

# SKY-640V2

## 4U Rackmount Intel® Xeon® Scalable GPU Server, Supporting 4x PCIe x16 Double-Deck Cards Plus 3x PCIe x8 Single-Deck Cards



### Features

- Processor: Dual 3rd Gen. Intel® Xeon® scalable processors
- Memory: 16x DDR4 3200 MHz ECC RDIMM/LRDIMM / Intel® Optane™ support up to 2TB
- Remote Management: IPMI function support
- Expansion: Supporting 4 \* PCIe x16 double-deck card + 2\* PCIe x8 single-deck FH/HL card + 1\*PCIe x8 card
- PSU: 2000W 1+1 redundant power supply with 80 PLUS Platinum level certification
- 3 x 12CM system fan with easy maintenance feature

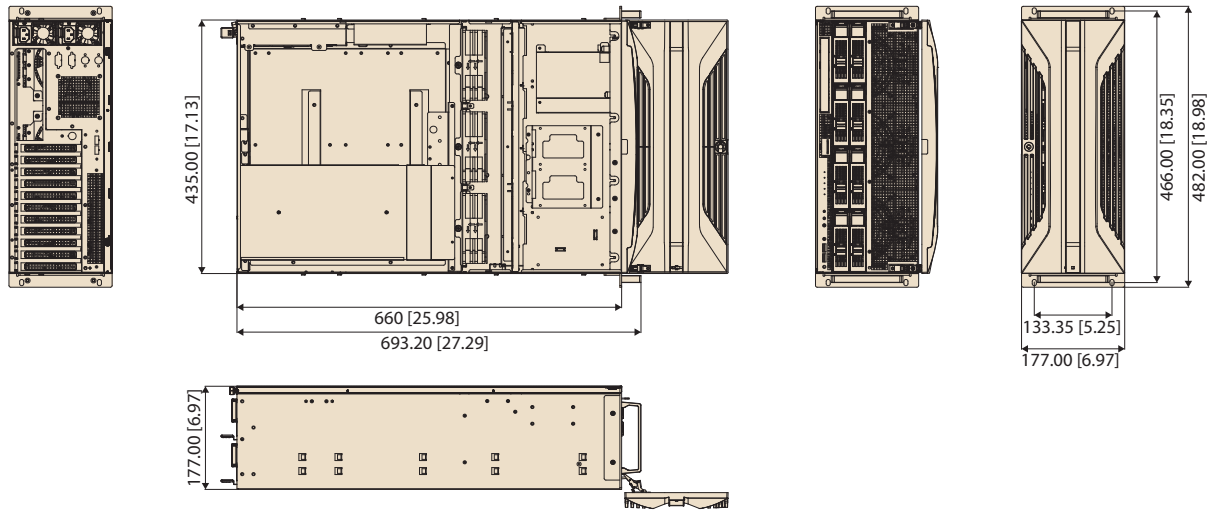


### Specifications

Processor System	Chipset	Intel® C621A chipset	
	CPU	Dual 3rd Gen. Intel® Xeon® Scalable processors (TDP up to 205W)	
	Memory type	16x DDR4 3200 MHz ECC RDIMM/LRDIMM / Intel® Optane™ support up to 2TB	
Graphics	Controller	Aspeed AST 2500	
	VRAM	64 MB	
Expansion Slot	Total PCIe slots	11	
	Slot1	PCIe x8 slot (Gen4 x8 link)	
	Slot2	PCIe x8 slot (Gen x8 link)	
	Slot3	PCIe x16 slot (Gen4 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion card	
	Slot4	PCIe x8 slot (Gen4 x8 link)	
	Slot5	PCIe x16 slot (Gen4 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion card	
	Slot6	PCIe x8 slot (Gen4 x8 link)	
	Slot7	PCIe x16 slot (Gen4 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion card	
	Slot8	PCIe x8 slot (Gen4 x8 link)	
	Slot9	PCIe x16 slot (Gen4 x16 link), for double-deck 4.376"(H)/10.5"(L) expansion card	
	Slot10	PCIe x8 slot (Gen4 x8 link)	
Slot11	PCIe x8 slot (Gen4 x8 link)		
Drive Bay	2.5" (Internal)	2	
	3.5" (Hot Swap)	8 (support 2.5"/3.5" drive)	
Networking	Interface	Gbe/10Gbe LAN	
	Controller	2 x Intel® I210AT / Intel® X550-AT2 (dual 10GbE ports)	
Front I/O Interface	USB	2 x USB 3.2 Gen. 1	
Rear I/O Interface	USB	2 x USB 3.2 Gen. 1	
	PS/2	-	
	COM	1	
	Display	1 x VGA	
	RJ-45	5 (1 port dedicated for IPMI function)	
Internal connector	USB	6 x USB 3.2 Gen 1 ports (three onboard headers) + 1 x Type-A USB 3.2 Gen 1 port + 1 x Type-A USB 2.0 port	
	COM	1	
	LPC	1	
Watchdog Timer	Output	System reset	
	Interval	Programmable, 1~255 sec/min mode	
Power Supply	Power Output Wattage	80 PLUS Platinum 2000W redundant Power Supply (Depends on input voltage)	
	Input Range	1000W@100-127V <sub>AC</sub>	
		1800W@200-219V <sub>AC</sub>	
Cooling	Chassis Fan	3 (12cm/238cfm)	
	Air Filter	-	
Miscellaneous	LED Indicators	LAN1, LAN2, HDD, Power, information	
	Remote Management	Advantech Remote Monitoring Utility	
Environment	Temperature	Operating	Non-Operating
		0 ~ 35° C (32 ~ 85° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	95% @ 40° C	
	Vibration (5 ~ 500 Hz)	0.75Grms	
	Shock	10G (with 11ms duration, half sine wave)	
Physical Characteristics	Dimension (W x H x D)	435 x 176 x 660mm (17.1" x 6.9" x 25.9")	
	Package Dimension (W x H x D)	710 x 360 x 905mm (27.95" x 14.17" x 35.63")	
	Weight (N.W. / G.W.)	34 Kg / 36 Kg	

## Dimensions

Unit: mm [inch]



## Front View

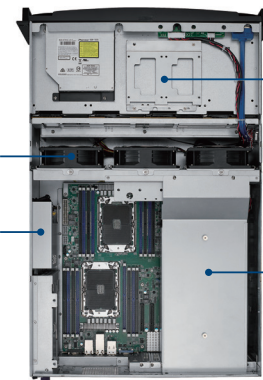
Power/reset/alarm reset Slim optical disc drive  
2 x USB LED indicators



8 x Hot-swap 3.5"/2.5" SAS/SATA HDD trays

## Inside View

3 x 12cm system fans



2 x internal 2.5" HDD/SSD bracket

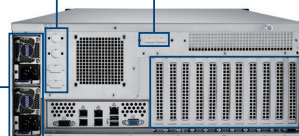
Power distribution board

GPU card air duct

## Rear View

Rear IO reserved space

(1+1) 1200W/2000W redundant power supply



Support up to eleven single-deck expansion cards

## Ordering Information

Part Number	HDD	M.2 2280	VGA Chip	RJ45	IPMI	Power supply
SKY-640-2R20A1	10	1 x M.2 2280 B+M key (SATA and PCIe) + 1 x M.2 2280 B+M key (PCIe)	AST 2500	5 (1 port dedicated for IPMI function)	YES	1+1 2000W RPS

## Packing List

Items	Advantech P/N	Quantity
CPU Cooler	1970004597T000	2
LGA4189 CPU carrier	1651003476-01	2
GPU Extended Bracket	1960094025N000	4

## Optional Accessories

Part	Number Description
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1700028024-01	Dual port USB 3.2 Gen cable (45 cm/17.7") with bracket
1701090401	COM port cable with bracket
9680016858	Rail Kit
98R16402100	External FAN for SKY-640V2
1700029268-01	GPU PWR convert cable, convert CPU8P to PCIe 6+2P
1700027928-01	UL Power core (125V,15A)
1700027909-02	BSMI Power Core (125V,15A)
1702002605	EU Power Core (250V,10A)
PCA-AUDIO-HDB1E	HD Audio-card
1702040400	B4P to 4P for audio board
1960094037N000	Hold-down bar for GPU card power at north edge
1992610020	Rubber for GPU card power at north edge to pair with hold-down bar, and one GPU card needs one pcs rubber
1700035590-01	12V2x6 power cable (300W), CPU8P (M) to 16Pin (VT type)