Business Computer VPC-700 Series



* Specifications, color and design of the products are subject to change without notice.

This product is a high-performance embedded-type personal computer equipped with the 6th-generation Intel $^{\circ}$ Core $^{\text{TM}}$ processor.

It has extension interfaces such as DVI-I, HDMI, DisplayPort, 1000BASE-T, USB 3.0, serial and Audio. These Units are ideal for a wide range of embedded applications, such as control devices and information terminals based on general-purpose PC OSes.

Embedded-type chipset and CPU have been adopted. The use of readily available parts ensures the ease of the use of the product.

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- * The contents in this document are subject to change without notice.
- * Visit the CONTEC website to check the latest details.
- * The information in the data sheets is as of January 2024.

Features

Compatible with Intel ® Core ™ processor series Skylake

The product is equipped with the 6th-generation Intel [®] Core [™] processor and greatly realizes lower-power consumption while ensuring fine performance of operation tasks and drawing. Adopting embedded-type CPU contributes to a stable supply.

The compact size that can install at a small area

This product is a compact size PC of $264(W) \times 263(D) \times 112(H)$ mm that can install at a small area.

Adopt removable storage

The product adopts front accessible 2.5-inch SATA storage, and also supports RAID function such as mirroring.

Supports mirroring (RAID1)

Mirroring enables the construction of redundant systems.

[Hardware RAID]

Selecting the optional mirror card enables the construction of hardware mirroring. Hot-swapping is also supported.

[Software RAID]

Software mirroring can be constructed, but hot-swapping is not supported.

Major types of peripherals are supported with rich interfaces including It has a variety of extended interface such as PCI Express $3.0(\times 16) \times 1$ slot, DVI-I x 1, HDMI x 1, DisplayPort x 1, $1000BASE-T \times 3$, USB3.0 x 6, USB2.0 x 2, serial (RS-232C/RS-422A/RS-485) x 1, Audio.

Supported OS

- Windows 10 IoT Enterprise LTSB 2016 64bit (Japanese / English / Chinese / Korean)
- Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)
- Windows 10 IoT Enterprise 2019 LTSC 64bit with Microsoft Edge (Chromium) (Japanese/English/Chinese/Korean)
- Windows 7 Professional for Embedded Systems SP1 32bit (Japanese / English)
- Windows 7 Professional for Embedded Systems SP1 64bit (Japanese / English)

Specifications

Function specifications <1/2>

ltem		Description					
		VPC-700-18000B	VPC-700-28000B	VPC-700-38000B			
CPU		Intel® Celeron® Processor	Intel® Core™ i5 Processor	Intel® Core™i7 Processor			
[Selection]		G3900TE 2.3GHz	GHz 6500TE 2.3GHz 6700TE 2.4GHz				
Chip set		Intel® Q170					
BIOS		BIOS (mfd. by AMI)					
Memory		Max16GB, 260pin SO-DIM	M Socket x 2, PC4-17000(DE	DR4 2133) DDR4 SDRAM			
[Selection]		8GB: 8GB DDR4 SO-DIMI	M 2133MHz ×1				
		16GB: 8GB DDR4 SO-DIM	M 2133MHz ×2				
Graphic *1		DVI-1 x 1 *2, HDM1 x 1, Disp	playPort x 1, Supports three d	isplays			
Controller		Intel® HD Graphics 510	Intel® HD Graphics 530				
System	HDMI	800x600, 1024x768, 1152x	800x600, 1024x768, 1152x864, 1280x600, 1280x720, 1280x800, 1280x960,				
resolution		1280x1024, 1360x768, 136	1280x1024, 1360x768, 1366x768, 1400x1050, 1440x900, 1600x1200, 1680x1050,				
		1792x1344, 1856x1396, 19	20x1080, 1920x1440, 2048x1	1152, 2048x1536, 2560x1600,			
		2560x1920, 2560x2048, 38	40x2160 (16,770,000 colors)				
	Display	800x600, 1024x768, 1152x	864, 1280x600, 1280x720, 12	180x800, 1280x960,			
	Port	1280x1024, 1360x768, 136	6x768, 1400x1050, 1440x900), 1600x1200, 1680x1050,			
		1792x1344, 1856x1396, 1920x1080, 1920x1440, 2048x1152, 2048x1536, 2560x1600,					
		2560x1920, 2560x2048, 38	40x2160 (16,770,000 colors)				
	DVI-I	800 x 600, 1024 x 768, 115	2 x 864, 1280 x 600, 1280 x 7	20, 1280 x 768,			
		1280 x 800, 1280 x 960, 1280 x 1024, 1360 x 768, 1366 x 768, 1400 x 1050,					
		1440 x 900, 1600 x 900, 16	00 x 1200, 1680 x 1050, 1920	x 1080, 1920 x 1200			
		(16,770,000 colors)					
Storage		Removable drive, SATA III 2	2.5-inch x 2				
[Selection]		SATA III 2.5-inch HDD 500GB (Max. 2pcs)					
		SATA III 2.5-inch SSD 256GB (Max. 2pcs)					
		Hardware RAID (Mirroring	Hardware RAID (Mirroring) / Software raid (Mirroring)				
Optical drive		Slim Super Multi drive					
Audio		3.5φ stereo minijack, HD Audio compliant					
		Front: Line out, Mic in, 1 port					
		Rear: Line in, Line out, Mic in, 1 port					
LAN		3 ports (RJ-45 connector)					
		LAN-1: Intel I219-LM Controller, LAN-2, 3: Intel I210-AT Controller					
		1000BASE-T/100BASE-TX/10BASE-T, Wake On LAN support					
USB		A-TYPE connector					
		Front: USB2.0 x 2 ports,					
		Rear: USB3.0 x 6 ports					
Serial		9pin D-SUB connector(male)					
[Selection]		RS-232C/422A/485 x 1 port,					
		RS-232C up to 2 ports can be set. (occupies the expansion board slot)					
		Baud rate : 50 - 115,200bps					
Expansion box	ard slot	PCI Express 3.0(x16) 1 slot Low Profile support					
		Usable board dimension: Max. 150mm(L) x 67.9mm(H)					
Security (TPM)		TCG TPM2.0					
Hardware monitoring		Monitoring CPU temperature, system temperature, power voltage					
RTC/CMOS		The real-time clock is accurate within ±3 minutes (at 25°C) per month,					
D 14		Lithium backup battery life: 7 years or more					
Power Management		Power management setup via BIOS, Power On by Ring / Wake On LAN					
Supportable OS		Windows 10 loT Enterprise LTSB 2016 64bit (Japanese / English / Chinese / Korean)					
[Selection]		Windows 10 loT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)					
		Windows 10 loT Enterprise 2019 LTSC 64bit with Microsoft Edge (Chromium)					
		(Japanese/English/Chinese/Korean)					
			r Embedded Systems SP1 32				
		Windows 7 Professional fo	r Embedded Systems SP1 64	lbit (Japanese / English)			

VPC-700 Serie

Function specifications <2/2>

Description						
VPC-700-18000B	VPC-700-28000B	VPC-700-38000B				
100 - 240VAC (50/60Hz)						
90 - 264VAC						
ut currency 4A						
180W						
USB3.0 I/F: +5V: 5.4A (900mAx 6)						
USB2.0 I/F: +5V: 1A (500mA x 2)						
PCI Express 3.0(x16) slot, 33V:	2.0A, +12V:1.0A (19W or le	ss)				
264(W)×263(D)×112(H) (No protrusions)						
Weight About 4.3kg (Excluding attachment fittings)						
	100 - 240VAC (50/60Hz) 90 - 264VAC 4A 180W USB3.0 VF: +5V: 54A (900m USB2.0 VF: +5V: 1A (500mA: PCI Express 3.0(x16) slot; 33V: 264(W)x263(D)x112(H); No p About 4.3kg (Excluding attach	VPC-700-18000B VPC-700-28000B 100 - 240VAC (50)/60Hz) 90 - 264VAC 4A 180W USB3.0 VF: +5V: 54A (900mAx 6) USB2.0 VF: +5V: 1A (500mA x 2) PCI Express 3.0(x16) slot 33V: 2.0A, +12V: 1.0A (19W or le 264(W)×263(D)×112(H) (No protrusions)				

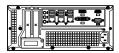
- 1 If the display cable is connected after the PC turns on, Monitor may not be displayed.
- *2 When connecting a display using only analog RGB on models with Windows 10 pre-installed (with "CSM Support" set to "Disabled"), a beep may be heard five times at startup, and the BIOS screen may not be displayed for some displays.
 - The OS screen will be displayed and the product can be used as normal.
 - To configure BIOS settings, use a different interface (DVI, HDMI, DisplayPort, etc.), or connect a different display.

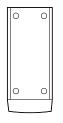
Environment Requirements

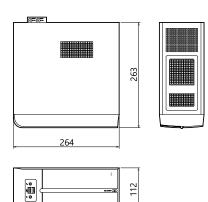
	Item	Description			
Operating temperature		5-40°C			
Storage temperature		-20 - +60°C			
Operating H	umidity	20 - 80%RH (No condensation)			
Storage Humidity		5 - 80%RH (No condensation)			
Floating dust	particles	Not to be excessive			
Corrosive ga	ses	None			
Line-noise Line noise AC line / ±2kV, Signal line / ±1kV		AC line / ±2kV, Signal line / ±1kV			
resistance		(EC61000-4-4 Level 3, EN61000-4-4 Level 3)			
	Static electricity	Contact discharge / ±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2)			
resistance		Atmospheric discharge / ±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)			
Vibration	Sweep resistance	10 - 57Hz/semi-amplitude: 0.075 mm, 57 - 150Hz/9.8m/s ² (1G)			
resistance		40 min. each in x, y, and z directions			
		(JIS C60068-2-6 compliant, IEC60068-2-6 compliant)			
Impact resistance		98m/s² (10G) / 11ms / half-sine shock for 3 times in x, y, and z directions			
-		(JIS C60068-2-27 compliant, IEC60068-2-27 compliant)			
Standard		VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A,			
		Low Voltage Directive, RoHS Directive), UKCA, CCC*1			
Grounding		Class D grounding, SG-FG / continuity			

^{*1} For the CCC model only

Physical Dimensions







Included Items

Product...1

AC cable...1

DVI-analog RGB conversion adapter...1

Rubber Foot...4

Flat Screw for HDD *1...8

Binding Screw for Extension Board *1...2

CCC Compliant AC Cable (250VAC, 3Ptype) *2...1

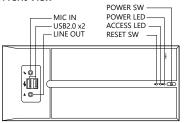
Hazardous Substances Management *2...1

Product Guide...1

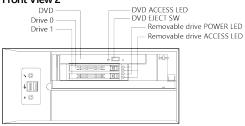
- *1 The quantity varies depending on the product configuration.
- *2 This is included when it is selected as a CCC support.

Nomenclature of Product Components

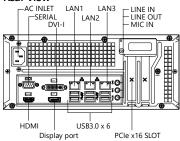
Front View



Front View 2



Rear View



Name	Function		
POWER LED	Power ON display LED		
ACCESS LED	SATA device access display IED		
POWER-SW	Power switch		
RESET SW	Reset switch		
DVD	Slim super multi drive		
Drive 0	SATA III 2.5 inch removable drive		
Drive 1			
DVD ACCESS LED	DVD access display LED		
DVD EJECT SW	Eject switch		
Removable drive POWER LED	Drive connection display LED		
Removable drive ACCESS LED	Drive access display LED		
SERIAL	RS-232C/422/485 (9pin D-SUB connector (male)) 1 port		
DVI-I	DVI-I1port		
Displayport	Display Port Connector 1 port		
HDMI	HDMI (19pin HDMI TYPE-A connector) 1 port		
USB3.0	USB3.0 (TYPE-A connector) 6 port (Rear)		
USB2.0	USB2.0 (TYPE-A connector) 2 port (Front)		
LAN	1000BASE-T/100BASE-TX/10BASE-T (RJ-45 connector) 3 port		
AUDIO	Line in, Line out, Mic in (3.5 φ stereo minijack) 1 port (Rear) Line out, Mic in(Front)		
AC INLET	AC100-240V Power input connector		

[mm]

Model List

♦BTO Model

VPC-700 Model Rule

Model Name **VPC-700**

Type Name <u>**B**</u> <u>**2**</u> <u>**2**</u> <u>**1**</u> <u>**1**</u> <u>**1**</u> <u>**1**</u> <u>**R**</u> <u>**1**</u> <u>**0**</u> <u>**0**</u> <u>**0**</u>

No. 1 2 3 4 5 6 7 8 9 10 11

No.	ltem	Type Name	Description			
1	Product	В	VPC-700			
2	CPU	1	Celeron G3900TE (35W)			
			Core i5 6500TE (35W)			
		3	Core i7 6700TE (35W)			
3			DDR4 SO-DIMM 8GB (8GB x 1)			
			DDR4 SO-DIMM 16GB (8GB x 2)			
4	Storage (Drive 0)	0	None			
		1	500GB 2.5inch HDD			
		2	256GB 2.5inch SSD			
5	Storage (Drive 1)	0	None			
		1	500GB 2.5inch HDD			
		2	256GB 2.5inch SSD			
6	Optics system drive (SATA 3)	1	Slim DVD Multi Drive			
7	RAID	0	None			
		Н	Hardware RAID (Mirroring)			
			Software RAID (Mirroring)			
8	8 OS		None			
			Windows 10 IoT Enterprise LTSB 2016 64bit (Japanese / English / Chinese / Korean)			
			Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)			
		2	Windows 7 Professional for Embedded Systems SP1 32bit (Japanese / English)			
			Windows 7 Professional for Embedded Systems SP1 64bit (Japanese / English)			
		D	Windows 10 IoT Enterprise 2019 LTSC 64bit with Microsoft Edge (Chromium) (Japanese/English/Chinese/Korean)			
9 Increase option (COM port) 0 None		None				
			COM port x1 (an expansion slot occupied)			
			COM port x 2 (2 expansion slot occupied)			
10	10 Onsite maintenance service 0 None		None			
2 Onsite maintenance service of 2 years		Onsite maintenance service of 2 years				
		3	Onsite maintenance service of 3 years			
11	Other	1	Fan cover (for a vertical installation)			

VPC-700 Series 3

♦Standard Model, CCC Model

VPC-700 Model Rule

Model Name **VPC-700**

Type Name <u>1</u> <u>8</u> <u>1</u> <u>5</u> <u>0</u> <u>B</u> <u>C</u>

No. 1 2 3 4 5 6 7

No.	ltem	Type Name	Description	
1	CPU	1	Celeron G3900TE (35W)	
		2	Core i5 6500TE (35W)	
		3	Core i7 6700TE (35W)	
2	Memory	8 DDR4 SO-DIMM 8GB (8GB x 1)		
3	Storage *1	1 Drive 0: 500GB 2.5-inch HDD Drive 1: None		
		5	Drive 0: 256GB 2.5-inchSSD Drive 1: None	
4, 5	OS	50	Ubuntu (Linux) *2	
		31	Windows 10 IoT Enterprise LTSB 2016 64bit (Japanese / English / Chinese / Korean)	
6	Chassis color	В	Black	
7	ccc	С	China Compulsory Certification	

^{*1} OS is Ubuntu (Linux) when the storage is selecting HDD.

OS is Windows 10 when the storage is selecting SSD.

- *2 Operations are not supported since it is installed for boot checking purpose only.
- The optics system drive is installed as a standard feature.
- COM port connector is installed as a standard feature on the rear expansion slot.

Model Name		CDLI	C+	OS.
Standard Model	CCC Model	CPU	Storage	OS
VPC-700-18150B	VPC-700-18150BC	Celeron G3900TE	500GB HDD	Ubuntu (Linux)
VPC-700-28150B	VPC-700-28150BC	Core i5 6500TE	500GB HDD	Ubuntu (Linux)
VPC-700-38150B	VPC-700-38150BC	Core i7 6700TE	500GB HDD	Ubuntu (Linux)
VPC-700-18531B	VPC-700-18531BC	Celeron G3900TE	256GB SSD	Windows 10 IoT Enterprise LTSB 2016
VPC-700-28531B	VPC-700-28531BC	Core i5 6500TE	256GB SSD	Windows 10 IoT Enterprise LTSB 2016
VPC-700-38531B	VPC-700-38531BC	Core i7 6700TE	256GB SSD	Windows 10 IoT Enterprise LTSB 2016