

Embedded


Module Type	UDIMM	SODIMM	UDIMM	SODIMM
Memory Technology	DDR5	DDR5	DDR4	DDR4
Frequency	4800/5600		2133/2400/2666/2933/3200	
Density	8GB/16GB/32GB/48GB		2GB/4GB/8GB/16GB/32GB	
Voltage	1.1V	1.1V	1.2v	1.2v
Pin Count	288-Pin	262-Pin	288-Pin	260-Pin
Width	64-Bit	64-Bit	64-Bit	64-Bit
PCB Height	1.23"	1.18"	1.23"	1.18"
Operation / Wide Temperature. (°C)	TC= 0°C to 85°C / -40°C to 85°C	TC= 0°C to 85°C / -40°C to 85°C	TC= 0°C to 85°C / -40°C to 85°C	TC= 0°C to 85°C / -40°C to 85°C

Value-added Technology         *Optional

Notes: DDR / DDR2 / DDR3 are also available

Server/Workstation



Module Type	ECC UDIMM	ECC SODIMM	ECC UDIMM	ECC SODIMM
Memory Technology	DDR5	DDR5	DDR4	DDR4
Frequency	4800/5600		2133/2400/2666/2933/3200	
Density	16GB/32GB		4GB/8GB/16GB/32GB	
Voltage	1.1V	1.1V	1.2v	1.2v
Pin Count	288-Pin	262-Pin	288-Pin	260-Pin
Width	72-Bit	72-Bit	72-Bit	72-Bit
PCB Height	1.23"	1.18"	1.23"	1.18"
Operation / Wide Temperature. (°C)	TC= 0°C to 85°C / -40°C to 85°C	TC= 0°C to 85°C / -40°C to 85°C	TC= 0°C to 85°C / -40°C to 85°C	TC= 0°C to 85°C / -40°C to 85°C

Value-added Technology         *Optional

Notes: DDR3 is available

Server/Workstation

Model	DDR5 RDIMM	DDR4 RDIMM	DDR3 RDIMM
Module Type	RDIMM	RDIMM	RDIMM
Memory Technology	DDR5	DDR4	DDR3
Frequency	4800/5600	2133/2400/2666/2933/3200	1066/1333/1600/1866
Density	16G/32G/64G/128G	4G/8G/16G/32G/64G/128G	4G/8G
Voltage	1.1v	1.2v	1.5v/1.35v
Pin Count	288-Pin	288-Pin	240-Pin
Width	80-Bit	72-Bit	72-Bit
PCB Height	1.23"	1.23"	1.18"
Operation Temperature	TC=0°C to 85°C	TC=0°C to 85°C / -40°C to 85°C	TC=0°C to 85°C / -40°C to 85°C
Application	Healthcare / Server & Networking		

Value-Added             *Optional

Notes: Very Low Profile (VLP) is also available

The Most Reliable Storage For Industries

Global Presence

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Enterprise



- Form Factor: PCIe U.3/M.2 2280/M.2 22110/E1.S SATA 2.5"/M.2 2280
- Capacity: U.3: V6 eTLC 1.6TB-15.36TB; 2.5": BiCS5 TLC 240GB-7.68TB; M.2: BiCS5 TLC/eTLC 240GB-3.84TB; M.2 22110: BiCS5 eTLC 480GB-3.84TB; E1.S: BiCS5 eTLC 480GB-3.84TB
- Interface: PCIe Gen4 x4/SATA 3.2 (6Gb/s)
- Support AES 256-bit Encryption
- Support CorePower
- Support TCG OPAL (Optional)
- Support Namespace (Optional)

WORM Drive/Card

Write Once Read Many



- Capacity: USB drive: MLC 8GB-32GB; SD: MLC 8GB-128GB; microSD MLC 8GB-128GB
- Interface: USB2.0 Type-A/SD 6.1
- Ensure data integrity with non-rewritable storage function
- Data retention: 100 years
- Support S.M.A.R.T.
- Support SMART Read Refresh
- Inherent characteristics: File System Support: FAT32 only; Files must be written "one by one" and sequentially

SFD

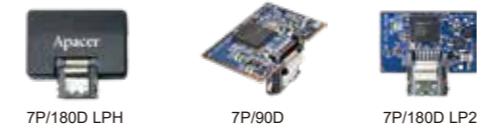
SATA Flash Drive



- Capacity: MO-297-3D TLC: 120GB-2048GB; 2.5"-3D TLC: 30GB-16TB
- SATA 3 (6 Gbit/s) interface
- Support LDPC ECC
- Global Wear-Leveling Technology
- AES256 Support
- End-to-End Data Protection
- DEVSLP/Thermal Sensor
- DataDefender™
- S.M.A.R.T. and SSD Widget
- DataRAID™
- TCG Opal 2.0 (Optional)
- CorePower (Optional)
- SLC-liteX P/E Cycles up to 100K
- SLC / MLC / SLC-liteX are also available

SDM

SATA Disk Module



- Capacity: 7pin-3D TLC 30GB-480GB
- Support LDPC ECC
- Global Wear-Leveling Technology
- AES256 Support
- Power Failure Management
- End-to-End Data Protection
- S.M.A.R.T. and SSD Widget support
- Multi-PowerPath Technology
- Thermal Sensor
- SLC / MLC / SLC-liteX are also available
- DataRAID™
- TCG Opal 2.0(Optional)
- SLC-liteX P/E Cycles up to 100K

PCIe SSD

M.2



- Capacity: 2230-3D TLC: 60GB-480GB; 2242-3D TLC: 240GB-960GB; 2280-3D TLC: 120GB-3840GB
- Interface: 2230/2242-Compliant with PCIe Gen3 x2 / Gen3 x4 interface; 2280-Compliant with PCIe Gen3 x4 / Gen4 x4 interface
- M.2 (NGFF) connector
- Support CoreGlacier Technology
- Built-in LDPC ECC and S.M.A.R.T. SSD Widget
- Support Datadefender and DataRAID™
- Built-in End-to-End Data Protection and Thermal throttling Technology
- Support AES 256 and Signed FW
- Anti-Sulfuration (Optional)
- SLC-liteX is also available

PCIe SSD

CFexpress Card & 2.5" & BGA SSD



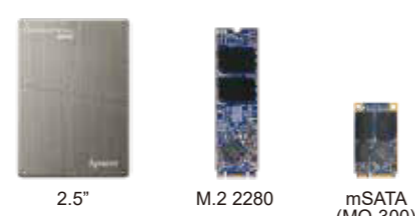
- Form Factor: CFX Type B/2.5"/PCIe BGA SSD (M.2 1620)
- Capacity: CFexpress-3D TLC 60GB-960GB ; 2.5"-3D TLC 960GB-7680GB ; BGA SSD-3D TLC 60GB-960GB
- Interface: CFexpress-Compliant with PCIe Gen3 x2 interface / Gen4 x2 interface; 2.5"-Compliant with PCIe Gen3 x4 interface; BGA SSD-Compliant with PCIe Gen3 x4 / Gen4 x4 interface
- Power Failure Management
- Built-in LDPC ECC and S.M.A.R.T. SSD Widget
- End-to-End Data Protection and Thermal throttling Technology
- Support TRIM
- Support Wide Temperature
- Support AES 256
- Write Protect Switch (CFexpress only)
- SLC-liteX is also available

FIPS TCG



- Form Factor: 2.5"/M.2 2280/mSATA (MO-300)/HalfSlim (MO-297)
- Capacity: 2.5": 3D TLC 240-1920GB; M.2 2280: 3D TLC 240-1920GB; mSATA: 3D TLC 240GB-1920GB; HalfSlim: 3D TLC 240GB-960GB
- Interface: SATA 3.2 (6Gb/s)
- Support AES 256-bit Encryption
- Support TCG OPAL 2.0
- Support SMART Read Refresh
- Support S.M.A.R.T.
- FIPS 140-2 Validated

Defense



- Form Factor: 2.5"/M.2 2280/mSATA (MO-300)
- Capacity: 2.5": 3D TLC 120-1920GB; PCIe M.2 2280: 3D TLC Single-sided M key 120GB/ Double-sided M key 240/480/960/1920GB; SATA M.2 2280: 3D TLC 120GB-1920GB; mSATA: 3D TLC 120GB-1920GB
- Interface: PCIe Gen3 x4/SATA 3.2 (6Gb/s)
- Support MIL Erase
- Support TCG Opal2.0 /SED
- Support Instant Keychange™
- Physical Destruction (Optional)
- Thermal Throttling
- Support Conformal Coating
- Sidefill
- 30u Gold Finger
- R-SATA for 2.5" (Optional)

CFast

CFast Card



- Capacity: 3D TLC 30GB-960GB; SLC-liteX 10GB-320GB
- Support LDPC ECC
- Global Wear-Leveling Technology
- AES256 Support
- End-to-End Data Protection
- DEVSLP/Thermal Sensor
- DataDefender™
- S.M.A.R.T. and SSD Widget
- DataRAID™
- Write Protect(Optional)
- SLC / MLC are also available
- CorePower (Optional)
- SLC-liteX P/E Cycles up to 100K

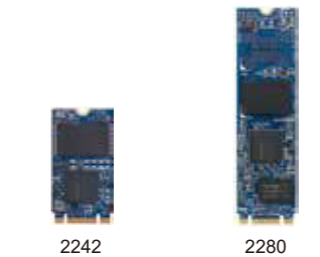
Industrial CF

Industrial CompactFlash



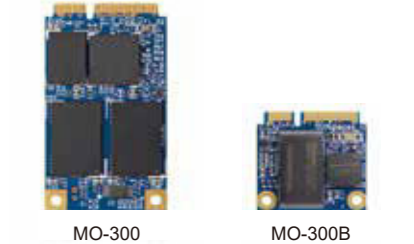
- Capacity: SLC 128MB-64GB, MLC 8GB-128GB
- Advanced wear-leveling technology and flash block management
- Built-in ATA Secure Erase and S.M.A.R.T. functions
- Intelligent power failure recovery
- Supports Wide Temperature
- Write Protect Switch (optional)
- SLC-lite is also available

M.2 (NGFF)



- Capacity: 2242 3D TLC 30GB-960GB/SLC-liteX:10GB-320GB; 2280 3D TLC 30GB-1920GB/SLC-liteX:10GB-640GB
- SATA 3 (6 Gbit/s) interface
- Support LDPC ECC
- Global Wear-Leveling Technology
- AES256 support
- End-to-End Data Protection
- DEVSLP/Thermal Sensor
- DataDefender™
- S.M.A.R.T. and SSD Widget
- DataRAID™
- TCG Opal 2.0 (Optional)
- CorePower (Optional)
- SLC-liteX P/E Cycles up to 100K
- Anti-Sulfuration (Optional)
- SLC / MLC / SLC-liteX are also available

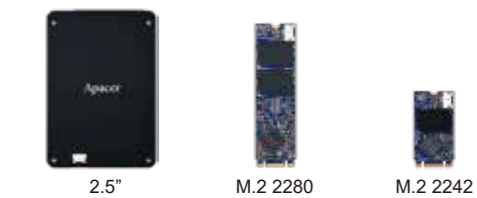
mSATA



- Capacity: MO-300-3D TLC 30GB-1920GB; MO-300B-3D TLC 30GB-960GB
- Support LDPC ECC
- Global Wear-Leveling Technology
- AES256 support
- End-to-End Data Protection
- DEVSLP/Thermal Sensor
- DataDefender™
- S.M.A.R.T. and SSD Widget
- DataRAID™
- SATA 3 (6 Gbit/s) interface
- TCG Opal 2.0 (Optional)
- SLC-liteX P/E Cycles up to 100K
- SLC / MLC / SLC-liteX are also available

CoreSnapshot

Recover an SSD' data and OS in seconds



- Form Factor: 2.5"/M.2 2280/M.2 2242
- Capacity: 2.5": 3D TLC 60GB-480GB; M.2 2280: 3D TLC Single-sided 60GB/120GB/240GB Double-sided 480GB; M.2 2242: 3D TLC 60GB-480GB
- Interface: SATA 3.2 (6Gb/s)
- Low-Density Parity-Check (LDPC) Code
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- Support S.M.A.R.T.
- Support DataDefender™
- Device Sleep
- Support ATA Secure Erase
- Support TRIM
- Hyper Cache Technology
- Over-provisioning
- Support SMART Read Refresh™

Transformed

Extending flexibility with value-added modules



- Form Factor: M.2 2280
- Capacity: 60GB-960GB
- Interface: SATA 3.2 (6Gb/s)
- Double-barreled Solution (CoreAnalyzer2 + SSDWidget 2.0): Cloud Edition
- OOB Function
- CoreSnapshot (Optional)
- Low-Density Parity-Check (LDPC) Code
- Global Wear Leveling
- Flash bad-block management
- Flash Translation Layer: Page Mapping
- Support S.M.A.R.T.
- DataDefender™
- Device Sleep
- ATA Secure Erase
- Support TRIM
- Hyper Cache Technology
- Over-provisioning
- Support SMART Read Refresh™

USB Drive

USB Disk Drive



- Capacity: SLC 256MB-32GB, MLC 8GB-128GB; 3D TLC 16GB-512GB; SLC-liteX 4GB-64GB
- Flash Bad-block Management
- Global Wear-Leveling Technology
- S.M.A.R.T.
- Power Failure Management
- Air 15kv ESD Protection (Optional)
- SLC-liteX technology (Optional)

UDM

USB Disk Module



- Capacity: SLC 128MB-32GB, MLC 8GB-128GB; 3D TLC 16GB-256GB; SLC-liteX 8GB-64GB
- Compliant with standard USB specifications
- Shock resistance, anti-vibration design and low power consumption
- Supports Wide Temperature
- Built-in S.M.A.R.T. function
- Pitch size 2.00 mm and 2.54 mm supported
- 3D TLC supporting page mapping

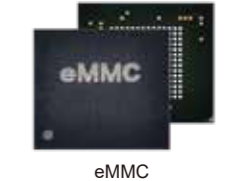
Industrial microSD

Industrial microSD & SD Card



- Capacity: SD Card-SLC 256MB-32GB , MLC 8GB-128GB; microSD Card-SLC 256MB-8GB , MLC: 8GB-128GB, 3D TLC 64GB-256GB
- Supports SD and SPI modes
- Global Wear Leveling and flash block management
- Low power consumption
- S.M.A.R.T. function supported
- Smart Read Refresh™
- FTL: Page Mapping (optional)
- SLC-lite / SLC-liteX technology (optional)
- Supports Wide Temperature
- Intelligent power failure recovery

eMMC



- Grade: Industrial/Commercial
- Form Factor: 153 Ball FBGA
- Capacity: Industrial: 3D TLC 32GB-128GB; MLC 8GB-16GB; Commercial: 3D TLC 16GB-128GB; MLC 8GB
- Interface: eMMC5.1 HS400