

Advantech Certified Peripherals

Your Ultimate Sourcing Partner

- ✓ DRAM Memory Module
- ✓ Solid State Drive
- ✓ Hard Drive
- ✓ CF Card
- ✓ Power Supply
- ✓ CPU
- ✓ Cooler
- ✓ Graphics Card
- ✓ RAID Controller
- ✓ Display
- ✓ Thermal Printer
- ✓ Optical Drive
- ✓ Keyboard & Mouse

ADVANTECH

**Industrial
APS**

Industrial Allied Procurement Services

<http://www.advantech.com/certified-peripherals/>

Table Of Contents

About US — 02

- About Advantech Certified Peripherals
- Premium Services From Us
- Vendor Relationship Management
- Suppliers by Product Category

DRAM Memory Module — 06

- DDR3 Unbuffered
- DDR3 ECC
- DDR3 Registered
- SO-DDR3 Unbuffered
- SO-DDR3 Unbuffered Wide-Temp
- SO-DDR3 ECC
- DDR4 Unbuffered
- DDR4 ECC
- DDR4 Registered
- SO-DDR4 Unbuffered
- SO-DDR4 ECC

Solid State Drive — 16

- 2.5"
- U.2
- mSATA
- M.2

Hard Drive — 23

- General IPC HDD
- Video Storage HDD
- Server Storage HDD

CF Card — 27

- Commercial Temperature (0 ~ 70°C)
- Extend Temperature (-40 ~ 85°C)
- CFast

Power Supply — 30

- DIN-Rail
- PS2
- DC/DC
- Flex ATX
- Redundant
- Adapter
- Medical Application

CPU — 38

- Sandy Bridge
- Ivy Bridge
- Haswell
- Broadwell-EP
- Skylake
- Kaby Lake

Cooler — 44

- IPC Application
- Embedded Application
- Server Application

Graphics Card — 47

- Desktop Series
- Video Wall Series

RAID Controller — 50

- Entry RAID Controller
- RAID Controller
- Host Bus Card

Display — 53

- Signage
- Video Wall

Thermal Printer — 55

- Industrial
- Desktop
- Mobile

Optical Drive — 59

- Half-height
- Slim

Keyboard & Mouse — 61

- Keyboard
- Mouse

About Advantech Certified Peripherals

Advantech Certified Peripherals, Your Ultimate Sourcing Partner, also enables the Advantech intelligent solution. With more than 30 professional procurement specialists around the world, we have a very well-organized global procurement network and logistic infrastructure. We are capable of sourcing the best price in the world, as well as delivering products to customers within the shortest time.

With a full line of products, Advantech Certified Peripherals can provide everything that you need to build a system or solution. If the item is not covered by our standard product offerings, our regional purchasing specialists can help source any part based on a customer's specified vendor and product.

In short, the ultimate goal of us is to provide customers the most efficient services, the best quality products, and the shortest shipment lead time.



Premium Services From Us

Global Procurement Services

With professional purchasing specialists assigned around the world, Advantech Certified Peripherals is able to provide immediate and real-time response to support customers from every corner of the globe.

One-stop Shopping Services

To eliminate multiple sourcing, complex operations, higher costs in freight charges, and potential compatibility issues, Advantech Certified Peripherals offers customers a “One-stop Shopping” solution, where customers can purchase compatible peripherals based on selected motherboards, bare-bones, and semi-finished systems.

Inventory Consignment Services

For customer convenience, Advantech Certified Peripherals offers inventory consignment services at a very limited cost. Customers can temporarily place their system components in an Advantech warehouse to save freight costs for a period agreed upon by both parties.

Regional Warehouse Center

Advantech Certified Peripherals has regional inventory in China, the United States, Europe, Taiwan, Korea, Japan, Singapore, and Australia, providing prompt and efficient order delivery service.

Other Procurement Services

Advantech Certified Peripherals can provide special procurement services to customers. For example, we can do LTB (Last Time Buy) inventory reservation in regional warehouses, special sourcing for customized parts, customized tooling, customized color repaint and customized system configuration validation services.



Vendor Relationship Management

Advantech Certified Peripherals have partnered with more than a hundred manufacturers and vendors around the world and received direct support from some of the biggest players in the industry including Intel, Seagate, Western Digital, and Transcend. We are committed to maintain long-term business relationships with them. We see ourselves as a bridge between vendors and customers, helping them reach new territories, extend their customer base, and increase their revenue. In addition, as Advantech continues to explore the Internet of Things and cloud computing solutions, we take vendors' products with us, helping them keep current with the latest trends in technology. We believe the synergy between vendors and Advantech Certified Peripherals will take things to a whole new level.

Benefits in becoming one of our vendors :

- Reaching geographic locations where vendors might not have the resources on their own
- Increasing revenue and expanding customer base
- Introducing vendors' products, applications, and other solutions into the latest technology fields

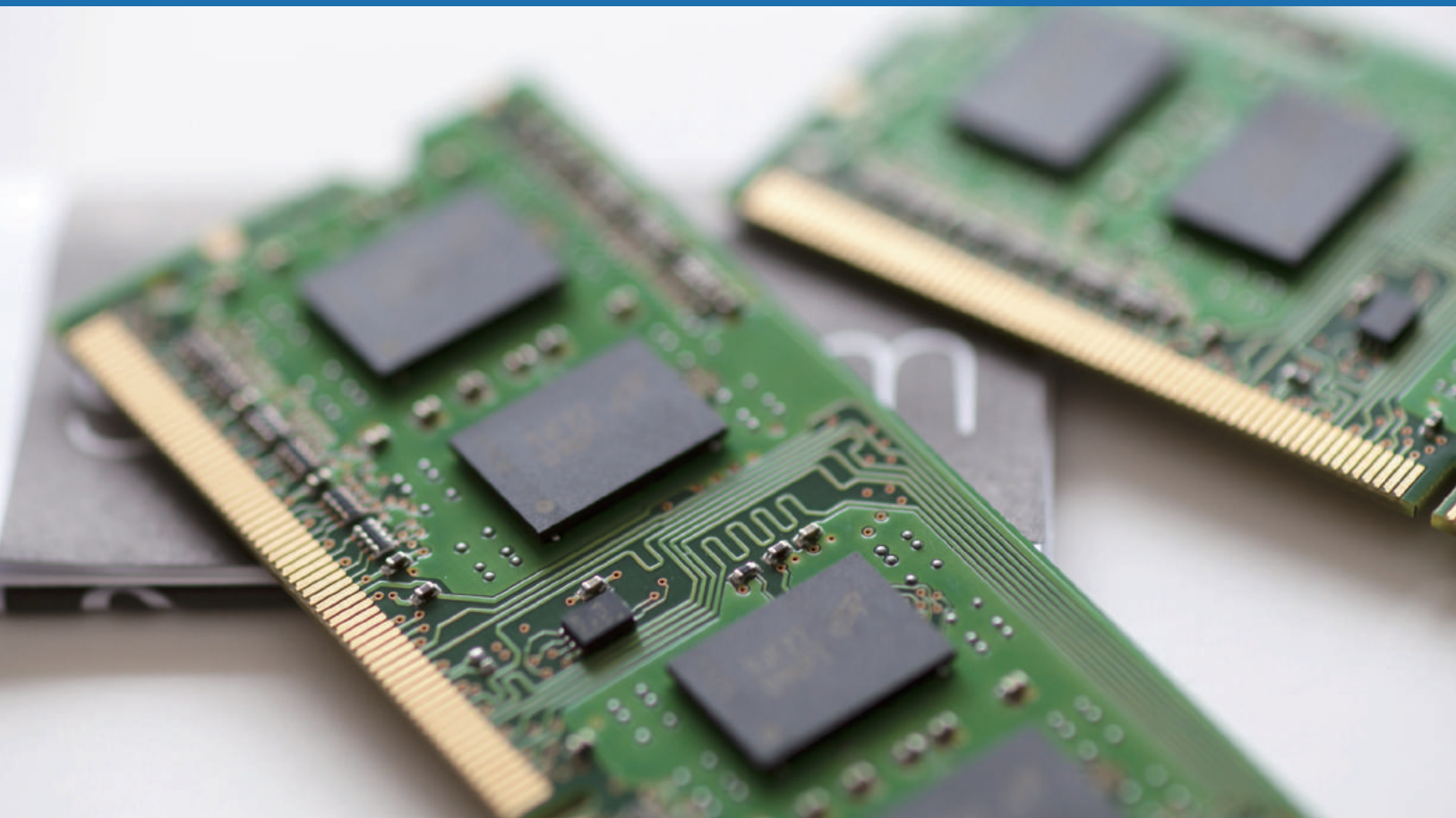


Suppliers by Product Category

	COMPACT FLASH	CPU	DISPLAY PANEL	HARD DRIVE	KEYBOARD	KVM	Medical Monitor	MEMORY MODULE	MOUSE	NETWORK CARD	OPTICAL DRIVE	POWER SUPPLY	RAID CONTROLLER	SOFTWARE	SOLID-STATE DRIVE	THERMAL MODULE	THERMAL PRINTER	TOUCHSCREEN MONITOR	VIDEO CARD
ADAPTEC													■						
ADATA								■											
AMD		■																	
APACER	■							■											
ATP ELECTRONICS								■											
AUO			■																
AUSTIN HUGES						■													
COOLER MASTER																■			
CPT			■																
DELTA												■							
EIZO							■												
ELO																		■	
FSP												■							
INNOLUX			■																
INTEL		■								■					■				
LG											■								
LITEON											■				■				
LOGITECH					■				■										
LSI													■						
MICRON								■							■				
MICROSOFT									■					■					
NVIDIA																			■
SAMSUNG								■			■								
SEAGATE				■															
SEWOO																	■		
TOSHIBA				■															
TRANSCEND	■							■							■				
TSC																	■		
WESTERN DIGITAL				■															
ZIPPY												■							

DRAM Memory Module

- Full range of RAM memory modules
- High standard quality assurance program
- Rigorous reliability and vibration tests
- Cross-checked, guaranteed compatibility
- Locked BOM and 3-year longevity
- Backed by lifetime warranty
- 30 μ " gold plating thickness connector



Products

DRAM Memory Module

7

DDR3 Unbuffered

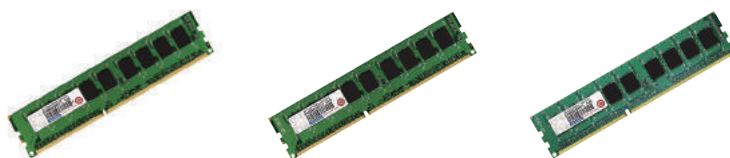


Product	AQD-D31GN16-HC	AQD-D3L2GN16-SQ1	AQD-D3L2GN16-HQ	AQD-D3L4GN16-SG1
Product Description	Advantech 1G DDR3-1600 240Pin 128MX16 1.5V Unbuffered Hynix Chip	Advantech 2G DDR3-1600 240Pin 256MX8 1.35V Unbuffered Samsung Chip	Advantech 2G DDR3-1600 240Pin 256MX8 1.35V Unbuffered Hynix Chip	Advantech 4G DDR3-1600 240Pin 512MX8 1.35V Unbuffered Samsung Chip
Brand	Advantech	Advantech	Advantech	Advantech
Capacity	1 GB	2 GB	2 GB	4 GB
Chip Manufacturer	Hynix	Samsung	Hynix	Samsung
Chip Organization	128MX16	256MX8	256MX8	512MX8
Rank	1 Rank	1 Rank	1 Rank	1 Rank
Interface	240 pin	240 pin	240 pin	240 pin
Frequency	1600 Mhz	1600 Mhz	1600 Mhz	1600 Mhz
Voltage	1.5 V	1.35 V	1.35 V	1.35 V
PCB Height	1.18"	1.18"	1.18"	1.18"
Feature	Unbuffered	Unbuffered	Unbuffered	Unbuffered
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

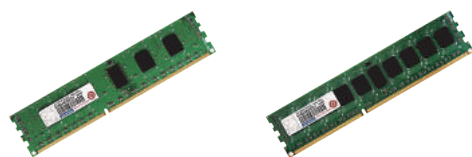
DDR3 Unbuffered



Product	AQD-D3L4GN16-MG	AQD-D3L4GN16-SQ	AQD-D3L8GN16-SG1	AQD-D3L8GN16-MG
Product Description	Advantech 4G DDR3-1600 240Pin 512MX8 1.35V Unbuffered Micron Chip	Advantech 4G DDR3-1600 240Pin 512MX8 1.35V Unbuffered Samsung Chip	Advantech 8G DDR3-1600 240Pin 512MX8 1.35V Unbuffered Samsung Chip	Advantech 8G DDR3-1600 240Pin 512MX8 1.35V Unbuffered Micron Chip
Brand	Advantech	Advantech	Advantech	Advantech
Capacity	4 GB	4 GB	8 GB	8 GB
Chip Manufacturer	Micron	Samsung	Samsung	Micron
Chip Organization	512MX8	256MX8	512MX8	512MX8
Rank	1 Rank	2 Rank	2 Rank	2 Rank
Interface	240 pin	240 pin	240 pin	240 pin
Frequency	1600 Mhz	1600 Mhz	1600 Mhz	1600 Mhz
Voltage	1.35 V	1.35 V	1.35 V	1.35 V
PCB Height	1.18"	1.18"	1.18"	1.18"
Feature	Unbuffered	Unbuffered	Unbuffered	Unbuffered
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

DDR3 ECC

Product	AQD-D3L2GE16-SQ	AQD-D3L4GE16-SG	AQD-D3L8GE16-SG
Product Description	Advantech 2G DDR3-1600 240Pin 256MX8 1.35V ECC Samsung Chip	Advantech 4G DDR3-1600 240Pin 512MX8 1.35V ECC Samsung Chip	Advantech 8G DDR3-1600 240Pin 512MX8 1.35V ECC Samsung Chip
Brand	Advantech	Advantech	Advantech
Capacity	2 GB	4 GB	8 GB
Chip Manufacturer	Samsung	Samsung	Samsung
Chip Organization	256MX8	512MX8	512MX8
Rank	1 Rank	1 Rank	2 Rank
Interface	240 pin	240 pin	240 pin
Frequency	1600 Mhz	1600 Mhz	1600 Mhz
Voltage	1.35 V	1.35 V	1.35 V
PCB Height	1.18"	1.18"	1.18"
Feature	ECC	ECC	ECC
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

DDR3 Registered

Product	AQD-D3L4GR16-SG	AQD-D3L8GR16-SG
Product Description	Advantech 4G DDR3-1600 240Pin 512MX8 1.35V Registered Samsung Chip	Advantech 8G DDR3-1600 240Pin 512MX8 1.35V Registered Samsung Chip
Brand	Advantech	Advantech
Capacity	4 GB	8 GB
Chip Manufacturer	Samsung	Samsung
Chip Organization	512MX8	512MX8
Rank	1 Rank	2 Rank
Interface	240 pin	240 pin
Frequency	1600 Mhz	1600 Mhz
Voltage	1.35 V	1.35 V
PCB Height	1.18"	1.18"
Feature	Registered	Registered
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse

Products

DRAM Memory Module

9

*SO-DDR3
Unbuffered*



Product	AQR-SD31GN13-SX	AQR-SD3L2GN16-SQ1	AQR-SD3L2GN16-HQ	AQR-SD3L4GN16-SG1
Product Description	Advantech 1G SO-DDR3-1333 204Pin 128MX8 1.5V Unbuffered Samsung Chip	Advantech 2G SO-DDR3-1600 204Pin 256MX8 1.35V Unbuffered Samsung Chip	Advantech 2G SO-DDR3-1600 204Pin 256MX8 1.35V Unbuffered Hynix Chip	Advantech 4G SO-DDR3-1600 204Pin 512MX8 1.35V Unbuffered Samsung Chip
Brand	Advantech	Advantech	Advantech	Advantech
Capacity	1 GB	2 GB	2 GB	4 GB
Chip Manufacturer	Samsung	Samsung	Hynix	Samsung
Chip Organization	128MX8	256MX8	256MX8	512MX8
Rank	1 Rank	1 Rank	2 Rank	1 Rank
Interface	204 pin	204 pin	204 pin	204 pin
Frequency	1333 Mhz	1600 Mhz	1600 Mhz	1600 Mhz
Voltage	1.5 V	1.35 V	1.35 V	1.35 V
PCB Height	1.18"	1.18"	1.18"	1.18"
Feature	Unbuffered	Unbuffered	Unbuffered	Unbuffered
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

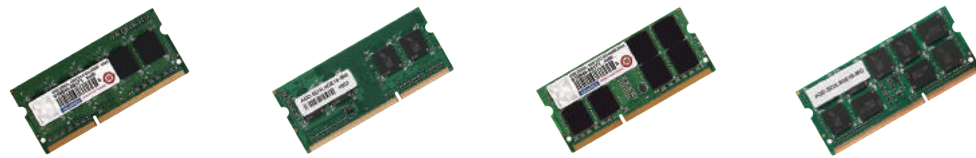
*SO-DDR3
Unbuffered*



Product	AQR-SD3L4GN16-MG	AQR-SD3L4GN16-SQ	AQR-SD3L8GN16-SG1	AQR-SD3L8GN16-MG
Product Description	Advantech 4G SO-DDR3-1600 204Pin 512MX8 1.35V Unbuffered Micron Chip	Advantech 4G SO-DDR3-1600 204Pin 256MX8 1.35V Unbuffered Samsung Chip	Advantech 8G SO-DDR3-1600 204Pin 512MX8 1.35V Unbuffered Samsung Chip	Advantech 8G SO-DDR3-1600 204Pin 512MX8 1.35V Unbuffered Micron Chip
Brand	Advantech	Advantech	Advantech	Advantech
Capacity	4 GB	4 GB	8 GB	8 GB
Chip Manufacturer	Micron	Samsung	Samsung	Micron
Chip Organization	512MX8	256MX8	512MX8	512MX8
Rank	1 Rank	2 Rank	2 Rank	2 Rank
Interface	204 pin	204 pin	204 pin	204 pin
Frequency	1600 Mhz	1600 Mhz	1600 Mhz	1600 Mhz
Voltage	1.35 V	1.35 V	1.35 V	1.35 V
PCB Height	1.18"	1.18"	1.18"	1.18"
Feature	Unbuffered	Unbuffered	Unbuffered	Unbuffered
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

*SO-DDR3 Unbuffered
Wide-Temp*

Product	AQD-SD3L4GN16-MGI	AQD-SD3L8GN16-MGI
Product Description	Advantech 4G Anti-sulfur and Wide Temp SO-DDR3-1600 204Pin 512MX8 1.35V Unbuffered Micron Chip	Advantech 8G Anti-sulfur and Wide Temp SO-DDR3-1600 204Pin 512MX8 1.35V Unbuffered Micron Chip
Brand	Advantech	Advantech
Capacity	4 GB	8 GB
Chip Manufacturer	Micron	Micron
Chip Organization	512MX8	512MX8
Rank	1 Rank	2 Rank
Interface	204 pin	204 pin
Frequency	1600 Mhz	1600 Mhz
Voltage	1.35 V	1.35 V
PCB Height	1.18"	1.18"
Feature	Unbuffered	Unbuffered
Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)

SO-DDR3 ECC

Product	AQD-SD3L4GE16-SG	AQD-SD3L4GE16-MG	AQD-SD3L8GE16-SG	AQD-SD3L8GE16-MG
Product Description	Advantech 4G SO-DDR3-1600 204Pin 512MX8 1.35V ECC Samsung Chip	Advantech 4G SO-DDR3-1600 204Pin 512MX8 1.35V ECC Micron Chip	Advantech 8G SO-DDR3-1600 204Pin 512MX8 1.35V ECC Samsung Chip	Advantech 8G SO-DDR3-1600 204Pin 512MX8 1.35V ECC Micron Chip
Brand	Advantech	Advantech	Advantech	Advantech
Capacity	4 GB	4 GB	8 GB	8 GB
Chip Manufacturer	Samsung	Micron	Samsung	Micron
Chip Organization	512MX8	512MX8	512MX8	512MX8
Rank	1 Rank	1 Rank	2 Rank	2 Rank
Interface	204 pin	204 pin	204 pin	204 pin
Frequency	1600 Mhz	1600 Mhz	1600 Mhz	1600 Mhz
Voltage	1.35 V	1.35 V	1.35 V	1.35 V
PCB Height	1.18"	1.18"	1.18"	1.18"
Feature	ECC	ECC	ECC	ECC
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

Products

DRAM Memory Module

11

DDR4 Unbuffered



Product	AQD-D4U4GN24-SG	AQD-D4U4GN24-HP	AQD-D4U8GN24-HE	AQD-D4U8GN24-SE
Product Description	Advantech 4G DDR4-2400 288Pin 512MX8 1.2V Unbuffered Samsung Chip	Advantech 4G DDR4-2400 288Pin 512MX16 1.2V Unbuffered Hynix Chip	Advantech 8G DDR4-2400 288Pin 1GX8 1.2V Unbuffered Hynix Chip	Advantech 8G DDR4-2400 288Pin 1GX8 1.2V Unbuffered Samsung Chip
Brand	Advantech	Advantech	Advantech	Advantech
Capacity	4 GB	4 GB	8 GB	8 GB
Chip Manufacturer	Samsung	Hynix	Hynix	Samsung
Chip Organization	512MX8	512MX16	1GX8	1GX8
Rank	1 Rank	1 Rank	1 Rank	1 Rank
Interface	288 pin	288 pin	288 pin	288 pin
Frequency	2400 Mhz	2400 Mhz	2400 Mhz	2400 Mhz
Voltage	1.2 V	1.2 V	1.2 V	1.2 V
PCB Height	1.23"	1.23"	1.23"	1.23"
Feature	Unbuffered	Unbuffered	Unbuffered	Unbuffered
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

DDR4 Unbuffered



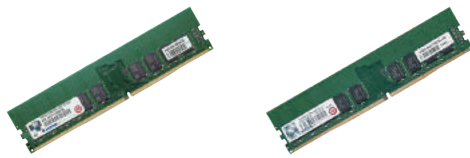
Product	AQD-D4U16N24-HE	AQD-D4U16N24-SE
Product Description	Advantech 16G DDR4-2400 288Pin 1GX8 1.2V Unbuffered Hynix Chip	Advantech 16G DDR4-2400 288Pin 1GX8 1.2V Unbuffered Samsung Chip
Brand	Advantech	Advantech
Capacity	16 GB	16 GB
Chip Manufacturer	Hynix	Samsung
Chip Organization	1GX8	1GX8
Rank	2 Rank	2 Rank
Interface	288 pin	288 pin
Frequency	2400 Mhz	2400 Mhz
Voltage	1.2 V	1.2 V
PCB Height	1.23"	1.23"
Feature	Unbuffered	Unbuffered
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

DDR4 ECC



Product	AQD-D4U4GE24-SG	AQD-D4U4GE24-HG	AQD-D4U8GE24-SE	AQD-D4U8GE24-HE
Product Description	Advantech 4G DDR4-2400 288Pin 512MX8 1.2V ECC Samsung Chip	Advantech 4G DDR4-2400 288Pin 512MX8 1.2V ECC Hynix Chip	Advantech 8G DDR4-2400 288Pin 1GX8 1.2V ECC Samsung Chip	Advantech 8G DDR4-2400 288Pin 1GX8 1.2V ECC Hynix Chip
Brand	Advantech	Advantech	Advantech	Advantech
Capacity	4 GB	4 GB	8 GB	8 GB
Chip Manufacturer	Samsung	Hynix	Samsung	Hynix
Chip Organization	512MX8	512MX8	1GX8	1GX8
Rank	1 Rank	1 Rank	1 Rank	1 Rank
Interface	288 pin	288 pin	288 pin	288 pin
Frequency	2400 Mhz	2400 Mhz	2400 Mhz	2400 Mhz
Voltage	1.2 V	1.2 V	1.2 V	1.2 V
PCB Height	1.23"	1.23"	1.23"	1.23"
Feature	ECC	ECC	ECC	ECC
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

DDR4 ECC



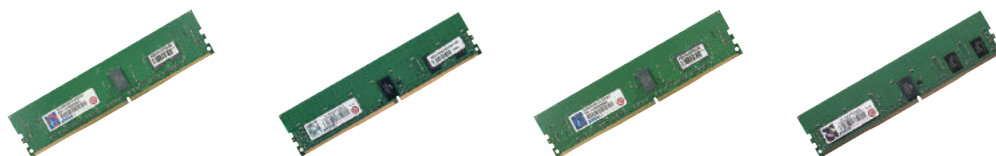
Product	AQD-D4U16E24-SE	AQD-D4U16E24-HE
Product Description	Advantech 16G DDR4-2400 288Pin 1GX8 1.2V ECC Samsung Chip	Advantech 16G DDR4-2400 288Pin 1GX8 1.2V ECC Hynix Chip
Brand	Advantech	Advantech
Capacity	16 GB	16 GB
Chip Manufacturer	Samsung	Hynix
Chip Organization	1GX8	1GX8
Rank	2 Rank	2 Rank
Interface	288 pin	288 pin
Frequency	2400 Mhz	2400 Mhz
Voltage	1.2 V	1.2 V
PCB Height	1.23"	1.23"
Feature	ECC	ECC
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

Products

DRAM Memory Module

13

DDR4 Registered

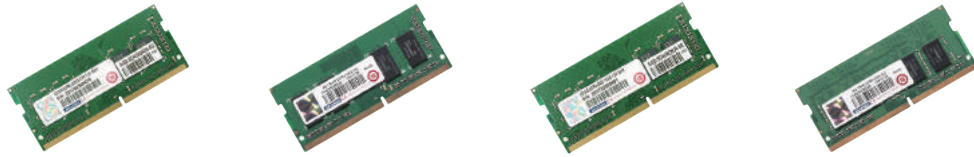


Product	AQD-D4U4GR24-SG	AQD-D4U4GR24-HG	AQD-D4U8GR24-SE	AQD-D4U8GR24-HE
Product Description	Advantech 4G DDR4-2400 288Pin 512MX8 1.2V Registered Samsung Chip	Advantech 4G DDR4-2400 288Pin 512MX8 1.2V Registered Hynix Chip	Advantech 8G DDR4-2400 288Pin 1GX8 1.2V Registered Samsung Chip	Advantech 8G DDR4-2400 288Pin 1GX8 1.2V Registered Hynix Chip
Brand	Advantech	Advantech	Advantech	Advantech
Capacity	4 GB	4 GB	8 GB	8 GB
Chip Manufacturer	Samsung	Hynix	Samsung	Hynix
Chip Organization	512MX8	512MX8	1GX8	1GX8
Rank	1 Rank	1 Rank	1 Rank	1 Rank
Interface	288 pin	288 pin	288 pin	288 pin
Frequency	2400 Mhz	2400 Mhz	2400 Mhz	2400 Mhz
Voltage	1.2 V	1.2 V	1.2 V	1.2 V
PCB Height	1.23"	1.23"	1.23"	1.23"
Feature	Registered	Registered	Registered	Registered
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

DDR4 Registered



Product	AQD-D4U16R24-SE	AQD-D4U16R24-HE
Product Description	Advantech 16G DDR4-2400 288Pin 1GX8 1.2V Registered Samsung Chip	Advantech 16G DDR4-2400 288Pin 1GX8 1.2V Registered Hynix Chip
Brand	Advantech	Advantech
Capacity	16 GB	16 GB
Chip Manufacturer	Samsung	Hynix
Chip Organization	1GX8	1GX8
Rank	2 Rank	2 Rank
Interface	288 pin	288 pin
Frequency	2400 Mhz	2400 Mhz
Voltage	1.2 V	1.2 V
PCB Height	1.23"	1.23"
Feature	Registered	Registered
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

*SO-DDR4
Unbuffered*

Product	AQD-SD4U4GN24-SG	AQD-SD4U4GN24-HP	AQD-SD4U8GN24-SE	AQD-SD4U8GN24-HE
Product Description	Advantech 4G SO-DDR4-2400 260Pin 512MX8 1.2V Unbuffered Samsung Chip	Advantech 4G SO-DDR4-2400 260Pin 512MX16 1.2V Unbuffered Hynix Chip	Advantech 8G SO-DDR4-2400 260Pin 1GX8 1.2V Unbuffered Samsung Chip	Advantech 8G SO-DDR4-2400 260Pin 1GX8 1.2V Unbuffered Hynix Chip
Brand	Advantech	Advantech	Advantech	Advantech
Capacity	4 GB	4 GB	8 GB	8 GB
Chip Manufacturer	Samsung	Hynix	Samsung	Hynix
Chip Organization	512MX8	512MX16	1GX8	1GX8
Rank	1 Rank	1 Rank	1 Rank	1 Rank
Interface	260 pin	260 pin	260 pin	260 pin
Frequency	2400 Mhz	2400 Mhz	2400 Mhz	2400 Mhz
Voltage	1.2 V	1.2 V	1.2 V	1.2 V
PCB Height	1.18"	1.18"	1.18"	1.18"
Feature	Unbuffered	Unbuffered	Unbuffered	Unbuffered
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

*SO-DDR4
Unbuffered*

Product	AQD-SD4U16N24-SE	AQD-SD4U16N24-HE
Product Description	Advantech 16G SO-DDR4-2400 260Pin 1GX8 1.2V Unbuffered Samsung Chip	Advantech 16G SO-DDR4-2400 260Pin 1GX8 1.2V Unbuffered Hynix Chip
Brand	Advantech	Advantech
Capacity	16 GB	16 GB
Chip Manufacturer	Samsung	Hynix
Chip Organization	1GX8	1GX8
Rank	2 Rank	2 Rank
Interface	260 pin	260 pin
Frequency	2400 Mhz	2400 Mhz
Voltage	1.2 V	1.2 V
PCB Height	1.18"	1.18"
Feature	Unbuffered	Unbuffered
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

Products

DRAM Memory Module

15

SO-DDR4 ECC



Product	AQR-SD4U4GE24-SG	AQR-SD4U4GE24-HG	AQR-SD4U8GE24-SE	AQR-SD4U8GE24-HE
Product Description	Advantech 4G SO-DDR4-2400 260Pin 512MX8 1.2V ECC Samsung Chip	Advantech 4G SO-DDR4-2400 260Pin 512MX8 1.2V ECC Hynix Chip	Advantech 8G SO-DDR4-2400 260Pin 1GX8 1.2V ECC Samsung Chip	Advantech 8G SO-DDR4-2400 260Pin 1GX8 1.2V ECC Hynix Chip
Brand	Advantech	Advantech	Advantech	Advantech
Capacity	4 GB	4 GB	8 GB	8 GB
Chip Manufacturer	Samsung	Hynix	Samsung	Hynix
Chip Organization	512MX8	512MX8	1GX8	1GX8
Rank	1 Rank	1 Rank	1 Rank	1 Rank
Interface	260 pin	260 pin	260 pin	260 pin
Frequency	2400 Mhz	2400 Mhz	2400 Mhz	2400 Mhz
Voltage	1.2 V	1.2 V	1.2 V	1.2 V
PCB Height	1.18"	1.18"	1.18"	1.18"
Feature	ECC	ECC	ECC	ECC
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

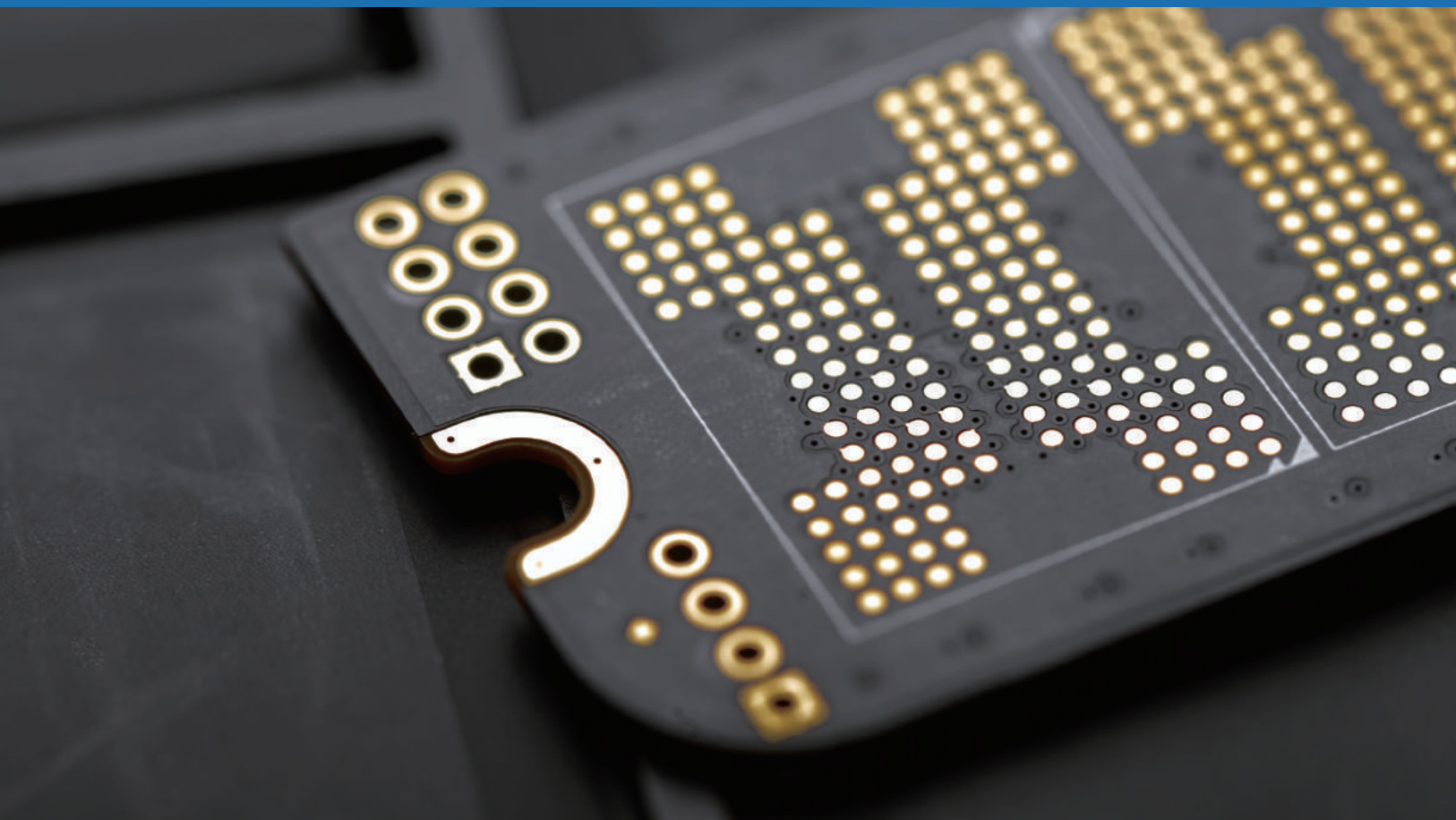
SO-DDR4 ECC



Product	AQR-SD4U16E24-SE	AQR-SD4U16E24-HE
Product Description	Advantech 16G SO-DDR4-2400 260Pin 1GX8 1.2V ECC Samsung Chip	Advantech 16G SO-DDR4-2400 260Pin 1GX8 1.2V ECC Hynix Chip
Brand	Advantech	Advantech
Capacity	16 GB	16 GB
Chip Manufacturer	Samsung	Hynix
Chip Organization	1GX8	1GX8
Rank	2 Rank	2 Rank
Interface	260 pin	260 pin
Frequency	2400 Mhz	2400 Mhz
Voltage	1.2 V	1.2 V
PCB Height	1.18"	1.18"
Feature	ECC	ECC
Operating Temperature	0 ~ 85°C (32 ~ 185°F)	0 ~ 85°C (32 ~ 185°F)

Solid State Drive (SSD)

- Flash-based storage for better performance
- Faster access time compared to traditional storage devices
- No moving parts for high durability in rugged environments
- High instantaneous (burst) data-transfer rates
- Small form factor suitable for space limited applications
- Maximizes existing systems with the most advanced controller technology

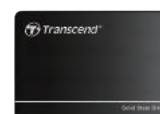
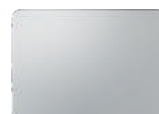
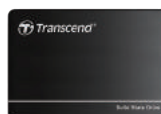
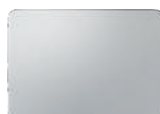


Products

Solid State Drive

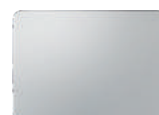
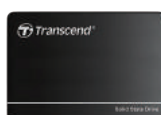
17

2.5"



Product	96FD25-S032-PLG1	96FD25-S032-TR7	96FD25-S064-PLG1	96FD25-S064-TR7
Product Description	LITE-ON 32GB 2.5" SATAIII MLC SSD	Transcend 32GB 2.5" SATAIII MLC SSD	LITE-ON 64GB 2.5" SATAIII MLC SSD	Transcend 64GB 2.5" SATAIII MLC SSD
Manufacturer	LITE-ON	Transcend	LITE-ON	Transcend
Capacity	32 GB	32 GB	64 GB	64 GB
Form Factor	2.5"	2.5"	2.5"	2.5"
Interface	SATA III	SATA III	SATA III	SATA III
Sequential Read Performance	150 MB/s	260 MB/s	300 MB/s	520 MB/s
Sequential Write Performance	30 MB/s	40 MB/s	80 MB/s	90 MB/s
Dimensions (W x H x D)	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.
MTBF (hours)	1,500,000	1,500,000	1,500,000	1,500,000
Operating Temperature	0 ~ 70°C (32 ~ 158°F)	-10 ~ 80°C (14 ~ 176°F)	0 ~ 70°C (32 ~ 158°F)	-10 ~ 80°C (14 ~ 176°F)
NAND Type (SLC/MLC/TLC)	MLC	MLC	MLC	MLC
Warranty	3 years	3 years	3 years	3 years

2.5"



Product	96FD25-S128-PLG2	96FD25-S128-TR7	96FD25-S256-PLG2	96FD25-S256-TR7
Product Description	LITE-ON 128GB 2.5" SATAIII MLC SSD	Transcend 128GB 2.5" SATAIII MLC SSD	LITE-ON 256GB 2.5" SATAIII MLC SSD	Transcend 256GB 2.5" SATAIII MLC SSD
Manufacturer	LITE-ON	Transcend	LITE-ON	Transcend
Capacity	128 GB	128 GB	256 GB	256 GB
Form Factor	2.5"	2.5"	2.5"	2.5"
Interface	SATA III	SATA III	SATA III	SATA III
Sequential Read Performance	500 MB/s	570 MB/s	500 MB/s	570 MB/s
Sequential Write Performance	160 MB/s	170 MB/s	300 MB/s	470 MB/s
Dimensions (W x H x D)	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.
MTBF (hours)	2,500,000	1,500,000	2,500,000	1,500,000
Operating Temperature	-40 ~ 90°C (-40 ~ 194°F)	-10 ~ 80°C (14 ~ 176°F)	-40 ~ 90°C (-40 ~ 194°F)	-10 ~ 80°C (14 ~ 176°F)
NAND Type (SLC/MLC/TLC)	MLC	MLC	MLC	MLC
Warranty	3 years	3 years	3 years	3 years

2.5"



Product	96FD25-S512-PLG2	96FD25-S512-TR7	96FD25-S1TB-PLG2	96FD25-S1TB-TR7
Product Description	LITE-ON 512GB 2.5" SATAIII MLC SSD	Transcend 512GB 2.5" SATAIII MLC SSD	LITE-ON 1TB 2.5" SATAIII MLC SSD	Transcend 1TB 2.5" SATAIII MLC SSD
Manufacturer	LITE-ON	Transcend	LITE-ON	Transcend
Capacity	512 GB	512 GB	1 TB	1 TB
Form Factor	2.5"	2.5"	2.5"	2.5"
Interface	SATA III	SATA III	SATA III	SATA III
Sequential Read Performance	500 MB/s	570 MB/s	500 MB/s	570 MB/s
Sequential Write Performance	400 MB/s	470 MB/s	450 MB/s	470 MB/s
Dimensions (W x H x D)	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.
MTBF (hours)	2,500,000	1,500,000	2,500,000	1,500,000
Operating Temperature	-40 ~ 90°C (-40 ~ 194°F)	-10 ~ 80°C (14 ~ 176°F)	-40 ~ 90°C (-40 ~ 194°F)	-10 ~ 80°C (14 ~ 176°F)
NAND Type (SLC/MLC/TLC)	MLC	MLC	MLC	MLC
Warranty	3 years	3 years	3 years	3 years

2.5" (Supercapacitor)



Product	96FD25-S032-IDP	96FD25-S064-IDP	96FD25-S128-IDP
Product Description	Innodisk 32GB 2.5" SATAIII MLC SSD	Innodisk 64GB 2.5" SATAIII MLC SSD	Innodisk 128GB 2.5" SATAIII MLC SSD
Manufacturer	Innodisk	Innodisk	Innodisk
Capacity	32 GB	64 GB	128 GB
Form Factor	2.5"	2.5"	2.5"
Interface	SATA III	SATA III	SATA III
Sequential Read Performance	270 MB/s	520 MB/s	520 MB/s
Sequential Write Performance	45 MB/s	90 MB/s	180 MB/s
Dimensions (W x H x D)	100.10 x 69.85 x 7.0 mm / 3.94 x 2.75 x 0.276 in.	100.10 x 69.85 x 7.0 mm / 3.94 x 2.75 x 0.276 in.	100.10 x 69.85 x 7.0 mm / 3.94 x 2.75 x 0.276 in.
MTBF (hours)	3,000,000	3,000,000	3,000,000
Operating Temperature	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)
NAND Type (SLC/MLC/TLC)	MLC	MLC	MLC
Warranty	3 years	3 years	3 years

Products

Solid State Drive

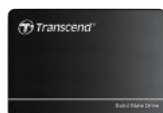
19

2.5" (-40 ~ 90°C)



Product	96FD25-S032-ITR4	96FD25-S064-ITR4	96FD25-S128-ITR4	96FD25-S256-ITR4
Product Description	Transcend Wide Temp 32GB 2.5" SATAIII MLC SSD	Transcend Wide Temp 64GB 2.5" SATAIII MLC SSD	Transcend Wide Temp 128GB 2.5" SATAIII MLC SSD	Transcend Wide Temp 256GB 2.5" SATAIII MLC SSD
Manufacturer	Transcend	Transcend	Transcend	Transcend
Capacity	32 GB	64 GB	128 GB	256 GB
Form Factor	2.5"	2.5"	2.5"	2.5"
Interface	SATA III	SATA III	SATA III	SATA III
Sequential Read Performance	230 MB/s	450 MB/s	550 MB/s	560 MB/s
Sequential Write Performance	40 MB/s	80 MB/s	170 MB/s	320 MB/s
Dimensions (W x H x D)	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.
MTBF (hours)	1,500,000	1,500,000	1,500,000	1,500,000
Operating Temperature	-40 ~ 90°C (-40 ~ 194°F)	-40 ~ 90°C (-40 ~ 194°F)	-40 ~ 90°C (-40 ~ 194°F)	-40 ~ 90°C (-40 ~ 194°F)
NAND Type (SLC/MLC/TLC)	MLC	MLC	MLC	MLC
Warranty	3 years	3 years	3 years	3 years

2.5" (-40 ~ 90°C)



Product	96FD25-S512-ITR4	96FD25-S1TB-ITR4
Product Description	Transcend Wide Temp 512GB 2.5" SATAIII MLC SSD	Transcend Wide Temp 1TB 2.5" SATAIII MLC SSD
Manufacturer	Transcend	Transcend
Capacity	512 GB	1 TB
Form Factor	2.5"	2.5"
Interface	SATA III	SATA III
Sequential Read Performance	560 MB/s	560 MB/s
Sequential Write Performance	460 MB/s	460 MB/s
Dimensions (W x H x D)	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.	100 x 70 x 7 mm / 3.937 x 2.756 x 0.276 in.
MTBF (hours)	1,500,000	1,500,000
Operating Temperature	-40 ~ 90°C (-40 ~ 194°F)	-40 ~ 90°C (-40 ~ 194°F)
NAND Type (SLC/MLC/TLC)	MLC	MLC
Warranty	3 years	3 years

U.2 (PCIe)



Product	96FD25-V1.6TB-M9X	96FD25-V3.2TB-M9X	96FD25-V6.4TB-M9X
Product Description	Micron 1.6TB 2.5"U.2 PCIe TLC SSD	Micron 3.2TB 2.5"U.2 PCIe TLC SSD	Micron 6.4TB 2.5"U.2 PCIe TLC SSD
Manufacturer	Micron	Micron	Micron
Capacity	1.6 TB	3.2 TB	6.4 TB
Form Factor	2.5" U.2	2.5" U.2	2.5" U.2
Interface	PCIe	PCIe	PCIe
Sequential Read Performance	2700 MB/s	3350 MB/s	3350 MB/s
Sequential Write Performance	1950 MB/s	2400 MB/s	2400 MB/s
Dimensions (W x H x D)	69.85 x 15 x 100 mm / 2.75 x 0.59 x 3.937 in.	69.85 x 15 x 100 mm / 2.75 x 0.59 x 3.937 in.	69.85 x 15 x 100 mm / 2.75 x 0.59 x 3.937 in.
MTBF (hours)	2,000,000	2,000,000	2,000,000
Operating Temperature	0 ~ 80°C (32 ~ 176°F)	0 ~ 80°C (32 ~ 176°F)	0 ~ 80°C (32 ~ 176°F)
NAND Type (SLC/MLC/TLC)	TLC	TLC	TLC
Warranty	3 years	3 years	3 years



mSATA

Product	96FD-M032-TR71	96FD-M064-TR71	96FD-M128-TR71	96FD-M256-TR71
Product Description	Transcend 32GB mSATA SATAIII MLC SSD	Transcend 64GB mSATA SATAIII MLC SSD	Transcend 128GB mSATA SATAIII MLC SSD	Transcend 256GB mSATA SATAIII MLC SSD
Manufacturer	Transcend	Transcend	Transcend	Transcend
Capacity	32 GB	64 GB	128 GB	256 GB
Form Factor	mSATA	mSATA	mSATA	mSATA
Interface	SATA III	SATA III	SATA III	SATA III
Sequential Read Performance	280 MB/s	560 MB/s	560 MB/s	570 MB/s
Sequential Write Performance	50 MB/s	100 MB/s	290 MB/s	400 MB/s
Dimensions (W x H x D)	50.95 x 30 x 4 mm / 2.006 x 1.181 x 0.157 in.	50.95 x 30 x 4 mm / 2.006 x 1.181 x 0.157 in.	50.95 x 30 x 4 mm / 2.006 x 1.181 x 0.157 in.	50.95 x 30 x 4 mm / 2.006 x 1.181 x 0.157 in.
MTBF (hours)	1,500,000	1,500,000	1,500,000	1,500,000
Operating Temperature	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)
NAND Type (SLC/MLC/TLC)	MLC	MLC	MLC	MLC
Warranty	3 years	3 years	3 years	3 years

Products

Solid State Drive

21



mSATA

Product	96FD-M512-TR71	96FD-M1TB-TR71
Product Description	Transcend 512GB mSATA SATAIII MLC SSD	Transcend 1TB mSATA SATAIII MLC SSD
Manufacturer	Transcend	Transcend
Capacity	512 GB	1 TB
Form Factor	mSATA	mSATA
Interface	SATA III	SATA III
Sequential Read Performance	570 MB/s	570 MB/s
Sequential Write Performance	460 MB/s	460 MB/s
Dimensions (W x H x D)	50.95 x 30 x 4 mm / 2.006 x 1.181 x 0.157 in.	50.95 x 30 x 4 mm / 2.006 x 1.181 x 0.157 in.
MTBF (hours)	1,500,000	1,500,000
Operating Temperature	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)
NAND Type (SLC/MLC/TLC)	MLC	MLC
Warranty	3 years	3 years



M.2 2242 (SATA)

Product	96FD42-N032-LIS	96FD42-N064-LIS	96FD42-N128-LIS
Product Description	LITE-ON 32GB M.2 2242 SATAIII MLC SSD	LITE-ON 64GB M.2 2242 SATAIII MLC SSD	LITE-ON 128GB M.2 2242 SATAIII MLC SSD
Manufacturer	LITE-ON	LITE-ON	LITE-ON
Capacity	32 GB	64 GB	128 GB
Form Factor	M.2 2242	M.2 2242	M.2 2242
Interface	SATA III	SATA III	SATA III
Sequential Read Performance	260 MB/s	490 MB/s	520 MB/s
Sequential Write Performance	40 MB/s	80 MB/s	160 MB/s
Dimensions (W x H x D)	22 x 3.5 x 42 mm / 0.866 x 0.138 x 1.654 in.	22 x 3.5 x 42 mm / 0.866 x 0.138 x 1.654 in.	22 x 3.5 x 42 mm / 0.866 x 0.138 x 1.654 in.
MTBF (hours)	1,500,000	1,500,000	1,500,000
Operating Temperature	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)
NAND Type (SLC/MLC/TLC)	MLC	MLC	MLC
Warranty	3 years	3 years	3 years

M.2 2280 (SATA)

Product	96FD80-N064-LIS	96FD80-N128-LIS	96FD80-N256-LIS	96FD80-N512-LIS
Product Description	LITE-ON 64GB M.2 2280 SATAIII MLC SSD	LITE-ON 128GB M.2 2280 SATAIII MLC SSD	LITE-ON 256GB M.2 2280 SATAIII MLC SSD	LITE-ON 512GB M.2 2280 SATAIII MLC SSD
Manufacturer	LITE-ON	LITE-ON	LITE-ON	LITE-ON
Capacity	64 GB	128 GB	256 GB	512 GB
Form Factor	M.2 2280	M.2 2280	M.2 2280	M.2 2280
Interface	SATA III	SATA III	SATA III	SATA III
Sequential Read Performance	520 MB/s	520 MB/s	520 MB/s	520 MB/s
Sequential Write Performance	80 MB/s	160 MB/s	320 MB/s	450 MB/s
Dimensions (W x H x D)	22 x 3.5 x 82 mm / 0.866 x 0.138 x 3.228 in.	22 x 3.5 x 82 mm / 0.866 x 0.138 x 3.228 in.	22 x 3.5 x 82 mm / 0.866 x 0.138 x 3.228 in.	22 x 3.5 x 82 mm / 0.866 x 0.138 x 3.228 in.
MTBF (hours)	1,500,000	1,500,000	1,500,000	1,500,000
Operating Temperature	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)
NAND Type (SLC/MLC/TLC)	MLC	MLC	MLC	MLC
Warranty	3 years	3 years	3 years	3 years

*M.2 2280 (PCIe)*

Product	96FD80-P256-LIS	96FD80-P512-LIS	96FD80-P1TB-LIS
Product Description	LITE-ON 256GB M.2 2280 PCIe Gen3x4 TLC SSD	LITE-ON 512GB M.2 2280 PCIe Gen3x4 TLC SSD	LITE-ON 1TB M.2 2280 PCIe Gen3x4 TLC SSD
Manufacturer	LITE-ON	LITE-ON	LITE-ON
Capacity	256 GB	512 GB	1 TB
Form Factor	M.2 2280	M.2 2280	M.2 2280
Interface	PCIe	PCIe	PCIe
Sequential Read Performance	2800 MB/s	3000 MB/s	3000 MB/s
Sequential Write Performance	800 MB/s	1600 MB/s	2000 MB/s
Dimensions (W x H x D)	22 x 2.3 x 80 mm / 0.866 x 0.09 x 3.149 in.	22 x 2.3 x 80 mm / 0.866 x 0.09 x 3.149 in.	22 x 2.3 x 80 mm / 0.866 x 0.09 x 3.149 in.
MTBF (hours)	1,500,000	1,500,000	1,500,000
Operating Temperature	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)
NAND Type (SLC/MLC/TLC)	TLC	TLC	TLC
Warranty	3 years	3 years	3 years

Hard Drive

- Available in a broad range of capacities, cache sizes and form factors
- Latest technology with affordable prices
- Responsive, maximized performance
- Support for S.M.A.R.T. drive monitoring and reporting
- Massive capacity with the best C/P value
- Every driver extensively tested before product launch



Products

Hard Drive

24

General IPC HDD



Product	96ND500G-ST-WD5KG	96ND500G-ST-SG5KG	96ND1TB-ST-WD5K	96ND1TB-ST-SG5KG1
Product Description	WD 2.5" 500G SATAIII 5KRPM 16MB HDD	Seagate 2.5" 500G SATAIII 5KRPM 128MB HDD	WD 2.5" 1TB SATAIII 5KRPM 8MB HDD	Seagate 2.5" 1TB SATAIII 5KRPM 128MB HDD
Manufacturer	Western Digital	Seagate	Western Digital	Seagate
Capacity	500 GB	500 GB	1 TB	1 TB
Size	2.5"	2.5"	2.5"	2.5"
Interface	SATA III	SATA III	SATA III	SATA III
24X7 Operation	No	No	No	No
Spindle Speed	5400RPM	5400RPM	5400RPM	5400RPM
Cache Size	16 MB	128 MB	8 MB	128 MB
Average Read Seek Time	11 ms	4.16 ms	12 ms	13 ms
Dimensions (W x H x D)	69.85 x 7 x 100.2 mm / 2.75 x 0.276 x 3.945 in.	100.35 x 7 x 69.85 mm / 3.95 x 0.275 x 2.75 in.	100.2 x 15 x 59.85 mm / 3.945 x 0.591 x 2.356 in.	100.35 x 7 x 69.85 mm / 3.951 x 0.276 x 2.75 in.
Operating Temperature	0 ~ 60°C (32 ~ 140°F)	5 ~ 60°C (41 ~ 140°F)	0 ~ 60°C (32 ~ 140°F)	0 ~ 60°C (32 ~ 140°F)
MTBF (hours)/ Load/Upload Cycles	600,000	2,000,000	600,000	600,000
Warranty	3 years	3 years	3 years	3 years

General IPC HDD



Product	96ND2TB-ST-SG5KG1	96HD1000G-ST-WD7K2	96HD2000G-ST-SG7K2
Product Description	Seagate 2.5" 2TB SATAIII 5KRPM 128MB HDD	WD 3.5" 1TB SATAIII 7KRPM 64MB HDD	Seagate 3.5" 2TB SATA 7KRPM 64M HDD
Manufacturer	Seagate	Western Digital	Seagate
Capacity	2 TB	1 TB	2 TB
Size	2.5"	3.5"	3.5"
Interface	SATA III	SATA III	SATA III
24X7 Operation	No	No	No
Spindle Speed	5400RPM	7200RPM	7200RPM
Cache Size	128 MB	64 MB	64 MB
Average Read Seek Time	13 ms	2 ms	8.5 ms
Dimensions (W x H x D)	100.35 x 7 x 69.85 mm / 3.951 x 0.276 x 2.75 in.	101.6 x 25.4 x 147 mm / 4 x 1 x 5.787 in.	101.6 x 25.4 x 147 mm / 4 x 1 x 5.787 in.
Operating Temperature	0 ~ 60°C (32 ~ 140°F)	0 ~ 60°C (32 ~ 140°F)	0 ~ 60°C (32 ~ 140°F)
MTBF (hours)/ Load/Upload Cycles	600,000	30,000	30,000
Warranty	3 years	3 years	3 years

DRAM
Memory
Module

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse

Products

Hard Drive

25

Video Storage HDD



Product	96HD500G-ST-SG5KA1	96HD1TB-ST-SG5KA	96HD1TB-ST-WD5KA1	96HD2TB-ST-SG5KA
Product Description	Seagate 3.5" 500GB SATAIII 5KRPM 64MB HDD	Seagate 3.5" 1TB SATAIII 5KRPM 64MB HDD	WD 3.5" 1TB SATAIII 5KRPM 64MB HDD	Seagate 3.5" 2TB SATAIII 5KRPM 64MB HDD
Manufacturer	Seagate	Seagate	Western Digital	Seagate
Capacity	500 GB	1 TB	1 TB	2 TB
Size	3.5"	3.5"	3.5"	3.5"
Interface	SATA III	SATA III	SATA III	SATA III
24X7 Operation	Yes	Yes	Yes	Yes
Spindle Speed	5900RPM	5900RPM	5400RPM	5900RPM
Cache Size	64 MB	64 MB	64 MB	64 MB
Average Read Seek Time	12 ms	8.5 ms	2 ms	12 ms
Dimensions (W x H x D)	101.85 x 26.11 x 147 mm / 4.01 x 1.028 x 5.787 in.	101.85 x 26.11 x 147 mm / 4.01 x 1.028 x 5.787 in.	101.6 x 26.1 x 147 mm / 4 x 1.028 x 5.787 in.	101.6 x 26.11 x 146.99 mm / 4 x 1.028 x 5.787 in.
Operating Temperature	0 ~ 60°C (32 ~ 140°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 65°C (32 ~ 149°F)	5 ~ 60°C (41 ~ 140°F)
MTBF (hours)/ Load/Upload Cycles	1,000,000	1,000,000	1,000,000	1,000,000
Warranty	3 years	3 years	3 years	3 years

Video Storage HDD



Product	96HD2TB-ST-WD5KA1	96HD3TB-ST-WD5KA1	96HD4TB-ST-SG5KA1
Product Description	WD 3.5" 2TB SATAIII 5KRPM 64MB HDD	WD 3.5" 3TB SATAIII 5KRPM 64MB HDD	Seagate 3.5" 4TB SATAIII 5KRPM 64MB HDD
Manufacturer	Western Digital	Western Digital	Seagate
Capacity	2 TB	3 TB	4 TB
Size	3.5"	3.5"	3.5"
Interface	SATA III	SATA III	SATA III
24X7 Operation	Yes	Yes	Yes
Spindle Speed	5900RPM	5400RPM	5900RPM
Cache Size	64 MB	64 MB	64 MB
Average Read Seek Time	2 ms	2 ms	9.5 ms
Dimensions (W x H x D)	101.6 x 26.11 x 146.99 mm / 4 x 1.028 x 5.787 in.	101.6 x 26.1 x 147 mm / 4 x 1.028 x 5.787 in.	101.6 x 26.11 x 146.99 mm / 4 x 1.028 x 5.787 in.
Operating Temperature	5 ~ 60°C (41 ~ 140°F)	0 ~ 65°C (32 ~ 149°F)	5 ~ 60°C (41 ~ 140°F)
MTBF (hours)/ Load/Upload Cycles	1,000,000	1,000,000	1,000,000
Warranty	3 years	3 years	3 years

Server Storage HDD



Product	96ND600G-SS-SG10E1	96ND1.2T-SS-SG10E1	96HD1TB-ST-SG7KE1	96HD1TB-ST-WD7KE1
Product Description	Seagate Enterprise 2.5" 600GB SAS 10KRPM 256MB HDD	Seagate Enterprise 2.5" 1.2TB SAS 10KRPM 256MB HDD	Seagate Enterprise 3.5" 1TB SATAIII 7KRPM 128MB HDD	WD Enterprise 3.5" 1TB SATAIII 7KRPM 128MB HDD
Manufacturer	Seagate	Seagate	Seagate	Western Digital
Capacity	600 GB	1.2 TB	1 TB	1 TB
Size	2.5"	2.5"	3.5"	3.5"
Interface	SAS	SAS	SATA III	SATA III
24X7 Operation	Yes	No	Yes	Yes
Spindle Speed	10K RPM	10K RPM	7200RPM	7200RPM
Cache Size	256 MB	256 MB	128 MB	128 MB
Average Read Seek Time	2.9 ms	2.9 ms	3.4 ms	7.7 ms
Dimensions (W x H x D)	100.45 x 15 x 69.85 mm / 3.954 x 0.59 x 2.75 in.	100.45 x 15 x 69.85 mm / 3.955 x 0.591 x 2.75 in.	101.85 x 26.1 x 147 mm / 4.01 x 1.028 x 5.787 in.	101.6 x 26.1 x 147 mm / 4 x 1.027 x 5.787 in.
Operating Temperature	5 ~ 60°C (41 ~ 140°F)	5 ~ 60°C (41 ~ 140°F)	5 ~ 60°C (41 ~ 140°F)	5 ~ 60°C (41 ~ 140°F)
MTBF (hours)/ Load/Upload Cycles	2,000,000	2,000,000	2,000,000	2,000,000
Warranty	5 years	5 years	5 years	5 years

Server Storage HDD



Product	96HD2TB-ST-SG7KE1	96HD4TB-ST-SG7KE1	96HD6TB-ST-SG7KE1	96HD8TB-ST-SG7KE
Product Description	Seagate Enterprise 3.5" 2TB SATAIII 7KRPM 128MB HDD	Seagate Enterprise 3.5" 4TB SATAIII 7KRPM 128MB HDD	Seagate Enterprise 3.5" 6TB SATAIII 7KRPM 256MB HDD	Seagate Enterprise 3.5" 8TB SATAIII 7KRPM 256MB HDD
Manufacturer	Seagate	Seagate	Seagate	Seagate
Capacity	2 TB	4 TB	6 TB	8 TB
Size	3.5"	3.5"	3.5"	3.5"
Interface	SATA III	SATA III	SATA III	SATA III
24X7 Operation	Yes	Yes	Yes	Yes
Spindle Speed	7200RPM	7200RPM	7200RPM	7200RPM
Cache Size	128 MB	128 MB	256 MB	256 MB
Average Read Seek Time	4.16 ms	4.16 ms	3.4 ms	3.4 ms
Dimensions (W x H x D)	101.85 x 26.1 x 147 mm / 4.01 x 1.028 x 5.787 in.	101.85 x 26.1 x 147 mm / 4.01 x 1.028 x 5.787 in.	101.85 x 26.1 x 147 mm / 4.01 x 1.028 x 5.787 in.	101.85 x 26.1 x 147 mm / 4.01 x 1.028 x 5.787 in.
Operating Temperature	5 ~ 60°C (41 ~ 140°F)	5 ~ 60°C (41 ~ 140°F)	5 ~ 60°C (41 ~ 140°F)	5 ~ 60°C (41 ~ 140°F)
MTBF (hours)/ Load/Upload Cycles	2,000,000	2,000,000	2,000,000	2,000,000
Warranty	5 years	5 years	5 years	5 years

Compact Flash (CF Card)

- Designed for industrial, medical, and military applications
- Comes in a variety of speeds, based on NAND technology
- No moving parts for high durability in rugged environments
- Best reliability with high mean time between failure (MTBF) rates
- Architecture supports fast-action photography or high-definition video
- Supports a non-moving model, making the CF bootable
- Features wear-leveling, write protection, and error correction



Products

CF Card

28

Commercial
Temperature (0 ~ 70°C)



Product	96FMCFI-1G-CT-AP5	96FMCFI-2G-CT-AP5	96FMCFI-4G-CT-AP5	96FMCFI-8G-CT-AP5
Product Description	Apacer 1G CF Card with SLC Flash	Apacer 2G CF Card with SLC Flash	Apacer 4G CF Card with SLC Flash	Apacer 8G CF Card with SLC Flash
Manufacturer	Apacer	Apacer	Apacer	Apacer
Capacity	1 GB	2 GB	4 GB	8 GB
Sequential Read Performance	29 MB/s	29 MB/s	29 MB/s	29 MB/s
Sequential Writing Rate	15 MB/s	15 MB/s	15 MB/s	15 MB/s
Operating Temperature	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)
NAND Type (SLC/MLC/TLC)	SLC	SLC	SLC	SLC
DMA Mode	Ultra DMA	Ultra DMA	Ultra DMA	Ultra DMA
Disk Mode	Fixed Mode	Fixed Mode	Fixed Mode	Fixed Mode
Terabytes Written (TBW)	25.6 TBW	38.4 TBW	51.9 TBW	69.8 TBW

Extend Temperature
(-40 ~ 85°C)



Product	96FMCFI-2G-ET-AP4	96FMCFI-4G-ET-AP4	96FMCFI-8G-ET-AP4	96FMCFI-16G-ET-AP4
Product Description	Apacer 2G CF Card with SLC Flash Wide Temperature	Apacer 4G CF Card with SLC Flash Wide Temperature	Apacer 8G CF Card with SLC Flash Wide Temperature	Apacer 16G CF Card with SLC Flash Wide Temperature
Manufacturer	Apacer	Apacer	Apacer	Apacer
Capacity	2 GB	4 GB	8 GB	16 GB
Sequential Read Performance	29 MB/s	29 MB/s	29 MB/s	29 MB/s
Sequential Writing Rate	15 MB/s	15 MB/s	15 MB/s	15 MB/s
Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)
NAND Type (SLC/MLC/TLC)	SLC	SLC	SLC	SLC
DMA Mode	Ultra DMA	Ultra DMA	Ultra DMA	Ultra DMA
Disk Mode	Fixed Mode	Fixed Mode	Fixed Mode	Fixed Mode
Terabytes Written (TBW)	38.4 TBW	51.9 TBW	69.8 TBW	115 TBW

DRAM
Memory
Module

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse

CFast



Product	96FMCFF-04G-CS-AP	96FMCFF-08G-CS-AP	96FMCFF-16G-CS-AP
Product Description	Apacer 4GB CFast with SLC Flash	Apacer 8GB CFast with SLC Flash	Apacer 16GB CFast with SLC Flash
Manufacturer	Apacer	Apacer	Apacer
Capacity	4 GB	8 GB	16 GB
Sequential Read Performance	285 MB/s	285 MB/s	285 MB/s
Sequential Writing Rate	260 MB/s	260 MB/s	260 MB/s
Operating Temperature	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)
NAND Type (SLC/MLC/TLC)	SLC	SLC	SLC
DMA Mode	DMA	DMA	DMA
Disk Mode	Fixed Mode	Fixed Mode	Fixed Mode
Terabytes Written (TBW)	171 TBW	260 TBW	466 TBW
MTBF (hours)	2,000,000	2,000,000	2,000,000

CFast



Product	96FMCFF-16G-CM-AP2	96FMCFF-32G-CM-AP2	96FMCFF-64G-CM-AP2
Product Description	Apacer 16GB CFast with MLC Flash	Apacer 32GB CFast with MLC Flash	Apacer 64GB CFast with MLC Flash
Manufacturer	Apacer	Apacer	Apacer
Capacity	16 GB	32 GB	64 GB
Sequential Read Performance	380 MB/s	380 MB/s	380 MB/s
Sequential Writing Rate	180 MB/s	180 MB/s	180 MB/s
Operating Temperature	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 70°C (32 ~ 158°F)
NAND Type (SLC/MLC/TLC)	MLC	MLC	MLC
DMA Mode	DMA	DMA	DMA
Disk Mode	Fixed Mode	Fixed Mode	Fixed Mode
MTBF (hours)	1,000,000	1,000,000	1,000,000

Power Supply

- Comprehensive selection of high-efficiency power supplies
- Power supplies are fully tested by Advantech with 3-year warranty
- Quality products provided from first tier manufacturers, with enhanced components for industrial applications (Japanese capacitors + dual ball bearing fan)
- High thermal resilience, which provides full load under 50°C (some external power supplies 40°C)
- Order friendly with flexible minimum order quantity modification



Products

Power Supply

31

*DIN-Rail
Power Supply*



Product	PSD-A40W24	PSD-A60W24	PSD-A120W24	PSD-A120W48
Product Description	24V / 40W DIN-Rail Power Supply	24V / 60W DIN-Rail Power Supply	24V / 120W DIN-Rail Power Supply	48V / 120W DIN-Rail Power Supply
Form Factor	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail
Brand	Advantech	Advantech	Advantech	Advantech
Output Power	40W	60W	120W	120W
Input Type	AC to DC	AC to DC	AC to DC	AC to DC
Input Current	1.0A max. (115V)	1.4A max. (115V)	1.4A max. (115V)	1.4A max. (115V)
Input Voltage Range	85 ~ 264V _{AC}	85 ~ 264V _{AC}	85 ~ 264V _{AC}	85 ~ 264V _{AC}
Input Frequency	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
Efficiency	89%	89%	90%	91%
Operating Temperature	-25 ~ 70°C (-13 ~ 158°F)	-25 ~ 70°C (-13 ~ 158°F)	-25 ~ 70°C (-13 ~ 158°F)	-25 ~ 70°C (-13 ~ 158°F)
Power Derating	Full load to 60°C, Derate 2.5% per °C	Full load to 60°C, Derate 2.5% per °C	Full load to 60°C, Derate 2.5% per °C	Full load to 60°C, Derate 3.5% per °C
Storage Temperature	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)
Storage Humidity	95% RH	95% RH	95% RH	95% RH
Output Rating	24V / 1.67A	24V / 2.5A	24V / 5A	48V / 2.5A
MTBF (hours)	> 500,000	> 500,000	> 500,000	> 500,000
Dimensions (W x H x D)	32 x 90.2 x 100 mm / 1.26 x 3.54 x 3.94 in.	32 x 90.2 x 100 mm / 1.26 x 3.54 x 3.94 in.	40 x 110 x 120 mm / 1.57 x 4.33 x 4.72 in.	40 x 110 x 120 mm / 1.57 x 4.33 x 4.72 in.
Safety	CB / UL / FCC / CE / TUV / CCC	CB / UL / FCC / CE / TUV / CCC	CB / UL / FCC / CE	CB / UL / FCC / CE
Main Connector	Screw Terminal	Screw Terminal	Screw Terminal	Screw Terminal
PFC Function	Yes	Yes	Yes	Yes
Cooling Function	Conventional	Conventional	Conventional	Conventional
LED	Green, DC ok	Green, DC ok	Green, DC ok	Green, DC ok
Mounting Rail	TS35	TS35	TS35	TS35
Features	• Low Ripple & Noise • OVP / OCP / OTP • Compact Size • Support 110Vdc application • Support 150% load for 3 Secs • High MTBF and lifetime	• Low Ripple & Noise • OVP / OCP / OTP • Compact Size • Support 110Vdc application • Support 150% load for 3 Secs • High MTBF and lifetime	• Low Ripple & Noise • OVP / OCP / OTP • Compact Size • Support 110Vdc application • Support 150% load for 3 Secs • High MTBF and lifetime	• Low Ripple & Noise • OVP / OCP / OTP • Compact Size • Support 110Vdc application • Support 150% load for 3 Secs • High MTBF and lifetime

PS2 Power Supply



Product	PS8-250ATX-ZE	PS8-300ATX-ZBE	PS8-500ATX-ZE	PS8-700ATX-ZE
Product Description	250W PS2 Power Supply	300W PS2 Power Supply	500W PS2 Power Supply	700W PS2 Power Supply
Manufacturer	FSP	Delta	FSP	FSP
Form Factor	PS2	PS2	PS2	PS2
Output Power	250W	300W	500W	700W
Input Type	AC to DC	AC to DC	AC to DC	AC to DC
Input Current	115V @ 6A max.	100V @ 8A max.	115V @ 8A max.	115V @ 12A max.
Input Voltage Range	100 ~ 240V _{AC}	100 ~ 240V _{AC}	100 ~ 240V _{AC}	100 ~ 240V _{AC}
Input Frequency	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
Efficiency	80%	82%	82%	82%
Operating Temperature	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)
Storage Temperature	-20 ~ 80°C (-4 ~ 176°F)	-40 ~ 80°C (-40 ~ 176°F)	-20 ~ 80°C (-4 ~ 176°F)	-20 ~ 80°C (-4 ~ 176°F)
Storage Humidity	95% RH	90% RH	95% RH	95% RH
Output Rating	+3.3V @ 20A +5V @ 21A +12V1 @ 16A +12V2 @ 16A -12V @ 0.3A -5V @ 0.3A +5Vsb @ 2.5A	+3.3V @ 16A +5V @ 19A +12V1 @ 11A +12V2 @ 11.5A -12V @ 0.3A -5V @ 0.3A +5Vsb @ 2A	+3.3V @ 24A +5V @ 20A +12V1 @ 16A +12V2 @ 16A -12V @ 0.5A -5V @ 0.3A +5Vsb @ 3A	+3.3V @ 24A +5V @ 30A +12V1 @ 16A +12V2 @ 16A +12V3 @ 16A +12V4 @ 16A -12V @ 0.5A -5V @ 0.5A +5Vsb @ 4A
MTBF (hours)	100,000	100,000	100,000	100,000
Dimensions (W x H x D)	150 x 86 x 140 mm / 5.9 x 3.3 x 5.5 in.	150 x 86 x 140 mm / 5.9 x 3.3 x 5.5 in.	150 x 86 x 140 mm / 5.9 x 3.3 x 5.5 in.	150 x 86 x 140 mm / 5.9 x 3.3 x 5.5 in.
Safety	CB / UL / FCC / CE / TUV / CCC / KC / KC EMC	CB / UL / FCC / CE / CCC / BSMI / KC	CB / UL / FCC / CE / TUV / CCC / KC / KC EMC	CB / UL / FCC / CE / TUV / CCC / KC / KC EMC
80 Plus Certified	80 Plus	80 Plus Bronze	80 Plus Bronze	80 Plus Bronze
Main Connector	ATX (20 + 4pin)	ATX (20 + 4pin)	ATX (20 + 4pin)	ATX (20 + 4pin)
PFC Function	Yes	Yes	Yes	Yes
Fan Function	Yes	Yes	Yes	Yes
Power Switch Function	Yes	No	Yes	Yes
EMC	Class B	Class B	Class B	Class B
Features	• Low Ripple & Noise • Over Voltage Protection • Over Current Protection • Short Circuit Protection	• Low Ripple & Noise • Over Voltage Protection • Over Current Protection • Short Circuit Protection	• Low ripple & noise • Over Voltage Protection • Over Current Protection • Short Circuit Protection	• Low Ripple & Noise • Over Voltage Protection • Over Current Protection • Short Circuit Protection

DRAM
Memory
Module

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse

DC / DC
Power Supply



Product	PS-300ATX-DC48E	96PS-D500WPS2
Product Description	300W (DC) PS2 Power Supply	500W (DC) PS2 Power Supply
Manufacturer	FSP	FSP
Form Factor	PS2	PS2
Output Power	300W	500W
Input Type	DC to DC	DC to DC
Input Current	-36V _{dc} @ 15A max.	110V _{dc} @ 7A max. 220V _{dc} @ 3.5A max.
Input Voltage Range	-36 ~ -72V _{dc}	110 ~ 220V _{dc}
Input Frequency	N/A	N/A
Efficiency	65%	85%
Operating Temperature	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)
Storage Temperature	-20 ~ 80°C (-4 ~ 176°F)	-20 ~ 80°C (-4 ~ 176°F)
Storage Humidity	95% RH	95% RH
Output Rating	+3.3V @ 28A +5V @ 30A +12V @ 15A -12V @ 0.8A -5V @ 0.3A +5Vsb @ 2A	+3.3V @ 20A +5V @ 20A +12V1 @ 16A +12V2 @ 16A +12V3 @ 16A -12V @ 0.5A -5V @ 0.3A +5Vsb @ 2A
MTBF (hours)	100,000	100,000
Dimensions (W x H x D)	150 x 86 x 140 mm / 5.9 x 3.3 x 5.5 in.	150 x 86 x 140 mm / 5.9 x 3.3 x 5.5 in.
Safety	CB / UL / FCC / CSA / CE / TUV / CCC	CB / CE
80 Plus Certified	N/A	80 Plus Bronze
Main Connector	ATX (20 + 4pin)	ATX (20 + 4pin)
PFC Function	No	No
Fan Function	Yes	Yes
Power Switch Function	Yes	No
EMC	Class B	Class B
Features	• Low Ripple & Noise • Over Voltage Protection • Over Current Protection • Short Circuit Protection	• Low Ripple & Noise • Over Voltage Protection • Over Current Protection • Short Circuit Protection • Cable Management

Flex ATX Power Supply



Product	PS8-250FATX-XE	PS8-350FATX-XE	96PS-A400WFX-1
Product Description	250W Flex ATX	350W Flex ATX	400W Flex ATX
Manufacturer	FSP	Delta	FSP
Form Factor	Flex	Flex	Flex
Output Power	250W	350W	400W
Input Type	AC to DC	AC to DC	AC to DC
Input Current	115V @ 4A max.	115V @ 7A max.	115V @ 6.3A max.
Input Voltage Range	100 ~ 240V _{AC}	100 ~ 240V _{AC}	100 ~ 240V _{AC}
Input Frequency	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
Efficiency	82%	82%	90%
Operating Temperature	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)
Storage Temperature	-20 ~ 80°C (-4 ~ 176°F)	-40 ~ 75°C (-40 ~ 167°F)	-20 ~ 80°C (-4 ~ 176°F)
Storage Humidity	95% RH	95% RH	95% RH
Output Rating	+3.3V @ 12A +5V @ 14A +12V @ 18A -12V @ 0.3A +5Vsb @ 2.5A	+3.3V @ 16A +5V @ 16A +12V1 @ 18A +12V2 @ 18A -12V @ 0.3 +5Vsb @ 3A	+3.3V @ 16A +5V @ 16A +12V1 @ 18A +12V2 @ 18A -12V @ 0.5A -5V @ 0.2A +5Vsb @ 3A
MTBF (hours)	100,000	100,000	100,000
Dimensions (W x H x D)	40.5 x 150 x 81.5 mm / 1.6 x 5.9 x 3.2 in.	40.5 x 150 x 81.5 mm / 1.6 x 5.9 x 3.2 in.	40.5 x 190 x 81.5 mm / 1.6 x 7.4 x 3.2 in.
Safety	CB / UL / FCC / CE / TUV / CCC / KC	CB / UL / FCC / CE / TUV / CCC / BSMI	CB / UL / FCC / CE / TUV / CCC / KC
80 Plus Certified	80 Plus Bronze	80 Plus Bronze	80 Plus Gold
Main Connector	ATX (20 + 4pin)	ATX (20 + 4pin)	ATX (20 + 4pin)
PFC Function	Yes	Yes	Yes
Fan Function	Yes	Yes	Yes
Power Switch Function	No	No	No
EMC	Class B	Class B	Class B
Features	• Low Ripple & Noise • Over Voltage Protection • Over Power Protection • Short Circuit Protection	• Low Ripple & Noise • Over Voltage Protection • Over Current Protection • Short Circuit Protection	• Low Ripple & Noise • Over Voltage Protection • Over Current Protection • Short Circuit Protection

DRAM
Memory
Module

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse



Redundant
Power Supply

Product	RPS8-350ATX-XE	RPS8-500ATX-XE	RPS8-750ATX-XE
Product Description	350W Mini Redundant	500W Mini Redundant	750W Mini Redundant
Manufacturer	FSP	FSP	FSP
Form Factor	Mini Redundant	Mini Redundant	Mini Redundant
Output Power	350W	500W	750W
Input Type	AC to DC	AC to DC	AC to DC
Input Current	4.6A	8A	10A
Input Voltage Range	100 ~ 240V _{AC}	100 ~ 240V _{AC}	100 ~ 240V _{AC}
Input Frequency	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
Efficiency	88%	88%	88%
Operating Temperature	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 60°C (32 ~ 140°F)
Storage Temperature	-20 ~ 80°C (-4 ~ 176°F)	-20 ~ 80°C (-4 ~ 176°F)	-40 ~ 75°C (-40 ~ 158°F)
Storage Humidity	5 - 90% RH	5 - 90% RH	95% RH
Output Rating	+3.3V @ 20A +5V @ 20A +12V1 @ 29A -5V @ 0.3A -12V @ 0.5A +5Vsb @ 2A	+3.3V @ 20A +5V @ 20A +12V1 @ 16A +12V2 @ 16A +12V3 @ 16A -12V @ 0.5A -5V @ 0.3A +5Vsb @ 3A	+3.3V @ 24A +5V @ 30A +12V @ 60.9A -12V @ 0.5A +5Vsb @ 4A
MTBF (hours)	100,000	100,000	100,000
Dimensions (W x H x D)	150 x 84 x 190 mm / 5.9 x 3.3 x 7.4 in.	150 x 84 x 190 mm / 5.9 x 3.3 x 7.4 in.	150 x 84 x 200 mm / 5.9 x 3.3 x 7.8 in.
Safety	CB / UL / FCC / CE / TUV / CCC / KC / KC EMC	CB / UL / FCC / CCC / CE / TUV / KC / KC EMC	CB / UL / FCC / CE / TUV / CCC / BSMI
80 Plus Certified	80 Plus Gold	80 Plus Gold	80 Plus Gold
Main Connector	ATX (20 + 4pin)	ATX (20 + 4pin)	ATX (20 + 4pin)
PFC Function	Yes	Yes	Yes
Fan Function	Yes	Yes	Yes
Power Switch Function	Yes	Yes	No
EMC	Class B	Class B	Class B
Features	• Balance Load Sharing Design • Hot-Swappable • Over Voltage Protection • Over Power Protection • Short Circuit Protection • Over Temperature Protection • PMBus 1.2 Compatible	• Balance Load Sharing Design • Hot-Swappable • Over Voltage Protection • Over Power Protection • Short Circuit Protection • Over Temperature Protection • PMBus 1.2 Compatible	• Balance Load Sharing Design • Hot-Swappable • Over Voltage Protection • Over Power Protection • Short Circuit Protection • Over Temperature Protection • PMBus 1.2 Compatible



Adapter

Product	96PSA-A36W12R1 96PSA-A36W12W7	96PSA-A60W12V1-1 96PSA-A60W12R1-1	96PSA-A84W12V1	96PSA-A150W19P4-1
Product Description	36W 12V C6	60W 12 / 24V C14	84W 12V C14	150W 19V C14
Manufacturer	FSP	FSP	FSP	FSP
Output Power	36W	60W	84W	150W
Output Connector	96PSA-A36W12R1: DC PLUG 90° 96PSA-A36W12W7: Lockable DC Plug 180°	96PSA-A60W12V1-1: DC Plug 180° 96PSA-A60W12R1-1: DC Plug 90°	DC Plug 180°	Terminal Block 4 Pin
Input Type	AC to DC	AC to DC	AC to DC	AC to DC
Input Current	100V @ 1.5A max.	90V @ 1.5A max.	115V @ 1.3A max.	100V @ 2A max.
Input Voltage Range	100 ~ 240V _{AC}	100 ~ 240V _{AC}	100 ~ 240V _{AC}	100 ~ 240V _{AC}
Input Frequency	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
Efficiency	87% min.	88% min.	88% min.	86% min.
Max Temperature	70°C @ 88%	70°C @ 80%	70°C @ 82%	70°C @ 70%
Operating Temperature	0 ~ 40°C (32 ~ 104°F)	0 ~ 40°C (32 ~ 104°F)	0 ~ 40°C (32 ~ 104°F)	0 ~ 40°C (32 ~ 104°F)
Storage Temperature	-20 ~ 75°C (-4 ~ 158°F)	-20 ~ 75°C (-4 ~ 158°F)	-30 ~ 60°C (-22 ~ 140°F)	-20 ~ 80°C (-4 ~ 176°F)
Storage Humidity	10 - 90% RH	10 - 90% RH	8 - 80% RH	10 - 90% RH
Output Rating	12V _{DC} @ 3A	12V _{DC} @ 5.0A	12V _{DC} @ 7A	19V _{DC} @ 7.1A
MTBF (hours)	100,000	100,000	100,000	200,000
Cable Length (mm)	1,500	1,200	500	1,500
Dimensions (W x H x D)	37.8 x 27 x 89.8 mm / 1.5 x 1.0 x 3.5 in.	62.2 x 31.3 x 110 mm / 2.4 x 1.2 x 4.3 in.	58 x 32.3 x 160 mm / 2.2 x 1.2 x 6.2 in.	72 x 42 x 171 mm / 2.8 x 1.6 x 6.7 in.
Safety	CB / UL / FCC / CE / GS / CCC / PSE / KC / RCM / BSMI Efficiency Level VI	CB / UL / FCC / CE / GS / RCM / CCC / PSE / KC / PSB / BSMI / BIS / IRAM / Efficiency Level VI	CB / UL / FCC / CE / GS / RCM / CCC / PSE / KC / BSMI / CU / UkrCEPRO / NOM / IRAM / Efficiency Level VI	CB / UL / FCC / CE / GS / RCM / CCC / PSE / KC / CU / IRAM / Efficiency Level VI
PFC Function	No	No	Yes	Yes
EMC	Class B	Class B	Class B	Class B
Features	• Meet Energy Star EPS 2.0 / ErP Lot 7 / DoE level VI • No load Power Consumption ≤ 0.1W • High Reliability • Available for working at high altitude (5,000M)	• Meet Energy Star EPS 2.0 / ErP Lot 7 / DoE level VI • No load Power Consumption ≤ 0.21W • High Reliability • Available for working at high altitude (5,000M)	• Meet Energy Star EPS 2.0 / ErP Lot 7 / DoE level VI • No load Power Consumption ≤ 0.21W • High Reliability • Available for working at high altitude (5,000M)	• Meet Energy Star EPS 2.0 / ErP Lot 7 / DoE level VI • No load Power Consumption ≤ 0.21W • High Reliability • Available for working at high altitude (5,000M)

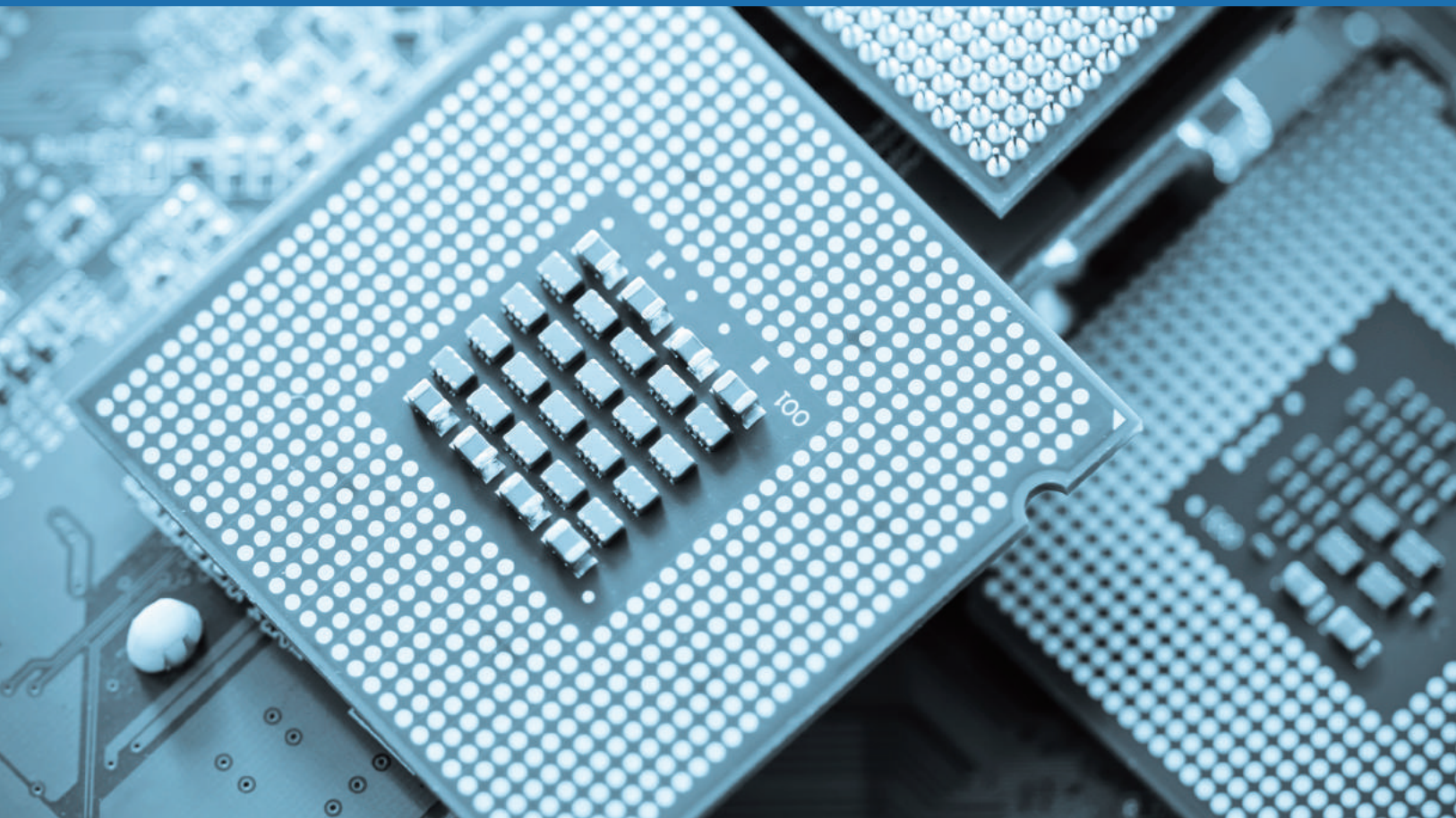
Medical Application



Product	96PS-A500WPS2G	96PS-A500W1UG-M	96PS0-A400W19-M	96PSA-A105W19D4-M
Product Description	Medical 500W PS2 Power Supply	Medical 500W 1U Power Supply	Medical 400W 19V Open Frame Power Supply	Medical 105W 19V C14 Adapter
Manufacturer	FSP	FSP	Delta	FSP
Output Power	500W	500W	400W	105W
Form Factor	PS2	1U	Open Frame	Adapter
Input Type	AC to DC	AC to DC	AC to DC	AC to DC
Input Current	115V @ 8A max.	115V @ 8A max.	90V @ 5.5A max.	100V @ 1.4A max.
Input Voltage Range	100 ~ 240V _{AC}	100 ~ 240V _{AC}	100 ~ 240V _{AC}	100 ~ 240V _{AC}
Input Frequency	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
Efficiency	90% min.	90% min.	88% min.	87% min.
Max Temperature	50°C @ 100%	50°C @ 100%	70°C @ 62.5%	60°C @ 50%
Operating Temperature	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 60°C (32 ~ 140°F)
Storage Temperature	-40 ~ 80°C (-40 ~ 176°F)	-40 ~ 80°C (-40 ~ 176°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)
Storage Humidity	5 - 95% RH	5 - 95% RH	10 - 90% RH	5 - 95% RH
Output Rating	+3.3V @ 24A +5V @ 20A +12V1 @ 16A +12V2 @ 16A +12V3 @ 16A -12V @ 0.5A -5V @ 0.3A +5Vsb @ 3A	+3.3V @ 20A +5V @ 20A +12V1 @ 16A +12V2 @ 16A +12V3 @ 16A -12V @ 0.5A -5V @ 0.2A +5Vsb @ 3A	19V _{DC} @ 20A	19V _{DC} @ 5.53A
MTBF (hours)	200,000	200,000	200,000	150,000
Main Connector	ATX (20 + 4pin)	ATX (20 + 4pin)	Terminal Block	Signal
Dimensions (W x H x D)	150 x 86 x 140 mm / 5.9 x 3.3 x 5.5 in.	100 x 40.5 x 220 mm / 3.9 x 1.6 x 8.6 in.	97 x 41.5 x 198 mm / 3.8 x 1.6 x 7.7 in.	75.2 x 39 x 146.2 mm / 2.9 x 1.5 x 5.7 in.
Safety	CB IEC 60601-1 / cUL ANSI / CE / TUV EN 60601-1 / AAMI ES 60601-1	CB IEC 60601-1 / cUL ANSI / CE / TUV EN 60601-1 / AAMI ES 60601-1	CB IEC60601-1 / UL 60601-1 / CUL / TUV / TUV EN60601-1	CB / UL / FCC / CE / GS / Efficiency Level V
PFC Function	Yes	Yes	No	No
Fan Function	Yes	Yes	No	No
EMC	Class B	Class B	Class B	Class B
Power Switch Function	Yes	Yes	No	No
Features	- Compliant with IEC 60601-1-2 4th Edition - High Reliability - High Efficiency 80 Plus Gold level - Japanese capacitors	- Compliant with IEC 60601-1-2 4th Edition - High Reliability - High Efficiency 80 Plus Gold level - Japanese capacitors	- Compliant with IEC 60601-1 3rd Edition - High Reliability - Japanese capacitors	- Meet 2MOPP Standard - DoE level V - High Reliability - Over Load Protection - Over Voltage Protection

Central Processor Unit (CPU)

- Wide selection of Intel® processors
- Great Intel® performance for the most demanding tasks
- Advanced technology keeps products competitive and innovative
- Enterprise-ready with enhanced security
- Highest quality hardware and chipset support on the market
- Best value for short- and long-term investment



Products

CPU

39

Sandy Bridge



Product	96MPXE-2.0-15M20T	96MPI7-3.4-8M11T	96MPI7M-2.1-6M9T	96MPI5-3.1-6M11T
Product Description	Intel Xeon E5-2620 2.0G 15M Processor	Intel Core i7-2600 3.4G 8M Processor	Intel Core i7-2710QE 2.1G 6M Processor	Intel Core i5-2400 3.1G 6M Processor
Market	Server	Desktop	Embedded	Desktop
Manufacturer	Intel	Intel	Intel	Intel
Processor Number	Xeon E5-2620	Core i7-2600	Core i7-2710QE	Core i5-2400
Code Name	Sandy Bridge-EP	Sandy Bridge	Sandy Bridge	Sandy Bridge
Socket Type	LGA2011	LGA1155	PGA988	LGA1155
Processor Base Frequency	2.0 GHz	3.4 GHz	2.1 GHz	3.1 GHz
Bus Speed	7.2 GT/s	5 GT/s	5 GT/s	5 GT/s
Smart Cache	15 MB	8 MB	6 MB	6 MB
Cache Memory	15 MB	8 MB	6 MB	6 MB
Processor Graphics	N/A	Intel HD Graphics 2000	Intel HD Graphics P3000	Intel HD Graphics P2000
Manufacturing Technology	32 nm	32 nm	32 nm	32 nm
sSpec	SR0K W	SR00Q	SR02T	SR00Q
Thermal Design Power (TDP)	95 W	95 W	45 W	95 W
# of Cores	6	4	4	4
64-bit Support	Yes	Yes	Yes	Yes
Embedded	Yes	Yes	Yes	Yes
Package	Tray	Tray	Tray	Tray
Warranty	1 year	1 year	1 year	1 year

Sandy Bridge



Product	96MPI5M-2.5-3M9T	96MPI3-3.3-3M11T	96MPP-2.9-3M11T	96MPCL-2.5-2M11T
Product Description	Intel Core i5-2510E 2.5G 3M Processor	Intel Core i3-2120 3.3G 3M Processor	Intel Pentium G850 2.9G 3M Processor	Intel Celeron G540 2.5G 2M Processor
Market	Embedded	Desktop	Desktop	Desktop
Manufacturer	Intel	Intel	Intel	Intel
Processor Number	Core i5-2510E	Core i3-2120	Pentium G850	Celeron G540
Code Name	Sandy Bridge	Sandy Bridge	Sandy Bridge	Sandy Bridge
Socket Type	PGA988	LGA1155	LGA1155	LGA1155
Processor Base Frequency	2.5 GHz	3.3 GHz	2.9 GHz	2.5 GHz
Bus Speed	5 GT/s	5 GT/s	5 GT/s	5 GT/s
Smart Cache	3 MB	3 MB	3 MB	2 MB
Cache Memory	3 MB	3 MB	3 MB	2 MB
Processor Graphics	Intel HD Graphics P3000	Intel HD Graphics 2000	Intel HD Graphics	Intel HD Graphics
Manufacturing Technology	32 nm	32 nm	32 nm	32 nm
sSpec	SR02U	SR05Q	SR05Q	SR05J
Thermal Design Power (TDP)	35 W	65 W	65 W	65 W
# of Cores	2	2	2	2
64-bit Support	Yes	Yes	Yes	Yes
Embedded	Yes	Yes	Yes	Yes
Package	Tray	Tray	Tray	Tray
Warranty	1 year	1 year	1 year	1 year

Ivy Bridge



Product	96MPXE-3.2-8M11T1	96MPXE-2.4-25M20T	96MPI7-3.4-8M11T1	96MPI7M-2.3-6M9T
Product Description	Intel Xeon E3-1225 v2 3.2G 8M Processor	Intel Xeon E5-2658 v2 2.4G 25M Processor	Intel Core i7-3770 3.4G 8M Processor	Intel Core i7-3610QE 2.3G 6M Processor
Market	Server	Embedded	Desktop	Embedded
Manufacturer	Intel	Intel	Intel	Intel
Processor Number	Xeon E3-1225 v2	Xeon E5-2658 v2	Core i7-3770	Core i7-3610QE
Code Name	Ivy Bridge	Ivy Bridge	Ivy Bridge	Ivy Bridge
Socket Type	LGA1155	LGA2011	LGA1155	PGA988
Processor Base Frequency	3.2 GHz	2.4 GHz	3.4 GHz	2.3 GHz
Bus Speed	5 GT/s	8 GT/s	5 GT/s	5 GT/s
Smart Cache	8 MB	25 MB	8 MB	6 MB
Cache Memory	8 MB	25 MB	8 MB	6 MB
Processor Graphics	Intel HD Graphics P4000	N/A	Intel HD Graphics 4000	Intel HD Graphics 4000
Manufacturing Technology	22 nm	22 nm	22 nm	22 nm
sSpec	SR0PJ	SR1A0	SR0PK	SR0NP
Thermal Design Power (TDP)	77 W	95 W	77 W	45 W
# of Cores	4	10	4	4
64-bit Support	Yes	Yes	Yes	Yes
Embedded	Yes	Yes	Yes	Yes
Package	Tray	Tray	Tray	Tray
Warranty	1 year	1 year	1 year	1 year

Ivy Bridge



Product	96MPI5-3.0-6M11T	96MPI3-3.3-3M11T1	96MPCL-2.7-2M11T
Product Description	Intel Core i5-3550S 3.0G 6M Processor	Intel Core i3-3220 3.3G 3M Processor	Intel Celeron G1620 2.7G 2M Processor
Market	Desktop	Desktop	Desktop
Manufacturer	Intel	Intel	Intel
Processor Number	Core i5-3550S	Core i3-3220	Celeron G1620
Code Name	Ivy Bridge	Ivy Bridge	Ivy Bridge
Socket Type	PGA991	LGA1155	LGA1155
Processor Base Frequency	3.0 GHz	3.3 GHz	2.7 GHz
Bus Speed	5 GT/s	5 GT/s	5 GT/s
Smart Cache	6 MB	3 MB	2 MB
Cache Memory	6 MB	3 MB	2 MB
Processor Graphics	Intel HD Graphics 2500	Intel HD Graphics 2500	Intel HD Graphics
Manufacturing Technology	22 nm	22 nm	22 nm
sSpec	SR0P3	SR0RG	SR10L
Thermal Design Power (TDP)	65 W	55 W	55 W
# of Cores	4	2	2
64-bit Support	Yes	Yes	Yes
Embedded	Yes	Yes	Yes
Package	Tray	Tray	Tray
Warranty	1 year	1 year	1 year

DRAM
Memory
Module

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse

Products

CPU

41

Haswell



Product	96MPXE-2.5-30M20T	96MPXE-2.4-15M20T	96MPI7-3.2-8M10T	96MPI7-3.1-8M10T
Product Description	Intel Xeon E5-2680 v3 2.5G 30M Processor	Intel Xeon E5-2620 v3 2.4G 15M Processor	Intel Core i7-4790S 3.2G 8M Processor	Intel Core i7-4770S 3.1G 8M Processor
Market	Server	Server	Desktop	Desktop
Manufacturer	Intel	Intel	Intel	Intel
Processor Number	Xeon E5-2680 v3	Xeon E5-2620 v3	Core i7-4790S	Core i7-4770S
Code Name	Haswell	Haswell	Haswell	Haswell
Socket Type	LGA2011-3	LGA2011-3	LGA1150	LGA1150
Processor Base Frequency	2.5 GHz	2.4 GHz	3.2 GHz	3.1 GHz
Bus Speed	9.6 GT/s	8 GT/s	5 GT/s	5 GT/s
Smart Cache	30 MB	15 MB	8 MB	8 MB
Cache Memory	30 MB	15 MB	8 MB	8 MB
Processor Graphics	N / A	N / A	Intel HD Graphics 4600	Intel HD Graphics 4600
Manufacturing Technology	22 nm	22 nm	22 nm	22 nm
sSpec	SR1XP	SR207	SR1QM	SR14H
Thermal Design Power (TDP)	120 W	85 W	65 W	65 W
# of Cores	12	6	4	4
64-bit Support	Yes	Yes	Yes	Yes
Embedded	Yes	Yes	Yes	Yes
Package	Tray	Tray	Tray	Tray
Warranty	1 year	1 year	1 year	1 year

Haswell



Product	96MPI5-2.9-6M10T	96MPI3-3.5-4M10T	96MPI3-2.4-4M10T	96MPP-2.3-3M10T
Product Description	Intel Core i5-4570S 2.9G 6M Processor	Intel Core i3-4330 3.5G 4M Processor	Intel Core i3-4330TE 2.4G 4M Processor	Intel Pentium G3320TE 2.3G 3M Processor
Market	Desktop	Embedded	Embedded	Embedded
Manufacturer	Intel	Intel	Intel	Intel
Processor Number	Core i5-4570S	Core i3-4330	Core i3-4330TE	Pentium G3320TE
Code Name	Haswell	Haswell	Haswell	Haswell
Socket Type	LGA1150	LGA1150	LGA1150	LGA1150
Processor Base Frequency	2.9 GHz	3.5 GHz	2.4 GHz	2.3 GHz
Bus Speed	5 GT/s	5 GT/s	5 GT/s	5 GT/s
Smart Cache	6 MB	4 MB	4 MB	3 MB
Cache Memory	6 MB	4 MB	4 MB	3 MB
Processor Graphics	Intel HD Graphics 4600	Intel HD Graphics 4600	Intel HD Graphics 4600	Intel HD Graphics
Manufacturing Technology	22 nm	22 nm	22 nm	22 nm
sSpec	SR14J	SR1NM	SR180	SR181
Thermal Design Power (TDP)	65 W	54 W	35 W	35 W
# of Cores	4	2	2	2
64-bit Support	Yes	Yes	Yes	Yes
Embedded	Yes	Yes	Yes	Yes
Package	Tray	Tray	Tray	Tray
Warranty	1 year	1 year	1 year	1 year

Broadwell-EP



Product	96MPXEB-2.4-35M20T	96MPXEB-2.1-20M20T
Product Description	Intel Xeon E5-2680 v4 2.4G 35M Processor	Intel Xeon E5-2620 v4 2.1G 20M Processor
Market	Server	Server
Manufacturer	Intel	Intel
Processor Number	Xeon E5-2680 v4	Xeon E5-2620 v4
Code Name	Broadwell-EP	Broadwell-EP
Socket Type	LGA2011-3	LGA2011-3
Processor Base Frequency	2.4 GHz	2.1 GHz
Bus Speed	9.6 GT/s	8 GT/s
Smart Cache	35 MB	20 MB
Cache Memory	35 MB	20 MB
Processor Graphics	N / A	N / A
Manufacturing Technology	14 nm	14 nm
sSpec	SR2N7	SR2R6
Thermal Design Power (TDP)	120 W	85 W
# of Cores	14	8
64-bit Support	Yes	Yes
Embedded	Yes	Yes
Package	Tray	Tray
Warranty	1 year	1 year

Skylake



Product	96MPXES-3.3-8M11T	96MPI7S-3.4-8M11T	96MPI7S-2.4-8M11T1	96MPI5S-3.2-6M11T
Product Description	Intel Xeon E3-1225 v5 3.3G 8M Processor	Intel Core i7-6700 3.4G 8M Processor	Intel Core i7-6700TE 2.4G 8M Processor	Intel Core i5-6500 3.2G 6M Processor
Market	Server	Desktop	Embedded	Desktop
Manufacturer	Intel	Intel	Intel	Intel
Processor Number	Xeon E3-1225 v5	Core i7-6700	Core i7-6700TE	Core i5-6500
Code Name	Skylake	Skylake	Skylake	Skylake
Socket Type	LGA1151	LGA1151	LGA1151	LGA1151
Processor Base Frequency	3.3 GHz	3.4 GHz	2.4 GHz	3.2 GHz
Bus Speed	8 GT/s	8 GT/s	8 GT/s	8 GT/s
Smart Cache	8 MB	8 MB	8 MB	6 MB
Cache Memory	8 MB	8 MB	8 MB	6 MB
Processor Graphics	Intel HD Graphics P530	Intel HD Graphics 530	Intel HD Graphics 530	Intel HD Graphics 530
Manufacturing Technology	14 nm	14 nm	14 nm	14 nm
sSpec	SR2LJ	SR2L2	SR2CG	SR2L6
Thermal Design Power (TDP)	80 W	65 W	35 W	65 W
# of Cores	4	4	4	4
64-bit Support	Yes	Yes	Yes	Yes
Embedded	Yes	Yes	Yes	Yes
Package	Tray	Tray	Tray	Tray
Warranty	1 year	1 year	1 year	1 year

DRAM
Memory
Module

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse

Products

CPU

43



Skylake

Product	96MPI5S-2.3-6M11T1	96MPI3S-3.7-3M11T	96MPPS-3.3-3M11T
Product Description	Intel Core i5-6500TE 2.3G 6M Processor	Intel Core i3-6100 3.7G 3M Processor	Intel Pentium G4400 3.3G 3M Processor
Market	Embedded	Mobile	Desktop
Manufacturer	Intel	Intel	Intel
Processor Number	Core i5-6500TE	Core i3-6100	Pentium G4400
Code Name	Skylake	Skylake	Skylake
Socket Type	LGA1151	LGA1151	LGA1151
Processor Base Frequency	2.3 GHz	3.7 GHz	3.3 GHz
Bus Speed	8 GT/s	8 GT/s	8 GT/s
Smart Cache	6 MB	3 MB	3 MB
Cache Memory	6 MB	3 MB	3 MB
Processor Graphics	Intel HD Graphic 530	Intel HD Graphics 530	Intel HD Graphics 510
Manufacturing Technology	14 nm	14 nm	14 nm
sSpec	SR2LR	SR2HG	SR2DC
Thermal Design Power (TDP)	35 W	51 W	54 W
# of Cores	4	2	2
64-bit Support	Yes	Yes	Yes
Embedded	Yes	Yes	Yes
Package	Tray	Tray	Tray
Warranty	1 year	1 year	1 year

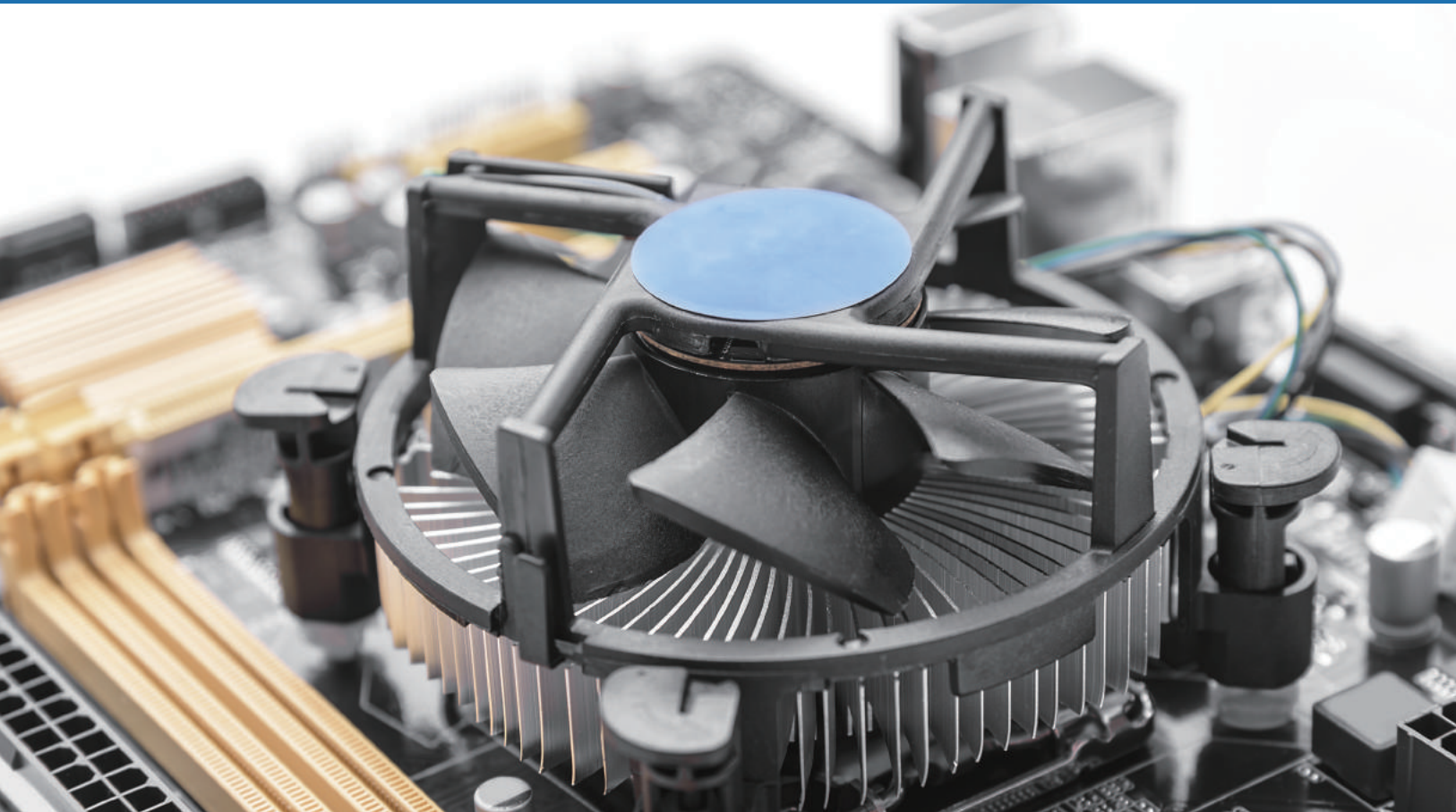


Kaby Lake

Product	96MPI7K-3.6-8M11T	96MPI5K-3.4-6M11T
Product Description	Intel Core i7-7700 3.6G 8M Processor	Intel Core i5-7500 3.4G 6M Processor
Market	Desktop	Desktop
Manufacturer	Intel	Intel
Processor Number	Core i7-7700	Core i5-7500
Code Name	Kaby Lake	Kaby Lake
Socket Type	LGA1151	LGA1151
Processor Base Frequency	3.6 GHz	3.4 GHz
Bus Speed	8 GT/s	8 GT/s
Smart Cache	8 MB	6 MB
Cache Memory	8 MB	6 MB
Processor Graphics	Intel® HD Graphics 630	Intel® HD Graphics 630
Manufacturing Technology	14 nm	14 nm
sSpec	SR338	SR335
Thermal Design Power (TDP)	65 W	65 W
# of Cores	4	4
64-bit Support	Yes	Yes
Embedded	Yes	Yes
Package	Tray	Tray
Warranty	1 year	1 year

Cooler

- High performance and low noise fan design
- IPC/embedded/server system applications
- Oxygen-free copper and aluminum heat sink
- Industrial level two ball bearing fan
- 5-year warranty





IPC Application

Product	WIN-DH0-065BT2U	WIN-DT0-095BT2U	WIN-DH0-095BT3U	WIN-DH0-135BS4U
Product Description	Active 2U 65W CPU Cooler for Intel Socket H	Active 2U 95W CPU Cooler for Intel Socket T	Active 3U 95W CPU Cooler for Intel Socket H	Active 4U 135W CPU Cooler for Intel Socket H
Compatible Socket	Socket H	Socket T	Socket H	Socket H
Cooler Height	2U	2U	3U	4U
Max. Cooling Capacity	65 W	95 W	95 W	135 W
Heat Pipe	N/A	N/A	N/A	Yes
Heat Sink Material	Cu + Al	Cu + Al	Cu + Al	Cu + Al
Fan Speed	4,500 RPM	4,500 RPM	4,500 RPM	5,000 RPM
Fan Air Flow	57.7 CFM	57.7 CFM	57.7 CFM	108.08 CFM
Fan Air Pressure	8.6 mm H2O	8.6 mm H2O	8.6 mm H2O	13.57 mm H2O
Fan Rated Voltage	12 V	12 V	12 V	12 V
Fan Rated Current	0.2 A	0.2 A	0.2 A	1 A
Fan Power Consumption	7.2 W	7.2 W	7.2 W	12 W
Fan Bearing Type	2 Ball	2 Ball	2 Ball	2 Ball
Fan Noise Level	51.5 dBA max.	51.5 dBA max.	51.5 dBA max.	59 dBA max.
Fan Connector	4-pin	4-pin	4-pin	4-pin
Fan Dimensions (W x H x D)	90 x 90 x 20 mm / 3.54" x 3.54" x 0.79"	95 x 95 x 25 mm / 3.74" x 3.74" x 0.98"	95 x 95 x 25 mm / 3.74" x 3.74" x 0.98"	90 x 90 x 25 mm / 3.54" x 3.54" x 0.98"
Fan MTBF (hours)	70,000 @ 40°C	70,000 @ 40°C	70,000 @ 40°C	70,000 @ 40°C
Cooler Weight	307 g / 0.68 lb.	546 g / 1.2 lb.	582 g / 1.28 lb.	583 g / 1.29 lb.
Cooler Dimensions (W x H x D)	93 x 93 x 46 mm / 3.66" x 3.66" x 1.77"	90 x 90 x 63 mm / 3.54" x 3.54" x 2.48"	90 x 90 x 69 mm / 3.54" x 3.54" x 2.72"	88.2 x 88.2 x 112.15 mm / 3.47" x 3.47" x 4.42"
Warranty	5 years	5 years	5 years	5 years



Embedded Application

Product	WIN-BG0-057BT15	WIN-PG0-057BT151	WIN-PM0-034BT1U	WIN-PG0-055BT1U
Product Description	Active 1.5U 57W CPU Cooler for Intel Socket G	Active 1.5U 57W CPU Cooler for Intel Socket G	Active 1U 34W CPU Cooler for Intel Socket M	Active 1U 55W CPU Cooler for Intel Socket G
Compatible Socket	Socket G	Socket G	Socket M	Socket G
Cooler Height	1.5U	1.5U	1U	1U
Max. Cooling Capacity	57 W	57 W	34 W	55 W
Heat Pipe	N/A	N/A	N/A	N/A
Heat Sink Material	Al	Cu	Al	Cu + Al
Fan Speed	6,500 RPM	5,300 RPM	6,000 RPM	6,500 RPM
Fan Air Flow	57.7 CFM	10.64 CFM	6.92 CFM	13.57 CFM
Fan Air Pressure	8.6 mm H2O	3.25 mm H2O	3.28 mm H2O	5.89 mm H2O
Fan Rated Voltage	12 V	12 V	12 V	12 V
Fan Rated Current	0.2 A	0.12 A	0.12 A	0.2 A
Fan Power Consumption	1.8 W	1.44 W	1.44 W	2.4 W
Fan Bearing Type	2 Ball	2 Ball	2 Ball	2 Ball
Fan Noise Level	40 dBA max.	35.6 dBA max.	32 dBA	40 dBA
Fan Connector	3-pin	3-pin	3-pin	3-pin
Fan Dimensions (W x H x D)	50 x 50 x 10 mm / 1.97" x 1.97" x 0.39"	50 x 50 x 10 mm / 1.97" x 1.97" x 0.39"	40 x 40 x 10 mm / 1.57" x 1.57" x 0.39"	50 x 50 X 10 mm / 1.97" x 1.97" x 0.39"
Fan MTBF (hours)	70,000 @ 40°C	70,000 @ 40°C	70,000 @ 40°C	70,000 @ 40°C
Cooler Weight	118 g / 0.26 lb.	208 g / 0.46 lb.	208 g / 0.46 lb.	208 g / 0.46 lb.
Cooler Dimensions (W x H x D)	60 x 60 x 27 mm / 2.36" x 2.36" x 1.06"	60 x 60 x 27 mm / 2.36" x 2.36" x 1.06"	51 x 51 x 15 mm / 2.01" x 2.01" x 0.59"	60 x 60 x 24 mm / 2.36" x 2.36" x 0.94"
Warranty	5 years	5 years	5 years	5 years

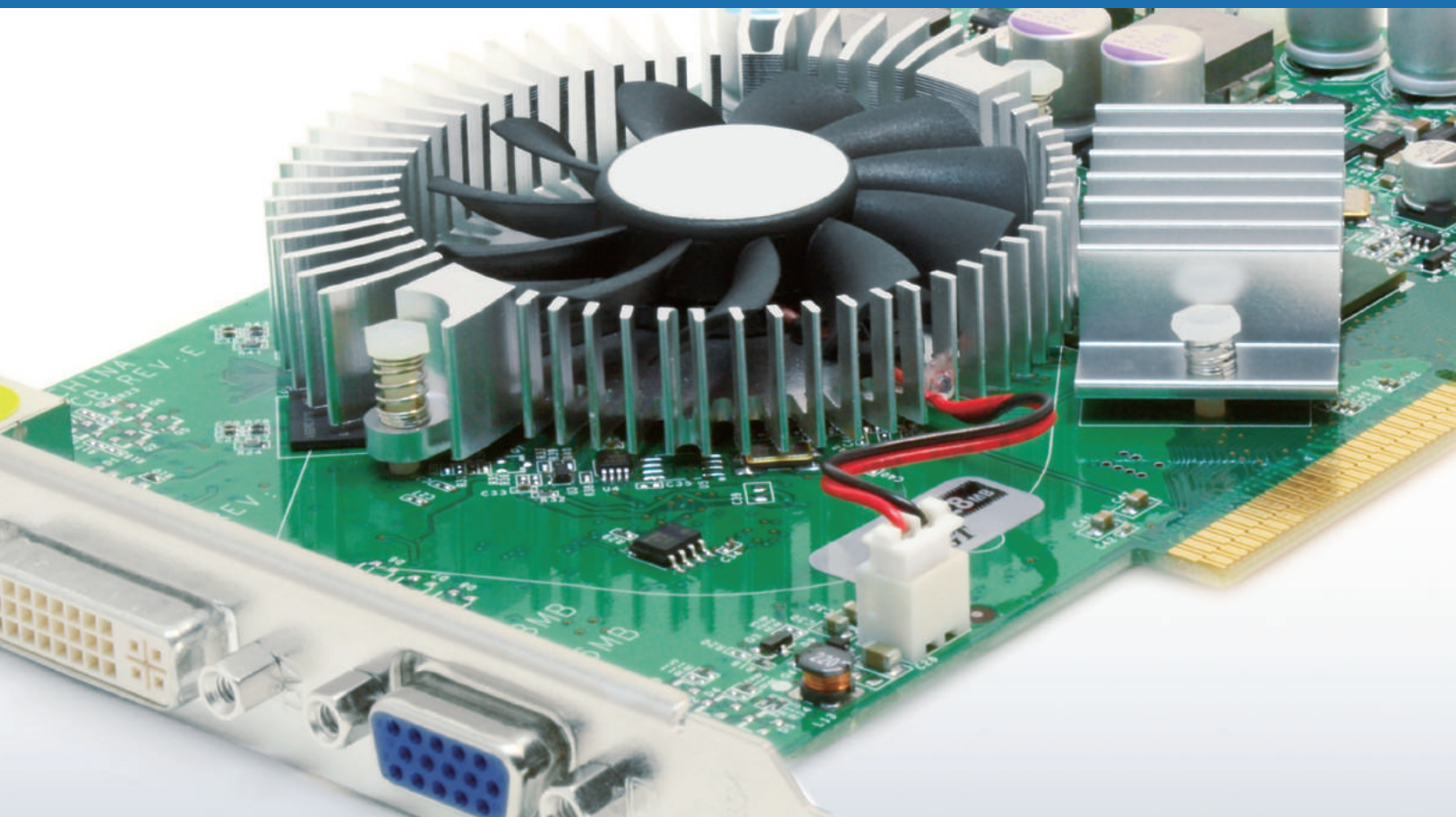


Server Application

Product	WIN-SR0-130NN1U	WIN-SR1-150NN1U
Product Description	Passive 1U 130W CPU Cooler for Intel Socket R	Passive 1U 150W CPU Cooler for Intel Socket R
Compatible Socket	Socket R	Socket R
Cooler Height	1U	1U
Max. Cooling Capacity	130 W	150 W
Heat Pipe	N/A	N/A
Heat Sink Material	Al	Al
Cooler Weight	202 g / 0.44 lb	209 g / 0.46 lb
Cooler Dimensions (W x H x D)	90 x 90 x 26.5 mm / 3.54" x 3.54" x 1.04"	90 x 90 x 26.5 mm / 3.54" x 3.54" x 1.04"
Warranty	5 years	5 years

Graphics Card

- High performance video, graphics, and computing capability
- Diverse display output configurations to support every scenario for visualization
- Extended product lifecycle specifically for industrial applications
- High reliability and durability for intensive use

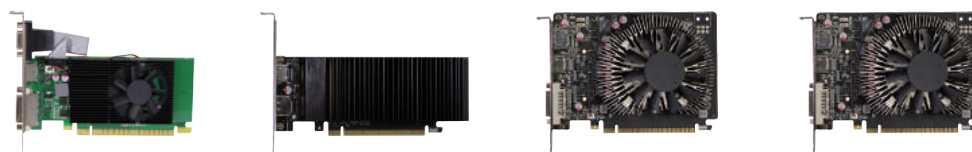


Products

Graphics Card

48

Desktop
Series (NVIDIA)



Product	GFX-NG710L16-3C	GFX-NG1030L16-5L	GFX-NG1050F16-5D1	GFX-NG1050TF16-5D1
Product Description	GT710 2G PClex16 DVI+HDMI+VGA Low Profile	GT1030 2G PClex16 HDMI+DP Heatsink Low Profile	GTX1050 2G PClex16 DVI+HDMI+DP Full Height	GTX1050Ti 4G PClex16 DVI+HDMI+DP Full Height
Brand	Advantech	Advantech	Advantech	Advantech
GPU Brand	NVIDIA	NVIDIA	NVIDIA	NVIDIA
Graphics Processing	GT710	GT1030	GTX1050	GTX1050Ti
Interface	PCIe 2.1 x 16	PCIe 3.0 x 16	PCIe 3.0 x 16	PCIe 3.0 x 16
Memory Type	DDR3	DDR5	DDR5	DDR5
Memory Size	2 GB	2 GB	2 GB	4 GB
Multi-View	3	2	3	3
Output	DVI-D + HDMI + VGA	HDMI + DP	DVI-D + HDMI + DP	DVI-D + HDMI + DP
PCB Board (L x W)	145 x 69 mm / 5.70 x 2.71 in.	168 x 69 mm / 6.61 x 2.71 in.	161 x 111 mm / 6.33 x 4.37 in.	161 x 111 mm / 6.33 x 4.37 in.
Bracket	Low Profile / Full Height	Low Profile / Full Height	Full Height	Full Height
Thermal Solution	Fansink	Heatsink	Fansink	Fansink

Desktop
Series (AMD)



Product	GFX-AH7750L16-5C	GFX-AH7750L16-5J	GFX-AE6465L16-5C	GFX-AE8860F16-5A
Product Description	HD7750 1G PClex16 DVI+HDMI+VGA Low Profile	HD7750 2G PClex16 4xMini DP Low Profile	E6465 2G PClex16 DVI+HDMI+VGA Support Windows 7 only	E8860 2G PClex16 4xHDMI Full Height
Brand	Advantech	Advantech	Advantech	Advantech
GPU Brand	AMD	AMD	AMD	AMD
Graphics Processing	HD7750	HD7750	E6465	E8860
Interface	PCIe 3.0 x 16	PCIe 3.0 x 16	PCIe 2.1 x 16	PCIe 3.0 x 16
Memory Type	DDR5	DDR5	DDR5	DDR5
Memory Size	1 GB	2 GB	2 GB	2 GB
Multi-View	2	4	2	4
Output	DVI-D + HDMI + VGA	Mini Display Port	DVI-D + HDMI + VGA	HDMI
PCB Board (L x W)	168 x 69 mm / 6.61 x 2.71 in.	168 x 68 mm / 6.61 x 2.67 in.	168 x 69 mm / 6.61 x 2.71 in.	145 x 111 mm / 5.70 x 4.37 in.
Bracket	Low Profile / Full Height	Low Profile / Full Height	Low Profile / Full Height	Full Height
Thermal Solution	Fansink	Fansink	Heatsink	Fansink

DRAM
Memory
Module

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse

Products

Graphics Card

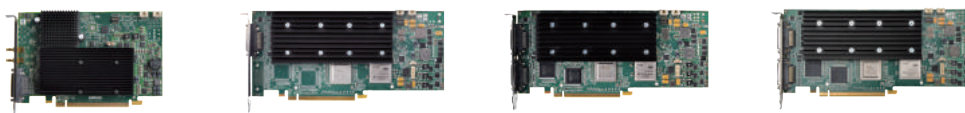
49

Desktop Series (AMD)



Product	GFX-AR560F16-5A	GFX-AR560F16-5K	GFX-AE9260L16-5J
Product Description	RX560 4G PClex16 4xHDMI Full Height	RX560 4G PClex16 4xDP Full Height	E9260 4G PClex16 4xMini DP Low Profile
Brand	Advantech	Advantech	Advantech
GPU Brand	AMD	AMD	AMD
Graphics Processing	RX560	RX560	E9260
Interface	PCIe 3.0 x 16	PCIe 3.0 x 16	PCIe 3.0 x 16
Memory Type	DDR5	DDR5	DDR5
Memory Size	4 GB	4 GB	4 GB
Multi-View	4	4	4
Output	HDMI	Display Port	Mini Display Port
PCB Board (L x W)	145 x 111 mm / 5.70 x 4.37 in.	145 x 111 mm / 5.70 x 4.37 in.	145 x 111 mm / 5.70 x 4.37 in.
Bracket	Full Height	Full Height	Low Profile / Full Height
Thermal Solution	Fansink	Fansink	Fansink

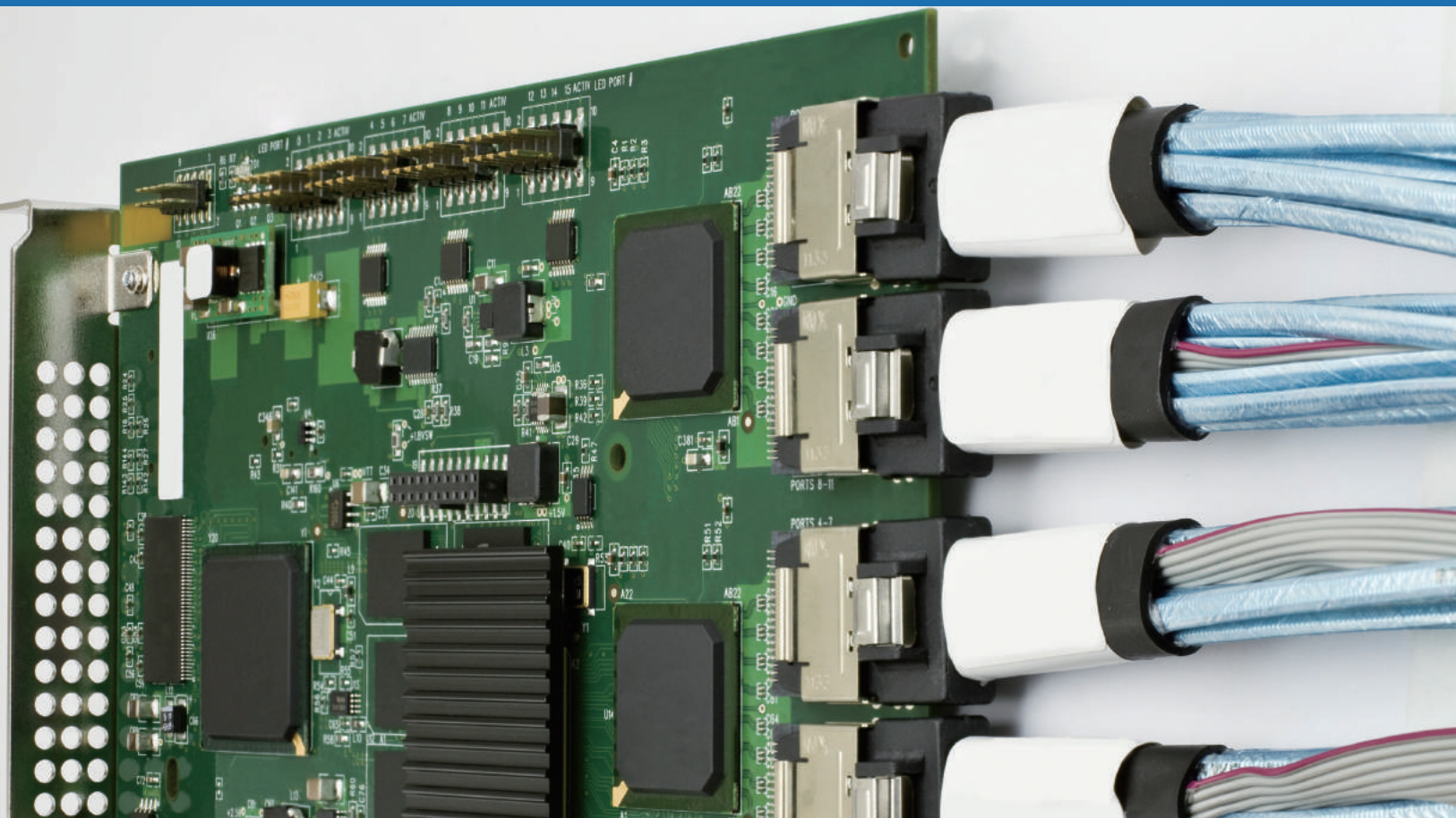
Video Wall Series



Product	96VG-1G-PE-MA	96VG-2G-PE-MA	96VG-2G-PE-MA1	96VG-2G-PE-MA2
Product Description	Matrox MPX 1G PClex16 DVI+VGA Full Height	Matrox MPX 2G PClex16 DVI+VGA Full Height	Matrox MPX 2G PClex16 DVI+VGA Full Height	Matrox MPX 2G PClex16 DVI+VGA Full Height
Brand	Matrox	Matrox	Matrox	Matrox
GPU Brand	Matrox	Matrox	Matrox	Matrox
Interface	PCIe 1.0 x 16	PCIe 2.0 x 16	PCIe 2.0 x 16	PCIe 2.0 x 16
Memory Size	1 GB	2 GB	2 GB	2 GB
Multi-View	2	4	4	4
Output	DVI + VGA	DVI + VGA	DVI + VGA	DVI + VGA
Output Resolutions				
SL-DVI	2048 x 1152 @ 60Hz	2048 x 1152 @ 60Hz	2048 x 1152 @ 60Hz	2048 x 1152 @ 60Hz
RGB (VGA)	2048 x 1536 @ 60Hz	2048 x 1536 @ 60Hz	2048 x 1536 @ 60Hz	2048 x 1536 @ 60Hz
Input Ports	2	N/A	2	4
Max. Input Resolutions				
SL-DVI	No Support	No Support	2560 x 1600 @ 30Hz	2560 x 1600 @ 30Hz
RGB (VGA)	No Support	No Support	2048 x 1536 @ 47Hz	2048 x 1536 @ 47Hz
Component (YPbPr)	No Support	No Support	1080i	1080i
S-Video	No Support	No Support	NTSC / PAL / SECAM	NTSC / PAL / SECAM
Composite	No Support	No Support	NTSC / PAL / SECAM	NTSC / PAL / SECAM
SDI	1920 x 1080	No Support	No Support	No Support
PCB Board (L x W x H)	168 x 112 x 19 mm / 6.61 x 4.40 x 0.74 in.	242 x 112 x 19 mm / 9.52 x 4.40 x 0.74 in.	242 x 112 x 19 mm / 9.52 x 4.40 x 0.74 in.	242 x 112 x 19 mm / 9.52 x 4.40 x 0.74 in.
Bracket	Full Height	Full Height	Full Height	Full Height
Thermal Solution	Heatsink	Heatsink	Heatsink	Heatsink

RAID Controller

- Complete RAID type and application introduction for beginners
- Suggested selections of RAID configured solutions
- Pre-compatibility tested to for faster time-to-market
- Full line up of RAID controllers to meet customer needs
- Trusted RAID controller manufacturers for reliable product support





Entry RAID Controller

Product	96RC-SAS-4P-PE-AD2	96RC-SAS-4P-PE-AD1	96RC-SAS-4P-PE-AD4	96RC-SAS-8P-PE-LS5
Product Description	Adaptec 6405E Kit SAS 4-Port 6Gb/s PCIeX1	Adaptec 6405E SAS 4-Port 6Gb/s PCIeX8	Adaptec 8405E SAS 4-Port 12Gb/s PCIeX8	LSI 9341-8i SAS 8-Port 12Gb/s PCIeX8
Manufacturer	Adaptec	Adaptec	Adaptec	LSI
Controller Type	Hardware RAID	Hardware RAID	Hardware RAID	Hardware RAID
Hard Drive Interface	SAS / SATA	SAS / SATA	SAS / SATA	SAS / SATA
On-Board Memory	128 MB	128 MB	512 MB	N / A
Adapter Interface	PCIe x 1	PCIe x 8	PCIe x 8	PCIe x 8
RAID Level	0, 1, 1E, 10, JBOD	0, 1, 1E, 10, JBOD	0, 1, 10	0, 1, 5, 10, 50, JBOD
Channel	4 Channel	4 Channel	4 Channel	8 Channel
Bandwidth	6 Gb/s	6 Gb/s	12 Gb/s	12 Gb/s
Backup Battery Option	N/A	N/A	N/A	N/A



RAID Controller

Product	96RC-SAS-4P-PE-AD	96RC-SAS-4P-PE-AD3	96RC-SAS-8P-PE-AD4	96RC-SAS-16-PE-AD3
Product Description	Adaptec 6405 SAS 4-Port 6Gb/s PCIeX8	Adaptec 8405 SAS 4-Port 12Gb/s PCIeX8	Adaptec 8805 SAS 8-Port 12Gb/s PCIeX8	Adaptec 8885 16-Port IN/EX 12Gb/s PCIeX8
Manufacturer	Adaptec	Adaptec	Adaptec	Adaptec
Controller Type	Hardware RAID	Hardware RAID	Hardware RAID	Hardware RAID
Hard Drive Interface	SAS / SATA	SAS / SATA	SAS / SATA	SAS / SATA
On-Board Memory	512 MB	1GB	1GB	1GB
Adapter Interface	PCIe x 8	PCIe x 8	PCIe x 8	PCIe x 8
RAID Level	0, 1, 5, 6, 10, 50, 60, JBOD	0, 1, 1E, 5, 6, 10, 50, 60	0, 1, 1E, 5, 6, 10, 50, 60	0, 1, 5, 6
Channel	4 Channel	4 Channel	8 Channel	8 Internal / 8 External
Bandwidth	6 Gb/s	12 Gb/s	12 Gb/s	12 Gb/s
Backup Battery Option	N/A	N/A	N/A	N/A



RAID Controller

Product	96RC-SAS-4P-PE-LS3	96RC-SAS-8P-PE-LS3	96RC-SAS-8P-PE-LS4
Product Description	LSI 9271-4i SAS 4-Port 6Gb/s PCIeX8	LSI 9271-8i SAS 8-Port 6Gb/s PCIeX8	LSI 9361-8i SAS 8-Port 12Gb/s PCIeX8
Manufacturer	LSI	LSI	LSI
Controller Type	Hardware RAID	Hardware RAID	Hardware RAID
Hard Drive Interface	SAS / SATA	SAS / SATA	SAS / SATA
On-Board Memory	1 GB	1 GB	1 GB
Adapter Interface	PCIe x 8	PCIe x 8	PCIe x 8
RAID Level	0, 1, 5, 6, 10, 50, 60	0, 1, 5, 6, 10, 50, 60	0, 1, 5, 6, 10, 50, 60
Channel	4 Channel	8 Channel	8 Channel
Bandwidth	6 Gb/s	6 Gb/s	12 Gb/s
Backup Battery Option	96RC-IBBU09-LS	96RC-IBBU09-LS	N/A



Host Bus Card

Product	96RC-SAS-4P-PE-AD5	96RC-SAS-8P-PE-AD5	96RC-SAS-8P-PE-AD6	96RC-SAS-8P-PE-AD7
Product Description	Adaptec 1100-4i HBA 4-Port 12Gb/s PCIeX8	Adaptec 1100-8i HBA 8-Port 12Gb/s PCIeX8	Adaptec 2100-8i HBA 8-Port 12Gb/s PCIeX8 w/Basic RAID	Adaptec 2100-4i4e HBA 8-Port INEX 12Gb/s PCIeX8 w/Basic RAID
Manufacturer	Adaptec	Adaptec	Adaptec	Adaptec
Controller Type	Host Bus	Host Bus	Host Bus / Hardware RAID	Host Bus / Hardware RAID
Hard Drive Interface	SAS / SATA	SAS / SATA	SAS / SATA	SAS / SATA
On-Board Memory	N/A	N/A	N / A	N / A
Adapter Interface	PCIe x 8	PCIe x 8	PCIe x 8	PCIe x 8
RAID Level	N/A	N/A	0, 1, 5, 10	0, 1, 5, 10
Channel	4 Channel	8 Channel	8 Channel	4 Internal / 4 External
Bandwidth	12 Gb/s	12 Gb/s	12 Gb/s	12 Gb/s
Backup Battery Option	N/A	N/A	N/A	N/A

Display

- Reliable 18x7 operation for industrial applications
- Diverse display output configurations for visualization
- Embedded cooling system for mission critical environments
- High reliability and durability for intensive use



Products

Display



Product	DSDM-0864K-41NE-V	DSDM-065FD-45NE-V	DSDM-055FD-45NE-V	DSDW-049FD-45NE-V
Product Description	86" 4K 410 nits Digital Signage	65" Full HD 450 nits Digital Signage	55" Full HD 450 nits Digital Signage	49" Full HD 450 nits Video Wall
Brand	Advantech	Advantech	Advantech	Advantech
Size (inch)	85.6"	64.5"	54.6"	48.5"
Resolution	3840 x 2160 (UHD)	1920 x 1080 (FHD)	1920 x 1080 (FHD)	1920 x 1080 (FHD)
Color	1.07B	1.06B	16.7M	1.07B
Brightness	410 nits	450 nits	450 nits	450 nits
Contrast Ratio	1200 : 1	1300 : 1	1100 : 1	1300 : 1
View Angle	89° / 89° / 89° / 89°	89° / 89° / 89° / 89°	89° / 89° / 89° / 89°	89° / 89° / 89° / 89°
Viewable Size (H / V)	1895.4 x 1065.96 mm	1428.5 x 803.5 mm	1209.6 x 680.4 mm	1073.8 x 604.0 mm
PC Connector	N / A	DVI-I x 1	DVI-I x 1	DVI-I x 1
Video Connector	HDMI x 4	HDMI x 2	HDMI x 2	HDMI x 2
RS-232	2.5mm jack x 1	2.5mm jack x 1	2.5mm jack x 1	2.5mm jack x 1
LAN	RJ - 45	RJ - 45	RJ - 45	RJ - 45
Internal Speaker	10W + 10W	10W + 10W	10W + 10W	10W + 10W
USB Multimedia Function	Yes	Yes	Yes	Yes
Power Supply	Universal (AC 100-240V)	Universal (AC 100-240V)	Universal (AC 100-240V)	Universal (AC 100-240V)
Power Consumption	290W (typ.)	103W (typ.)	76W (typ.)	110W (typ.)
Operating Temperature	0 ~ 40°C (32 ~ 104°F)	5 ~ 35°C (41 ~ 95°F) Portrait	5 ~ 35°C (41 ~ 95°F) Portrait	5 ~ 35°C (41 ~ 95°F) Portrait
Operational Humidity	20 ~ 80%	20 ~ 80%	20 ~ 80%	20 ~ 80%
Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)
Storage Humidity	10 ~ 90%	10 ~ 90%	10 ~ 90%	10 ~ 90%
Dimension (Without Stand; W x H x D)	1927.9 x 1098.9 x 85.9 mm / 75.9 x 43.2 x 3.3 in.	1452.3 x 833.4 x 63.5 mm / 57.1 x 32.8 x 2.5 in.	1233.4 x 710.3 x 45.5 mm / 45.5 x 27.9 x 1.8 in.	1077.6 x 607.8 x 103.8 mm / 42.4 x 23.9 x 4.0 in.
Dimension (Packing; W x H x D)	2224 x 1427 x 373 mm / 87.5 x 56.1 x 14.6 in.	1648.0 x 1076.0 x 280.0 mm / 64.9 x 42.3 x 11.0 in.	1448 x 952 x 223 mm / 57 x 37.4 x 8.7 in.	1374 x 901 x 373 mm / 54.0 x 35.4 x 14.6 in.
Net Weight (Without Stand)	63.8 kg / 140.68 lb.	29.8 kg / 65.71 lb.	18.0 kg / 39.69 lb.	21.6 kg / 47.6 lb.
Gross Weight	83 kg / 183.02 lb.	38.5 kg / 84.89 lb.	24.3 kg / 53.38 lb.	34.3 kg / 75.6 lb.
VESA Mount (V / H)	400 x 600 mm	400 x 400 mm	400 x 400 mm	400 x 400 mm
Tilt / Swivel / Rotation	Landscape only	Landscape / Portrait	Landscape / Portrait	Landscape / Portrait
Safety	CB / UL / FCC / CE / BSMI / CCC	CB / UL / FCC / CE / BSMI / CCC	CB / UL / FCC / CE / BSMI / CCC	CB / UL / FCC / CE / BSMI / CCC
Packing List	Power Cable (1.8 M) VGA cable (1.8 M) HDMI cable (1.8 M) RS-232 cable (1.8 M) RS-232 daisy cable (1.8 M) Remote control User Manual (paper)	Power Cable (1.8 M) VGA cable (1.8 M) HDMI cable (1.8 M) RS-232 cable (1.8 M) RS-232 daisy cable (1.8 M) Remote control User Manual (paper)	Power Cable (1.8 M) VGA cable (1.8 M) HDMI cable (1.8 M) RS-232 cable (1.8 M) RS-232 daisy cable (1.8 M) Remote control User Manual (paper)	Power Cable (1.8 M) VGA cable (1.8 M) HDMI cable (1.8 M) RS-232 cable (1.8 M) RS-232 daisy cable (1.8 M) Remote control User Manual (paper)

54

DRAM
Memory
Module

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse

Thermal Printer

- Superior high-speed performance, durable and rugged design, multiple resolutions, and standard interface options
- Increases efficiency and productivity, ensures end-to-end traceability, and reduces errors
- Wide-range of applications in manufacturing, retail, transportation, logistics, and commercial services



Products

Thermal Printer

Industrial



Product	96PR-152-US-I	96PR-152-USP-I	96PR-356-UXPH-I	96PR-102-US-I
Product Description	203dpi Industrial Barcode Printer, 4.09", 6 ips, USB / Serial	203dpi Industrial Barcode Printer, 4.09", 6 ips, USB / Serial / Parallel	203 dpi Industrial Barcode Printer, 4.09", 14 ips, USB / Serial / Ethernet / Parallel / USB Host	300 dpi Industrial Barcode Printer, 4.09", 4 ips, USB / Serial
Resolution	203 dpi	203 dpi	203 dpi	300 dpi
Max. Print Speed	152 mm / sec (6 in. / sec)	152 mm / sec (6 in. / sec)	356 mm / sec (14 in. / sec)	102 mm / sec (4 in. / sec)
Max. Print Width	104 mm / 4.09 in.	104 mm / 4.09 in.	104 mm / 4.09 in.	104 mm / 4.09 in.
Max. Print Length	2286 mm / 90 in.	2286 mm / 90 in.	25400 mm / 1000 in.	1016 mm / 40 in.
Printing Method	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal
USB 2.0	Yes	Yes	Yes	Yes
RS-232 (Serial)	Yes	Yes	Yes	Yes
Ethernet	-	-	Yes	-
Bluetooth	-	-	-	-
MFi (iOS)	-	-	-	-
Wi-Fi	-	-	-	-
USB Host	-	-	Yes	-
Parallel	-	Yes	Yes	-
Memory	4MB Flash memory 8MB SDRAM SD card reader, up to 4GB	4MB Flash memory 8MB SDRAM SD card reader, up to 4GB	128MB Flash memory 128MB SDRAM SD card reader, up to 32GB	4MB Flash memory 8MB SDRAM SD card reader, up to 4GB
SD Card Reader	Yes	Yes	Yes	Yes
LCD	-	-	Yes	-

Industrial



Product	96PR-102-USP-I	96PR-254-UXPH-I	96PR-102-UXPH-I
Product Description	300 dpi Industrial Barcode Printer, 4.09", 4 ips, USB / Serial / Parallel	300 dpi Industrial Barcode Printer, 4.09", 10 ips, USB / Serial / Ethernet / Parallel / USB Host	600 dpi Industrial Barcode Printer, 4.09", 4 ips, USB / Serial / Ethernet / Parallel / USB Host
Resolution	300 dpi	300 dpi	600 dpi
Max. Print Speed	102 mm / sec (4 in. / sec)	254 mm / sec (10 in. / sec)	102 mm / sec (4 in. / sec)
Max. Print Width	104 mm / 4.09 in.	104 mm / 4.09 in.	104 mm / 4.09 in.
Max. Print Length	1016 mm / 40 in.	11430 mm / 450 in.	2540 mm / 100 in.
Printing Method	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal
USB 2.0	Yes	Yes	Yes
RS-232 (Serial)	Yes	Yes	Yes
Ethernet	-	Yes	Yes
Bluetooth	-	-	-
MFi (iOS)	-	-	-
Wi-Fi	-	-	-
USB Host	-	Yes	Yes
Parallel	Yes	Yes	Yes
Memory	4MB Flash memory 8MB SDRAM SD card reader, up to 4GB	128MB Flash memory 128MB SDRAM SD card reader, up to 32GB	128MB Flash memory 128MB SDRAM SD card reader, up to 32GB
SD Card Reader	Yes	Yes	Yes
LCD	-	Yes	Yes

56

DRAM
Memory
Module

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse

Products

Thermal Printer

57

Desktop



Product	96PR-152-U-D	96PR-152-UB-D	96PR-178-USP-D	96PR-203-UXH-D
Product Description	203 dpi Desktop Barcode Printer, 4.25", 6 ips, USB	203 dpi Desktop Barcode Printer, 4.25", 6 ips, USB / Bluetooth	203 dpi Desktop Barcode Printer, 4.25", 7 ips, USB / Serial / Parallel	203 dpi Desktop Barcode Printer, 4.25", 8 ips, USB / Serial / Ethernet / USB Host
Resolution	203 dpi	203 dpi	203 dpi	203 dpi
Max. Print Speed	152 mm / sec (6 in. / sec)	152 mm / sec (6 in. / sec)	178 mm / sec (7 in. / sec)	203 mm / sec (8 in. / sec)
Max. Print Width	108 mm / 4.25 in.	108 mm / 4.25 in.	108 mm / 4.25 in.	108 mm / 4.25 in.
Max. Print Length	2794 mm / 110 in.	2794 mm / 110 in.	2286 mm / 90 in.	25400 mm / 1000 in.
Printing Method	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal
USB 2.0	Yes	Yes	Yes	Yes
RS-232 (Serial)	-	-	Yes	Yes
Ethernet	-	-	-	Yes
Bluetooth	-	Yes	-	-
MFi (iOS)	-	-	-	-
Wi-Fi	-	-	-	-
USB Host	-	-	-	Yes
Parallel	-	-	Yes	-
Memory	8MB Flash memory 16MB SDRAM	8MB Flash memory 16MB SDRAM	4MB Flash memory 8MB SDRAM MicroSD card reader, up to 4GB	128MB Flash memory 128MB SDRAM MicroSD card reader, up to 32GB
SD Card Reader	-	-	Yes	Yes
LCD	-	-	-	-

Desktop



Product	96PR-127-U-D	96PR-127-UB-D	96PR-127-UXP-D	96PR-152-UXH-D
Product Description	300 dpi Desktop Barcode Printer, 4.16", 5 ips, USB	300 dpi Desktop Barcode Printer, 4.16", 5 ips, USB / Bluetooth 4.0	300 dpi Desktop Barcode Printer, 4.17", 5 ips, USB / Serial / Ethernet / Parallel	300 dpi Desktop Barcode Printer, 4.17", 6 ips, USB / Serial / Ethernet / USB Host
Resolution	300 dpi	300 dpi	300 dpi	300 dpi
Max. Print Speed	127 mm / sec (5 in. / sec)	127 mm / sec (5 in. / sec)	127 mm / sec (5 in. / sec)	152 mm / sec (6 in. / sec)
Max. Print Width	105.6 mm / 4.16 in.	105.6 mm / 4.16 in.	106 mm / 4.17 in.	106 mm / 4.17 in.
Max. Print Length	1016 mm / 40 in.	1016 mm / 40 in.	1016 mm / 40 in.	11430 mm / 450 in.
Printing Method	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal
USB 2.0	Yes	Yes	Yes	Yes
RS-232 (Serial)	-	-	Yes	Yes
Ethernet	-	-	Yes	Yes
Bluetooth	-	Yes	-	-
MFi (iOS)	-	-	-	-
Wi-Fi	-	-	-	-
USB Host	-	-	-	Yes
Parallel	-	-	Yes	-
Memory	8MB Flash memory 16MB SDRAM	8MB Flash memory 16MB SDRAM	4MB Flash memory 8MB SDRAM MicroSD card reader, up to 4GB	128MB Flash memory 128MB SDRAM MicroSD card reader, up to 32GB
SD Card Reader	-	-	Yes	Yes
LCD	-	-	-	-

Mobile



Product	96PR-102-UB2-M	96PR-102-UW2-M
Product Description	203 dpi Mobile Barcode Printer, 2", 4 ips, USB / Bluetooth	203 dpi Mobile Barcode Printer, 2", 4 ips, USB / Wi-Fi
Resolution	203 dpi	203 dpi
Max. Print Speed	102 mm / sec (4 in. / sec)	102 mm / sec (4 in. / sec)
Max. Print Width	48 mm / 1.89 in.	48 mm / 1.89 in.
Max. Print Length	2286 mm / 90 in.	2286 mm / 90 in.
Printing Method	Direct Thermal	Direct Thermal
USB 2.0	Yes	Yes
RS-232 (Serial)	-	-
Ethernet	-	-
Bluetooth	Yes	-
MFi (iOS)	-	-
Wi-Fi	-	Yes
USB Host	-	-
Parallel	-	-
Memory	128MB Flash memory 64MB SDRAM	128MB Flash memory 64MB SDRAM
SD Card Reader	-	-
LCD	-	-

Mobile



Product	96PR-102-UB3-M	96PR-102-UBM3-M	96PR-102-UW3-M
Product Description	203 dpi Mobile Barcode Printer, 3", 4 ips, USB / Bluetooth	203 dpi Mobile Barcode Printer, 3", 4 ips, USB / Bluetooth / MFi	203 dpi Mobile Barcode Printer, 3", 4 ips, USB / Wi-Fi
Resolution	203 dpi	203 dpi	203 dpi
Max. Print Speed	102 mm / sec (4 in. / sec)	102 mm / sec (4 in. / sec)	102 mm / sec (4 in. / sec)
Max. Print Width	72 mm / 2.83 in.	72 mm / 2.83 in.	72 mm / 2.83 in.
Max. Print Length	2286 mm / 90 in.	2286 mm / 90 in.	2286 mm / 90 in.
Printing Method	Direct Thermal	Direct Thermal	Direct Thermal
USB 2.0	Yes	Yes	Yes
RS-232 (Serial)	-	-	-
Ethernet	-	-	-
Bluetooth	Yes	Yes	-
MFi (iOS)	-	Yes	-
Wi-Fi	-	-	Yes
USB Host	-	-	-
Parallel	-	-	-
Memory	4MB Flash memory 8MB SDRAM	4MB Flash memory 8MB SDRAM	4MB Flash memory 8MB SDRAM
SD Card Reader	-	-	-
LCD	-	-	-

Optical Drive

- Top of the market best-selling optical drive brands
- World class electronic performance architecture
- Easy installation and user friendly operating interface
- Handles all kinds of media and formats
- Excellent read and write speeds with SATA 3.0 Gb/s interface
- High reliability and durability perfect for intensive use



Products

Optical Drive

60

DRAM
Memory
Module

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse

Half-height



Product	96DVR-24X-ST-HL	96DVR-24X-ST-LT-B	96DVD-18X-ST-LT-B
Product Description	Hitachi-LG 24X SATA DVD +/-RW	LITE-ON 24X SATA DVD +/-RW	LITE-ON 18X SATA DVD-ROM
Manufacturer	Hitachi-LG	LITE-ON	LITE-ON
Type	DVD-RW	DVD-RW	DVD-ROM
Speed	24X	24X	18X
Interface	SATA	SATA	SATA
Color	Black	Black	Black
MTBF (hours)	100,000	70,000	70,000
Dimensions (W x H x D)	146 x 41.3 x 165 mm / 5.75 x 1.63 x 6.5 in.	146 x 41.3 x 170 mm / 5.75 x 1.63 x 6.69 in.	146 x 41.3 x 170 mm / 5.75 x 1.63 x 6.69 in.

Slim



Product	96SDVR-8X-ST-HL-BB	96SDVR-8X-ST-HL-B	96SDVR-8X-ST-LT-B2
Product Description	Hitachi-LG Blue-ray Super Slim 8X SATA DVD +/-RW	Hitachi-LG Slim 8X SATA DVD +/-RW	LITE-ON Slim 8X SATA DVD +/-RW
Manufacturer	Hitachi-LG	Hitachi-LG	LITE-ON
Type	DVD-RW	DVD-RW	DVD-RW
Speed	8X	8X	8X
Interface	SATA	SATA	SATA
Color	Black	Black	Black
MTBF (hours)	60,000	150,000	60,000
Dimensions (W x H x D)	128 x 9.5 x 127 mm / 5.04 x 0.37 x 5 in.	128 x 12.7 x 127 mm / 5.04 x 0.5 x 5 in.	128 x 12.7 x 126.1 mm / 5.04 x 0.5 x 4.96 in.

Keyboard & Mouse

- Classic style, rugged and spill-resistant design
- Low-profile, whisper-quiet keys and standard layout with full-size f-keys and number pad
- Easy to set up and use, plug the cable into a USB port and use it right away
- Compact and comfortable in either hand
- Optical technology with a three-button for smooth, precise control



Products

Keyboard & Mouse

Keyboard



Product	96KB-104U-LT-TW	96KB-88P2-WT-TW-B	96KB-88UP2-WK-TW-B
Product Description	Logitech Keyboard 104Keys USB T-Chinese Black	WINTEK 88KEY PS2 T-Chinese Black	WINTEK 88KEY USB+PS2 T-Chinese Black
Manufacturer	Logitech	Wintek	Wintek
Color	Black	Black	Black
Number of Keys	104 Keys	88 Keys	88 Keys
Voltage	N/A	5 Volt	5 Volt
Housing Design	Plastic	Plastic	Plastic
Current Input	N/A	N/A	100 mA
Interfaces	USB	PS/2	PS/2 & USB
Dimensions (W x H x L) inch	113 x 38 x 406 mm / 4.45 x 1.5 x 16 x in.	143 x 28 x 290 mm / 5.63 x 1.14 x 11.42 in.	150 x 19 x 290 mm / 5.94 x 0.75 x 11.45 in.
Operating Temperature	N/A	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)
Storage Temperature	N/A	-40 ~ 55°C (-40 ~ 131°F)	-40 ~ 55°C (-40 ~ 131°F)
Safety	RoHS	CE / FCC / CNS	CE / FCC / CNS
Weight (lb.)	226.7 g / 0.5 lb.	539.7 g / 1.19 lb.	340.1 g / 0.75 lb.
Manufacture Warranty	3 years	1 year	1 year

Mouse



Product	96MS-0P2-U-MS-TW-B	96MS-0P2-USB-LT3
Product Description	Microsoft Mouse Optical USB Black	Logitech Mouse Optical USB
Manufacturer	Microsoft	Logitech
Number of Keys	2	2
Housing Design	Plastic	Plastic
Interfaces	USB	USB
Dimensions (W x H x L)	87 x 50 x 32 mm / 3.45 x 1.99 x 1.26 in.	180 x 130 x 52 mm / 7.09 x 5.13 x 2.06 in.
Operating Temperature	0 ~ 40°C (32 ~ 104°F)	N/A
Storage Temperature	-40 ~ 60°C (-40 ~ 140°F)	N/A
Safety	CB Scheme / UL / cUL / FCC / WEEE / BSMI	RoHS
Weight (lb.)	113.3 g / 0.25 lb.	204.1 g / 0.45 lb.
Manufacture Warranty	3 years	3 years

62

DRAM
Memory
Module

SSD

Hard Drive

CF Card

Power Supply

CPU

Cooler

Graphics Card

RAID
Controller

Display

Thermal Printer

Optical Drive

Keyboard &
Mouse

One-stop Shopping Peripherals Depots

<http://www.advantech.com/certified-peripherals/>

At Advantech PAPS Certified Peripherals we go beyond what a customer needs. Customers are always looking for comprehensive product selections and an easier shopping experience. By shopping with us, customers can see a wide array of products, from CPUs, DRAMs, computing power, storage, and graphic processing, to the Internet of things, while at the same time taking advantage of the most efficient, globally-connected logistic services.



Regional Service & Customization Centers

China | Kunshan
86-512-5777-5666

Taiwan | Taipei
886-2-2792-7818

Netherlands | Eindhoven
31-40-267-7000

Poland | Warsaw
00800-2426-8080

USA | Milpitas, CA
1-408-519-3898

Worldwide Offices

Greater China

China
Toll Free 800-810-0345
Beijing 86-10-6298-4346
Shanghai 86-21-3632-1616
Shenzhen 86-755-8212-4222
Chengdu 86-28-8545-0198
Hong Kong 852-2720-5118

Taiwan
Toll Free 0800-777-111
Neihu 886-2-2792-7818
Taichung 886-4-2329-0371
Kaohsiung 886-7-229-3600

Middle East and Africa

Israel 072-2410527

Asia

Japan
Toll Free 0800-500-1055
Tokyo 81-3-6802-1021
Osaka 81-6-6267-1887
Nagoya 81-52-856-9657

Korea
Toll Free 080-363-9494
Seoul 82-2-3663-9494

Singapore
Singapore 65-6442-1000

Malaysia
Kuala Lumpur 60-3-7725-4188
Penang 60-4-537-9188

Thailand
Bangkok 66-2-248-3140

India
Bangalore 91-80-2545-0206
Pune 91-20-3948-2075

Indonesia
Jakarta 62-21-751-1939

Australia
Toll Free 1300-308-531
Melbourne 61-3-9797-0100

Europe

Germany
Toll Free 00800-2426-8080/81
Munich 49-89-12599-0
Düsseldorf 49-2103-97-855-0

France
Paris 33-1-4119-4666

Italy
Milano 39-02-9544-961

Benelux & Nordics
Breda 31-76-523-3100

UK
Newcastle 44-0-191-262-4844
London 44-0-870-493-1433

Poland
Warsaw 48-22-31-51-100

Russia
Moscow 8-800-555-01-50
St. Petersburg 8-800-555-81-20

Czech Republic
Ústí nad Orlicí 420-465-521-020

Ireland
Oranmore 353-91-792444

Americas

North America
Toll Free 1-888-576-9668
Cincinnati 1-513-742-8895
Milpitas 1-408-519-3898
Irvine 1-949-420-2500
Ottawa 1-815-434-8731

Brazil
Toll Free 0800-770-5355
São Paulo 55-11-5592-5355

Mexico
Toll Free 1-800-467-2415
Mexico City 52-55-6275-2727

www.advantech.com

Please verify specifications before quoting. This guide is intended for reference purposes only. All product specifications are subject to change without notice. No part of this publication may be reproduced in any form or by any means, electronic, photocopying, recording or otherwise, without prior written permission of the publisher. All brand and product names are trademarks or registered trademarks of their respective companies. © Advantech Co., Ltd. 2018

Online Catalog



ADVANTECH Industrial APS

Industrial Allied Procurement Services