400
	Voltage	1.8V	1.8V	1.8V
	Timing	CL 4	CL 5	CL 5
	Dimensions	68 x 30 (mm)	68 x 30 (mm)	68 x 30 (mm)
	Capacity & Chip Density	1GB 128Mb x8 8IC 2GB 128Mb x8 16IC	1GB 128Mb x8 8IC 2GB 128Mb x8 16IC	1GB 128Mb x8 8IC 2GB 128Mb x8 16IC

DDR3 SODIMM

		DDR3 PC3-1066 (8500)	DDR3 PC3-1333 (10600)	DDR3 PC3-1600 (12800)
	Speed	DDR3-1066MHz	DDR3-1333MHz	DDR3-1600MHz
	Bandwidth	PC3-8500	PC3-10600	PC3-12800
	Voltage	1.5V	1.5V	1.5V
	Timing	CL 7	CL 9	CL 11
	Dimensions	68 x 30 (mm)	68 x 30 (mm)	68 x 30 (mm)
	Capacity & Chip Density	2GB 256Mb x8 8IC, 256Mb x8 16IC 4GB 256Mb x16 4IC, 256Mb x16 8IC 8GB 512Mb x8 8IC, 512Mb x8 16IC	2GB 256Mb x8 8IC, 256Mb x8 16IC 4GB 256Mb x16 4IC, 256Mb x16 8IC 8GB 512Mb x8 8IC, 512Mb x8 16IC	2GB 256Mb x8 8IC, 256Mb x8 16IC 4GB 256Mb x16 4IC, 256Mb x16 8IC 8GB 512Mb x8 8IC, 512Mb x8 16IC

DDR3 UDIMM

		DDR3 PC3-1066 (8500)	DDR3 PC3-1333 (10600)	DDR3 PC3-1600 (12800)
	Speed	DDR3-1066MHz	DDR3-1333MHz	DDR3-1600MHz
	Bandwidth	PC3-8500	PC3-10600	PC3-12800
	Voltage	1.5V	1.5V	1.5V
	Timing	CL 7	CL 9	CL 11
	Dimensions	133 x 30 (mm)	133 x 30 (mm)	133 x 30 (mm)
	Capacity & Chip Density	2GB 256Mb x8 8IC, 256Mb x8 16IC 4GB 256Mb x16 4IC, 256Mb x16 8IC 8GB 512Mb x8 8IC, 512Mb x8 16IC	2GB 256Mb x8 8IC, 256Mb x8 16IC 4GB 256Mb x16 4IC, 256Mb x16 8IC 8GB 512Mb x8 8IC, 512Mb x8 16IC	2GB256Mb x8 8IC, 256Mb x8 16IC 4GB256Mb x16 4IC, 256Mb x16 8IC 8GB512Mb x8 8IC, 512Mb x8 16IC

DDR3L SODIMM

		DDR3 PC3L-1066 (8500)	DDR3 PC3L-1333 (10600)	DDR3 PC3L-1600 (12800)
	Speed	DDR3-1066MHz	DDR3-1333MHz	DDR3-1600MHz
	Bandwidth	PC3L-8500	PC3L-10600	PC3L-12800
	Voltage	1.5V	1.5V	1.5V
	Timing	CL 7	CL 9	CL 11
	Dimensions	68 x 30 (mm)	68 x 30 (mm)	68 x 30 (mm)
	Capacity & Chip Density	2GB 256Mb x8 8IC, 256Mb x8 16IC 4GB 256Mb x16 4IC, 256Mb x16 8IC 8GB 512Mb x8 8IC, 512Mb x8 16IC	2GB 256Mb x8 8IC, 256Mb x8 16IC 4GB 256Mb x16 4IC, 256Mb x16 8IC 8GB 512Mb x8 8IC, 512Mb x8 16IC	2GB256Mb x8 8IC, 256Mb x8 16IC 4GB256Mb x16 4IC, 256Mb x16 8IC 8GB512Mb x8 8IC, 512Mb x8 16IC

DDR3L UDIMM

		DDR3 PC3L-1066 (8500)	DDR3 PC3L-1333 (10600)	DDR3 PC3-1600 (12800)
	Speed	DDR3-1066MHz	DDR3-1333MHz	DDR3-1600MHz
	Bandwidth	PC3-8500	PC3-10600	PC3-12800
	Voltage	1.5V	1.5V	1.5V
	Timing	CL 7	CL 9	CL 11
	Dimensions	133 x 30 (mm)	133 x 30 (mm)	133 x 30 (mm)
	Capacity & Chip Density	2GB 256Mb x8 8IC, 256Mb x8 16IC 4GB 256Mb x16 4IC, 256Mb x16 8IC 8GB 512Mb x8 8IC, 512Mb x8 16IC	2GB 256Mb x8 8IC, 256Mb x8 16IC 4GB 256Mb x16 4IC, 256Mb x16 8IC 8GB 512Mb x8 8IC, 512Mb x8 16IC	2GB256Mb x8 8IC, 256Mb x8 16IC 4GB256Mb x16 4IC, 256Mb x16 8IC 8GB512Mb x8 8IC, 512Mb x8 16IC

DDR4 SODIMM

		DDR4 PC4-2133 (17000)	DDR4 PC4-2400 (19200)	DDR4 PC4-2666 (21300)
	Speed	DDR4-2133MHz	DDR4-2400MHz	DDR4-2666MHz
	Bandwidth	PC4-17000	PC4-19200	PC4-21300
	Voltage	1.2V	1.2V	1.2V
	Timing	CL 15	CL 17	CL 19
	Dimensions	70 x 30 (mm)	70 x 30 (mm)	70 x 30 (mm)
	Capacity & Chip Density	4GB 256Mb x8 16IC, 512Mb x8 8IC 8GB 512Mb x8 16IC, 1024Mb x8 8IC 16GB 1024Mb x8 16IC, 2048Mb x8 8IC	4GB 256Mb x8 16IC, 512Mb x8 8IC 8GB 512Mb x8 16IC, 1024Mb x8 8IC 16GB 1024Mb x8 16IC, 2048Mb x8 8IC	4GB 256Mb x8 16IC, 512Mb x8 8IC 8GB 512Mb x8 16IC, 1024Mb x8 8IC 16GB 1024Mb x8 16IC, 2048Mb x8 8IC

DDR4 UDIMM

		DDR4 PC4-2133 (17000)	DDR4 PC4-2400 (19200)	DDR4 PC4-2666 (21300)
	Speed	DDR4-2133MHz	DDR4-2400MHz	DDR4-2666MHz
	Bandwidth	PC4-17000	PC4-19200	PC4-21300
	Voltage	1.2V	1.2V	1.2V
	Timing	CL 15	CL 17	CL 19
	Dimensions	134 x 30 (mm)	134 x 30 (mm)	134 x 30 (mm)
	Capacity & Chip Density	4GB 256Mb x8 16IC, 512Mb x8 8IC 8GB 512Mb x8 16IC, 1024Mb x8 8IC 16GB 1024Mb x8 16IC, 2048Mb x8 8IC	4GB 256Mb x8 16IC, 512Mb x8 8IC 8GB 512Mb x8 16IC, 1024Mb x8 8IC 16GB 1024Mb x8 16IC, 2048Mb x8 8IC	4GB 256Mb x8 16IC, 512Mb x8 8IC 8GB 512Mb x8 16IC, 1024Mb x8 8IC 16GB 1024Mb x8 16IC, 2048Mb x8 8IC



USB FLASH DRIVE

Consumers in nowadays want to save their music, pictures, video, private or business files and use wherever they want. TAMMUZ USB flash drive - QUICK DIRVE - makes it realized.



QUICK DRIVE



UZ203

Interface	USB 2.0 (480Mb/s) Type A				
Color	Black / Sliver				
Meterial	Alumium Alloy				
Demension	53 x 17 x 7 (mm)				
Weight	10 g				
Capacity	8 GB	16 GB	32 GB	64 GB	128GB



UZ276

Interface	USB 3.1 Gen1 (5Gb/s) Type A				
Color	Sliver				
Meterial	Alumium Alloy				
Demension	38 x 12.25 x 7.33 (mm)				
Weight	9.5 g				
Capacity	8 GB	16 GB	32 GB	64 GB	128 GB



UZ325

Interface	USB 3.1 Gen1 (5Gb/s) Type A				
Color	Sliver				
Meterial	Alumium Alloy				
Demension	33.8 x 12.5 x 5 (mm)				
Weight	5 g				
Capacity	8 GB	16 GB	32 GB	64 GB	128 GB



UZ308

Interface	USB 3.1 Gen1 (5Gb/s) Type A					
Color	Blue					
Meterial	Plastic					
Demension	56 x 21 x 9 (mm)					
Weight	8 g					
Capacity	8 GB	16 GB	32 GB	64 GB	128 GB	256 GB



UZ388

Interface	USB 3.1 Gen1 (5Gb/s) Type A				
Color	Sliver				
Meterial	Alumium Alloy				
Demension	55 x 17 x 9 (mm)				
Weight	8 g				
Capacity	8 GB	16 GB	32 GB	64 GB	128 GB

MEMORY CARD

Consumers in nowadays want to save their music, pictures, video, private or business files and use wherever they want to. TAMMUZ Memory Card makes it realized.



PREMIUM PLUS



Model	TAMMUZ Micro SDXC Premium Plus
Capacity	64GB, 128GB, 256GB, 512GB
Product Type	MicroSDXC
Speed Class	CLASS10, UHS-1 U3, V30, A1
MTBF	1,000,000 hours
Operation Temperature	0°C to 70°C
Storage Temperature	-40°C to 85°C
Operation Voltage	2.7V to 3.6V
Dimension	15 x 11 x 1 (mm)

PREMIUM



Model	TAMMUZ SDXC Premium
Capacity	64GB, 128GB, 256GB
Product Type	SDXC
Speed Class	CLASS10, UHS-1 U3, V30, A1
MTBF	1,000,000 hours
Operation Temperature	0°C to 70°C
Storage Temperature	-40°C to 85°C
Operation Voltage	2.7V to 3.6V
Dimension	24 x 32 x 2.1 (mm)

TAMMUZ INTERNATIONAL CO., LTD.

TEL : +82 70 4286 9500

FAX : +82 2 711 9333

WEB : www.tammuz-intl.com

#W607, Hyundai Terrace Tower, 7, Yeonmujang 5ga-gil, Seongdong-gu, Seoul, Korea (04782)