

TOSHIBA

FA2100TX model 700

Performance, reliability and the latest technology - all in a compact body

The FA2100TX model 700 embodies robustness, maintainability, environmental resistance and expansibility, all in a slim case just 100 mm wide, 310 mm high and 340 mm deep. This model employs Intel® Xeon® processor W-1270TE(2.0GHz) and incorporates reliable memory with ECC (max. 32 GB), RAS to monitor inside the hardware and a mirroring disk for hot swapping (optional), as well as other features to support 24-hour use and stable operation expected of an industrial computer. Toshiba also offers long-term product supply and maintenance support.

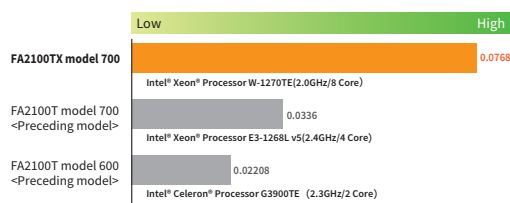


Now more functional

High performance CPU Intel® Xeon® processor

High-performance CPU Intel® Xeon® processor for Workstations with built-in W-1270TE(2.0GHz/8 core) for high-speed processing.

CPU performance comparison



Weighted maximum performance (APPvalue) Unit: Effective tera

*The above is a comparison of the weighted maximum performance (in APP value) released by Intel, and there may be difference from the above depending on your system.

Reference: APP Metrics for Intel® Microprocessors Intel® Xeon® Processor Revision.05 Date:11/16/2022
APP Metrics for Intel® Microprocessors Intel® Celeron® Processor Revision.05 Date:10/26/2022

Gigabit (4 Ports) Ethernet Interface is a Standard Feature

Gigabit-compatible 4 Ports Ethernet interface (with auto negotiation for 10BASE-T, 100BASE-TX, 1000BASE-T) is a standard feature (Compatible with the Wake On LAN function).

Graphic Function with built-in CPU Chipset Provided

The graphic function with a built-in CPU chipset is provided. It permits multi display of the expansion desktop function, clone display function, etc.

Expansion DesktopFunction



Monitors are used for wide display

Clone DisplayFunction



Monitors are used to show the same display on each screen

Collage DisplayFunction



Two monitors are used to display a single image

Good Maintainability and Protection Structure

High Maintainability by Front Access

The Storage Devices, cooling fan, and battery can be easily replaced from the front.

Example of Replacement



Front-end Replacement of Storage Devices



Front-end Replacement of Cooling Fan



Front-end Replacement of Battery

Security



Key lock(Optional)



Front switch cover



AC Power Cable Clamp

Operation Error Prevention



Security lock slot

Vertical or Horizontal to Make Effective Use of Your Space



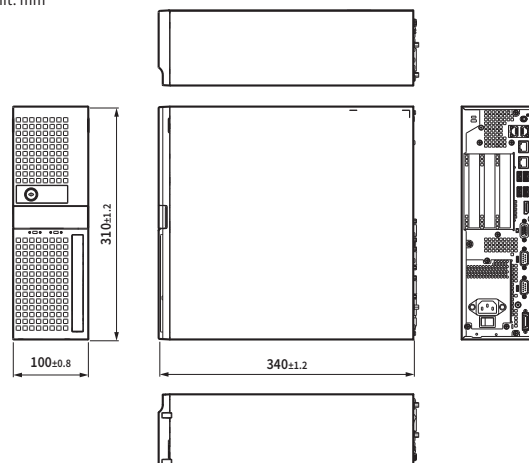
Vertical Installation (standard)
The stand is an optional part.



Horizontal Installation

Dimensions

Unit: mm



Specifications

Product Name		FA2100TX model 700	
		Single Disk Model	Mirroring Disk Model
Processor	Main Processor	Intel® Xeon® W-1270TE (2.0GHz)	
	No. of Cores/No. of Threads ¹	8/16	
	Level 2 Cache Memory	256 KB/Core (built into main processor)	
	Level 3 Shared Cache Memory	16 MB (built into main processor)	
Chipset		Intel® W480E Chipset	
Main Memory ²	Capacity	Min. 8GB (8GB×1), Max. 32GB (16GB×2)	
	Memory	DDR4-SDRAM (DDR4-2933 SDRAM / PC4-23400) with ECC function, DIMM 2 sockets	
Auxiliary Storage	Built-in HDD	Options (Refer to Optional Hardware Specifications)	
	Built-in SSD ³		
	Built-in DVD-ROM ⁴		
RAID Compatible		—	RAID1
Interface	COM Interface	RS-232C (9-pinD-SUB)×2 (rear)	
	Graphic Interface ⁵	RGB×1, DisplayPort*×1 (rear) CPU・Chipset built in Graphic Function	
	LAN Interface	10BASE-T/100BASE-TX/1000BASE-T (Auto Negotiation) (RJ45)×4 (rear) Wake On LAN (compatible for main unit port only)	
	Sound Interface ⁷	LINE OUT (3.5φ mini jack) (rear)	
	USB Interface ⁸	USB 5Gbps×6 (front2/rear4)	
	DI/DO Interface ⁴	Option(Refer to Optional Hardware Specifications)	
Expansion Interface ⁴		Option(Refer to Optional Hardware Specifications)	
Front Panel		Select whether there is a key lock	
Input Device	Keyboard	USB109 keys (Japanese OS), 104 keys (English OS)	
	Mouse	USB (optical)	
RAS Function		Fan stop detection, CPU temperature rise detection, Internal temperature detection, Internal voltage detection, Memory error detection, Digital input/output ⁹ (DI/DO 4 points each, remote ON/OFF or remote initialize 1 point), Watchdog timer monitoring (at system startup, during system operation), hard disk monitor (Mirroring Disk only) Software power off (shutdown), Remote initialize, Remote power on/off, Error information saved on RAS memory, Operating time monitor function, Temperature information trend function, Simulation function	
Power Supply (Wide Range Power Supply) ¹⁰		Rated voltage 100VAC-240 VAC, allowable voltage 85 VAC - 264 VAC, allowable frequency 50 Hz/60Hz±3Hz	
Electric Power Consumption ¹¹		Max. 278W/290VA	
Dimensions and Weight		100 (W) ×310 (H) ×340 (D) mm (without projections, stands) Weight: about 10 kg	
Items included in shipment package		AC power cable (1), AC power cable clamp (1), Rubber foot (4pieces), Mouse, Keyboard, Product recovery media (with OS pre-installed models) ¹² , Instruction manual PDF(included on optical media) * Items other than those listed above may be included depending on the configuration of the system ordered.	
Software (OS) ¹³ ¹⁴		Windows® 10 IoT Enterprise 2021 LTSC (Japanese or English selectable) (64bit) ¹⁵ Windows® 10 IoT Enterprise 2019 LTSC (Japanese or English selectable) (64bit) ¹⁵ Windows Server® IoT 2022 Standard (Japanese version/English version) (64bit) ¹⁶ Windows Server® IoT 2019 Standard (Japanese version/English version) (64 bit) ¹⁶ MIRACLE LINUX 8.6 (64bit)	

Optional Hardware Specifications

Built-in HDD	Single disk model capacity: 4TB HDD 2 units mountable		
	Mirroring disk model capacity: 500GB/4TB 1 set(2 units) mountable (Hot swap compatible mirroring disk)		
Built-in SSD ³	Single disk model capacity : 128 GB/512 GB 2 units mountable		
	Mirroring disk model capacity: 160 GB/400 GB 1 set(2 units) mountable (hot swap compatible)		
Built-in DVD-ROM ⁴	Read Media DVD-ROM,CD-ROM,DVD-R,DVD+R,DVD-RW,DVD+RW, CD-R,CD-RW		
Expansion Interface ⁴	PCI-Express (x16) ¹⁷ PCI-Express (x4) ¹⁷ PCI slot ¹⁸	1 slot (half size) PCI Express 3.0 1 slot (half size) PCI Express 3.0 1 slot (half size) PCI 2.2	
DI/DO Interface ⁴	(DI/DO board) Digital input/output (half-pitch 20-pin) DI 4 points, DO 4 points, remote input 1point		
RAS Terminal Board	DI 4 points, DO 4 points, remote input 1 point		
RAS Cable	Half-pitch 20-pin male at both ends, 2m max		
RAS Terminal Board Mounting Panel	Simplified type		
Stand	1 set		
Instruction Manual(Bound Booklet)	FA2100TX model 700 unit instruction manual, RAS support software instruction manual, RAID controller instruction manual		

Installation Environment Conditions

Installation Environment	Temperature (Operating/While Stored)	5 to 40°C / -10 to 50°C
	Humidity (Operating/While Stored)	20 to 80% RH (no condensation)/ 10 to 90% RH (no condensation)
	Vibration (Operating) ¹⁹	With HDD configuration: 2.0 m/s ² (JIS C60068-2-6:9 to 150Hz 1 cycle) With SSD configuration: 4.9 m/s ² (JIS C60068-2-6:9 to 150Hz 1 cycle)
	(While Packed)	19.6m/s ² or less
	Shock (Operating/While Packed)	19.6 m/s ² or less / 245 m/s ² or less
	Dust	0.3mg/m ³ or less (JEITA IT-1004B Class B compliant)
	Corrosive gas / chemicals	Not to be detected (JEITA IT-1004B Class A compliant)
	Allowable Instantaneous Power Failure Time	20 ms or less at the rated input voltage

- *1 The hyper-threading function is disabled in the factory setting. To enable this function, the BIOS setting must first be changed.
- *2 As the product supports dual channels, communication speed between the memory and CPU improves when 2 memory modules are mounted. Operation will not be guaranteed if you combine other than the genuine memory modules for Toshiba industrial computers.
- *3 A "SMART support software" tool that can be used to predict SSD life is not pre-installed. In case of an OS pre-installed model, an installation program is stored on the internal storage. Customers can install and use the program as needed. Also, mixed use of the SSD and HDD is only possible with the single disk model.
- *4 No expansion at customer site because of pre-shipment options.
- *5 Supports a total of 2 screens of 1 RGB connection + 1 DisplayPort connection or DisplayPort connection only (2 MST (Multi Stream Transport) compatible displays). 3-screen display with other combinations is not supported.
- *6 The DisplayPort of this product supports Display audio. When outputting audio from a display connected to a DisplayPort, use a cable and display that support DisplayPort audio. The DisplayPort of this product supports MST, and can output video by daisy-chaining up to two displays. Connect the Input and Output of the display compatible with MST correctly.
- *7 Use correcting units that meet the specifications below.

Terminal	Maximum Voltage	Remarks
LINE OUT	1Vrms	Load impedance 10kΩ to 600kΩ

- *8 USB interface does not always guarantee the operation of all the USB peripherals.
- *9 To use the digital input/output function, optional hardware is required (DI/DO interface, RAS terminal block and RAS cable).
- *10 This model has a power supply with a built-in PFC (power factor correction) circuit. If you are using a UPS (uninterrupted power supply), select a sine wave output type.
- *11 As a reference value to power consumption, when no peripherals are connected to the FA2100TX model 700 main unit (16 GB memory × 2, HDD × 2 (mirrored)), the maximum power consumption is about 120 W during startup of the main unit, and about 90 W after startup when the application is not running.
- *12 Windows adopts optical media and MIRACLE LINUX adopts a USB memory device.
- *13 Of the Operating Systems listed here, your specified OS will be installed. OS supply period is subject to change depending on the OS distribution period of the OS supplier.
- *14 If Windows is in use, the following functions are outside the scope of your support. Windows Bitlocker, power-saving modes (suspend, hibernation), Windows fast startup, Windows Hello.
- *15 Please note that Windows® 10 IoT Enterprise 2121 LTSC or Windows® 10 IoT Enterprise 2019 LTSC is the only pre-installation option we support. We do not support any other versions, servicing models or editions. For language selection, select either Japanese or English at the initial setup.
- *16 Client Access License (CAL) includes five licenses of Windows Server CAL. It does not include CAL for other specific functions. The secure boot function is not supported.
- *17 PCI Express slot board size (167.65 mm (L) × 111.15 mm (H) or less) mountable.
- *18 PCI slot board size (174.63 mm (L) × 106.68 mm (H) or less) mountable. Installable PCI boards are 5V key boards and 5V/3.3V shared key boards (Boards of 3.3V keys only cannot be installed).
- *19 Except when a drive unit such as an optical drive is running. If the SSD and HDD are used in a mixed configuration, the vibration specification will be the same as for HDD configuration (2.0 m/s2 or less (0.2G or less)).