

Server System Requirements for Vector Engine 2.0 Installation

Primary Item	Tertiary Item	Description
CPU	Architecture	The server must be equipped with the following CPU. <ul style="list-style-type: none"> · 1st Generation Intel® Xeon® Scalable Processors · 2nd Generation Intel® Xeon® Scalable Processors · 3rd Generation Intel® Xeon® Scalable Processors · AMD EPYC™ 7002 Series Processors · AMD EPYC™ 7003 Series Processors
Memory	Server memory capacity	The required memory capacity of the SX-Aurora TSUBASA software according to the number of VEs is as follows. 1VE: 16GB, 2VE: 22GB, 3VE: 28GB, 4VE: 34GB, 5VE: 39GB, 6VE: 43GB, 7VE: 50GB, 8VE: 56GB Note: -Excluding the memory used by the OS and other drivers. -Excluding the memory used by ScaTeFS(NEC file system) and NQSV(NEC scheduler).
BIOS setting	Boot Mode	UEFI
BIOS setting	PCI Hot-plug	Disable
BIOS setting	ASPM(Active-State Power Management)	Disable
BIOS setting	BAR spaces	<ul style="list-style-type: none"> · BAR01 size: 64GB per VE card · BAR2 size: 32MB per VE card · BAR3 size: 256KB per VE card · BAR4 size: 4KB per VE card · BAR5 size: 4KB per VE card Require to set the size of the MMIO area to 'Number of VE cards' x 64GB or higher.
Software	Supported OS for SX-Aurora TSUBASA SW	http://www.support.nec.co.jp/View.aspx?id=3140106285
PCI slot form factor	Length	Over 266.46mm (Full length)
PCI slot form factor	Height	Over 111.15mm (Full height)
PCI slot form factor	Width	Over 37.77mm (Dual Slot)
PCI slot form factor	Length (long offset)	Over 338.26mm
PCI slot form factor	Length (straight)	Over 311.46mm
PCI slot form factor	PCI interface	PCI Express Gen3 or later x16 (The VE card runs on Gen3.)
Power connector	Power connector type	CPU 8-pin connector (Fig. 1) Note: - To supply power to VE card from a server side, a power cable with CPU 8 PIN male connector is required, which can connect to auxiliary power connector on VE. Customers need to prepare its cable provided from the server vendor, or arrange the cable by themselves, which meets the server specification.
Power connector	Power connector location	Fig. 3
Cooling system	Cooling capacity	Passive heat sink
Card condition	Operating Temperature	10 to 35 degrees
Card condition	Cooling capability	When the environmental temperature is 30 degrees, it is recommended to have a cooling capability that satisfies the LSI / HBM temperature of 85 degrees or less.
Power consumption	Required power	Number of VE cards x 300W (only VE cards power requirement)

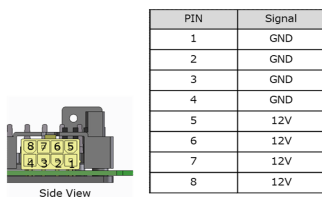


Fig. 1 CPU 8-pinconnector

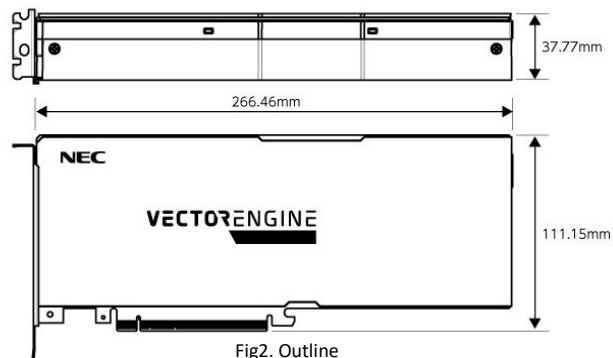


Fig2. Outline

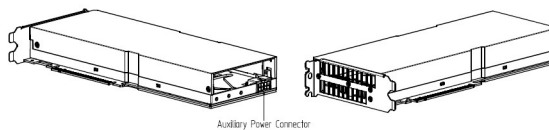


Fig. 3 Location of CPU 8-pin connector