TOSHIBA

FA2100T *model 600*

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

The FA2100T model 600 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® Celeron® G3900TE（2.3GHz/2 Core）and incorporates reliable memory with ECC (max. 8 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.
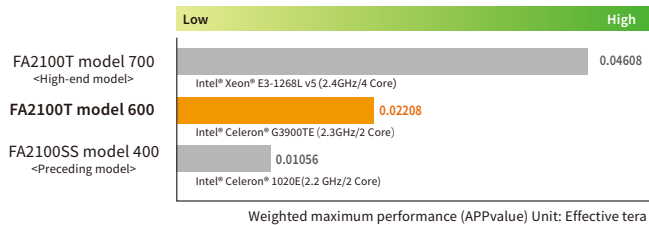
Now more functional

High cost performance CPU Celeron® G3900TE（2.3GHz/2 Core）

High-cost performance CPU Intel® Celeron® processor for work stations with built-in G3900TE（2.3GHz/2 Core） for high-speed processing.

CPU performance comparison

	Low	High
FA2100T model 700 <High-end model>	Intel® Xeon® E3-1268L v5 (2.4GHz/4 Core)	0.04608
FA2100T model 600	Intel® Celeron® G3900TE (2.3GHz/2 Core)	0.02208
FA2100SS model 400 <Preceding model>	Intel® Celeron® 1020E(2.2 GHz/2 Core)	0.01056

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.

Gigabit (3 Ports) Ethernet Interface is a Standard Feature

Gigabit-compatible 3 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 (compatible with full HD display) 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

Front switch cover

Main unit lock bracket

Operation Error Prevention

AC Power Cable Clamp

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

100±0.8   310±1.2   340±1.2
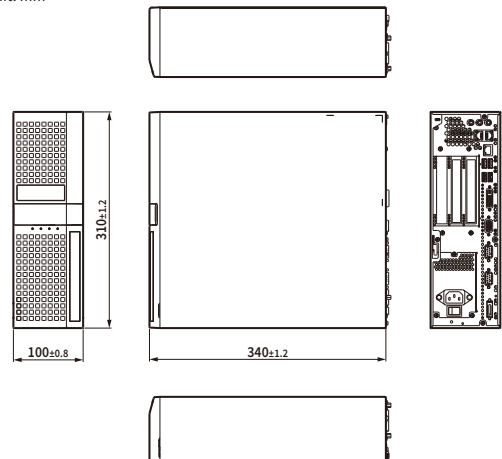
Specifications

Product Name		FA2100T model 600	
		Single Disk Model	**Mirroring Disk Model**
Processor	Main Processor	Intel® Celeron® G3900TE（2.3GHz/2 Core）	
	No. of Cores/No. of Threads	2/2	
	Level 2 Cache Memory	256 KB/Core (built into main processor)	
	Level 3 Shared Cache Memory	2 MB (built into main processor)	
Chipset		Intel® C236 Chipset	
Main Memory[*1]	Memory	DDR4-SDRAM（DDR4-2133/PC4-17000) with ECC function, DIMM 2 sockets	
	Capacity	Min. 4GB (4GB×1), Max. 8GB (8GB×1)	
Auxiliary Storage	Built-in HDD		
	Built-in SSD[*12]	Options (Refer to Optional Hardware Specifications)	
	Built-in DVD-ROM[*2]		
	Built-in DVD Super Multi-Drive[*2*3]		
RAID Compatible		—	RAID1
Interface	COM Interface	RS-232C (9-pinD-SUB)×2 (rear)	
	Graphic Interface	RGB×1, DVI-D×1 (rear) CPU・Chipset built in Graphic Function	
	LAN Interface	10BASE-T/100BASE-TX/1000BASE-T (Auto Negotiation) (RJ45)×3 (rear) Wake On LAN (compatible for main unit port only)	
	Sound Interface[*4]	LINE IN/LINE OUT/MIC IN (3.5φ mini jack) (rear)	
	USB Interface[*5]	USB×2 (rear), (TYPE A USB 3.0), USB×4 (front/rear 2 ports each) (TYPE A USB 2.0)	
	DI/DO Interface	Option(Refer to Optional Hardware Specifications)	
Expansion Interface		Optional	
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[*6] (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)[*7]		Rated voltage 100VAC-240 VAC, allowable voltage 85 VAC - 264 VAC, allowable frequency 50 Hz/60Hz±3Hz	
Electric Power Consumption		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), 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) [*8*9]		Windows® 10 IoT Enterprise 2019 LTSC (Japanese or English selectable) (64bit)[*10] Windows® 10 IoT Enterprise 2016 LTSB (Japanese or English selectable) (64bit)[*10] Windows® 7 Professional SP1 (Japanese version/English version) (32bit/64bit)[*11]	

Optional Hardware Specifications

Expansion Main Memory	DDR4-SDRAM (DDR4-2133/PC4-17000) 4GB/8GB selectable
Built-in HDD	Single disk model capacity: 2TB HDD 2 units mountable
	Mirroring disk model capacity:2TB/500GB (Customized options) (Hot swap compatible mirroring disk)
Built-in SSD[*12]	Single disk model capacity: 128 GB/512 GB 2 units mountable
	Mirroring disk model capacity: 160 GB/400 GB 2 units mountable (hot swap compatible)
Built-in DVD-ROM[*2]	Read Media DVD-ROM,CD-ROM,DVD-R,DVD+R,DVD-RW,DVD+RW,DVD-RAM, CD-R,CD-RW
Built-in DVD super multi-drive[*2*3]	Write/Read Media DVD-ROM,CD-ROM,DVD-R,DVD+R,DVD-RW,DVD+RW,DVD-RAM, CD-R,CD-RW
DI/DO Interface[*2]	(DI/DO board) Digital input/output (half-pitch 20-pin) DI 4 points, DO4 points, remote input 1point
Expansion Interface	PCI-Express (x16) 1slot (half size[*13]) PCI Express 3.0 PCI-Express (x4) 1slot (half size[*13]) PCI Express 3.0
	PCI slot (half size[*14]) PCI 2.2
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)	FA2100T model 700/600 unit instruction manual, RAS support software instruction manual, RAID controller instruction manual

*1 If a main memory of 4GB or more is installed with a 32-bit OS already installed in your system, the available memory capacity will be about 2.1GB (default) in order to reserve the memory address area for PCI device, etc.
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.

*2 No expansion at customer site because of pre-shipment options.

*3 Writing software is not included. Use the standard writing functions supported by each OS.

*4 Use correcting units that meet the specifications below.

Terminal	Maximum Voltage	Remarks
LINE IN	1Vrms	Input impedance 10kΩ
LINE OUT	1Vrms	Load impedance 10kΩ to 600kΩ
MIC IN	0.1Vrms	Input impedance 10kΩ

*5 USB interface does not always guarantee the operation of all the USB peripherals.

*6 To use the digital input/output function, optional hardware is required (DI/DO interface, RAS terminal block and RAS cable).

*7 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.

*8 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.

*9 If Windows is in use, the following functions are outside the scope of your support. Windows Bitlocker, Windows XP mode, power-saving modes (suspend, hibernation), Windows fast startup, Windows Hello.

*10 Please note that Windows® 10 IoT Enterprise 2019 LTSC or Windows® 10 IoT Enterprise 2016 LTSB 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.

*11 This product carries only a USB controller compatible with the USB 3.0 standard (not a USB controller compatible with the USB1.0 and USB2.0 standards). Since a USB3.0 driver is not incorporated in Windows® 7 installation media, the USB-connected keyboard and mouse cannot be operated while installing Windows® 7. If using Windows® 7 on this product, please consider obtaining a Windows® 7 pre-installed model.

*12 The "S・M・A・R・T (Self Monitoring Analysis and Reporting Technology) data monitoring software (XSMART)" that can be used to predict SSD life is not pre-installed. Customers can install and use the program as required. SSD and HDD cannot be mixed in the Mirroring disk model.

*13 PCI Express slot board size (167.65 mm (L) × 111.15 mm (H) or less) mountable.

*14 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).

*15 Except while optical drive is in operation.

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)[*15]	With HDD configuration: 2.0 m/s² (JIS C60068-2-6:9 to 150Hz 1 cycle)
		With SSD configuration: 4.9 m/s² (JIS C60068-2-6:9 to 150Hz 1 cycle)
	(While Packed)	19.6m/s² or less
	Shock (Operating/While Packed)	19.6 m/s² or less / 245 m/s² or less
	Dust	0.3mg/m³ 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