

Business Computer
LPC-1700 Series



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

Features

Compatible with Intel® Core™ processor series Coffee Lake
The product supports an 8th-generation Intel® Core™ processor and Celeron® processor G4900T and greatly realizes lower-power consumption while ensuring fine performance of operation tasks and drawing. Adopting embedded-type CPU contributes to a stable supply.

High-performance graphics with CPU embedded type
Full HD video can be smoothly played with the Intel® HD Graphics 630. It also supports full HD output of the three-screen with the DVI-I, DisplayPort and HDMI.

Rich variety of interfaces to expand your peripherals freely
Interfaces including DVI-I, HDMI, DisplayPort, 1000BASE-T x 3, USB3.2 Gen1 (USB3.0) x 6, USB2.0 x 4, serial port (RS-232C/RS-422A/RS-485 x 1), and audio are provided.

Included Items

- Product [LPC-1700 Series] ...1
- Vertical Stand ... 1
- AC Cable (125VAC, 3-P type) ...1
- DVI-Analog RGB Conversion Adapter ...1
- Mouse...1 *1
- Keyboard...1 *1
- AC Cable (Chinese Specification) ...1 *1
- Hazardous Substances Management...1 *1
- Rubber Foot ...1Set
- Product Guide ...1

*1 The number of covers differs depending on the model.

Support OS

Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)

Windows 10 IoT Enterprise 2019 LTSC 64bit with Office (Japanese / English / Chinese / Korean)

This product is a BTO industrial computer that support an 8th generation Intel® Core™ processor series or Celeron® processor G4900T. The Intel® Q370 chipset with DDR4 memory (32GB) provides advanced computing and graphical performance.

This product features a variety of interfaces such as one each port of DVI-I, HDMI, DisplayPort, Six USB3.2 Gen1 (USB3.0) ports (front: 2,rear: 4), four USB2.0 ports (front: 2, rear: 2), one serial ports (RS-232C/422A/485×1), and three 1000BASE-T ports, which can be used in a wide range of embedded applications such as general-purpose PC OS-based controllers and information terminals.

Expansion slots : PCI-Express 3.0(x16) slot x1, PCI-Express 3.0(x4) slot x2, PCI slots x1

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*Visit the CONTEC website to check the latest details in the document.

*The information in the data sheets is as of July 2024.

Specifications

Function specification

Item	Description	
CPU [Selection]	Intel® Core™ i7-8700T Processor 2.4GHz Intel® Core™ i5-8500T Processor 2.1GHz Intel® Core™ i5-8500 Processor 3.0GHz *6 Intel® Celeron® Processor G4900T 2.9GHz	
Chip set	Intel® Q370	
BIOS	BIOS (mfd. by AMI)	
Memory [Selection]	Max. 32GB, 288-pin U-DIMM socket x 4, DDR4-2666 SDRAM or DDR4-3200 SDRAM 8GB: 8GB DDR4 U-DIMM 2666MHz x 1 16GB: 8GB DDR4 U-DIMM 2666MHz x 2 32GB: 16GB DDR4 U-DIMM 3200MHz x 2	
Graphic		
Controller	Intel® HD Graphics 630	
System resolution	HDMI	800 x 600, 1,024 x 768, 1,152 x 864, 1,280 x 600, 1,280 x 720, 1,280 x 768, 1,280 x 800, 1,280 x 960, 1,280 x 1,024, 1,360 x 768, 1,366 x 768, 1,400 x 1,050, 1,440 x 900, 1,600 x 900, 1,600 x 1,200, 1,680 x 1,050, 1,920 x 1,080, 1,920 x 1,440, 2,048 x 1,152, 2,048 x 1,536, 2,560 x 1,600, 2,560 x 1,920, 2,560 x 2,048, 3,840 x 2,160 (16,770,000 colors)
	Display Port	800 x 600, 1,024 x 768, 1,152 x 864, 1,280 x 600, 1,280 x 720, 1,280 x 768, 1,280 x 800, 1,280 x 960, 1,280 x 1,024, 1,360 x 768, 1,366 x 768, 1,400 x 1,050, 1,440 x 900, 1,600 x 900, 1,600 x 1,200, 1,680 x 1,050, 1,920 x 1,080, 1,920 x 1,440, 2,048 x 1,152, 2,048 x 1,536, 2,560 x 1,600, 2,560 x 1,920, 2,560 x 2,048, 3,840 x 2,160 (16,770,000 colors)
	DVI-I	800 x 600, 1,024 x 768, 1,152 x 864, 1,280 x 600, 1,280 x 720, 1,280 x 768, 1,280 x 800, 1,280 x 960, 1,280 x 1,024, 1,360 x 768, 1,366 x 768, 1,400 x 1,050, 1,440 x 900, 1,600 x 900, 1,600 x 1,200, 1,680 x 1,050, 1,920 x 1,080 (16,770,000 colors)
Storage [Selection]	SATAIII 2.5"SSD 256GB TLC (Max 2pcs) SATAIII 2.5"SSD 512GB TLC (Max 2pcs) SATAIII 2.5"SSD 1TB TLC (Max 2pcs) SATAIII 2.5"SSD 2TB TLC (Max 2pcs) SATAIII 3.5"HDD 2TB 5400rpm (Max 1pcs) SATAIII 3.5"HDD 2TB 7200rpm (Max 1pcs) *6 SATAIII 3.5"HDD 4TB 5400rpm (Max 1pcs) Software RAID (Mirroring) *1	
Optical Drive [Selection]	5"DVD Super Multi drive	
Interface	Display	DVI-I x 1, HDMI x 1, DisplayPort x 1, Supports three displays (HDMI and DisplayPort: 4K output, DVI: 1080p)
	USB	Type-A connector Front: USB3.2 Gen1 (USB3.0) x 2, USB2.0 x 2 Rear: USB3.2 Gen1 (USB3.0) x 4, USB2.0 x 2
	Audio	HD Audio compliant, 3.5p stereo mini jack LINE OUT x 1, LINE IN x 1, MIC IN x 1
	Serial *2	9-pin D-SUB connector(male) [male] x 1 (RS-232C/422A/485 x 1) Baud rate: 50 - 115,200bps
Expansion slot	LAN	3-port (RJ-45 connector) LAN A, B: Intel I211-AT Controller, LAN C: Intel I219-LM Controller 1000BASE-T/100BASE-TX/10BASE-T, Wake On LAN
		- PCI-Express 3.0(x16) slot x 1 Low Profile Usable card dimension: Max. 160mm(L) x 69mm(H) - PCI-Express 3.0(x4) slot x 2 Low Profile Usable card dimension: Max. 120mm(L) x 69mm(H) - PCI slot x 1 Low Profile Usable card dimension: Max. 120mm(L) x 69mm(H)
Hardware monitoring	Monitoring CPU temperature, card temperature, fan speed and power voltage	

Item	Description
Watchdog timer (WDT)	Software programmable, 255 level (1sec - 255sec), Time up allows reset
Security (TPM)	TCG TPM2.0
RTC/CMOS	Lithium backup battery life: 7 years or more The real-time clock is accurate within ±3 minutes (at 25°C) per month (CPU integrated RTC).
Power Management	Power management setup via BIOS Power On by Ring/Wake On LAN
Support OS	Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean) Windows 10 IoT Enterprise 2019 LTSC 64bit with Office (Japanese / English / Chinese / Korean)
Power supply	250W FlexATX power supply (50/60Hz Input auto switching)
Rated Voltage Range	100 - 240VAC
Range of input voltage	90 - 135VAC, 180 - 264VAC
Power consumption (Max)	100 - 240VAC, 2.2 - 0.9A
External Device Power Supply Capacity	USB2.0 I/F +5V: Total 2A USB3.0 I/F +5V: Total 5.4A PCI-Express 3.0(x16) slot +3.3V: 3A, +12V: 5.5A(Max. 75W) *4*5 PCI-Express 3.0(x4) slot +3.3V: 3A, +12V: 2.1A(Max. 25W) *4*5 PCI slot +5V: 2A *3
Physical dimensions (mm)	330(W) x 399(D) x 96(H) (Not including the protrusions)
Weight	7.0kg (approx.) (Not including the attachment fitting)

- *1 Only 2.5" SSD is supported.
- *2 It is possible to add RS-232C x1 by option.
- *3 Ensure that the total power supply capacity for a +5V external device is 39W or less.
- *4 Ensure that the total power supply capacity for a +3.3V external device is 9.9W or less.
- *5 Ensure that the total power supply capacity for a +12V external device is 66W or less.
- *6 The standard model [LPC-1700-J436000100000] will be provided.

Installation Environment Requirements

Item	Description
Operating temperature	5 - 40°C
Storage Temperature	-20 - +60°C
Operating Humidity	20 - 80%RH (No condensation)
Storage Humidity	20 - 80%RH (No condensation)
Floating dust particles	Not to be excessive
Corrosive gases	None
Line-noise resistance	Line noise AC Line:±2kV, Signal Line:±1kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3)
	Static electricity resistance Contact discharge /±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Air discharge /±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)
Vibration resistance	Sweep resistance 10 - 57Hz /semi-amplitude vibration 0.035mm, 57 - 150Hz/0.5G 40minutes each in X, Y, and Z directions (JIS C60068-2-6-compliant, IEC60068-2-6-compliant)
Impact resistance	10 - 50Hz/0.5G 25minutes each in X, Y, and Z directions (JIS C 60068-2-6-compliant, IEC 60068-2-6-compliant)
Grounding	Class D grounding, SG-FG / continuity
Standard	VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A, RoHS Directive), UKCA
	[Selection] CCC *1

- *1 Please check "LPC-1700 type name rule" for how to distinguish CCC compatible models.
Models without OS are not supported as CCC compatible models.

Support OS

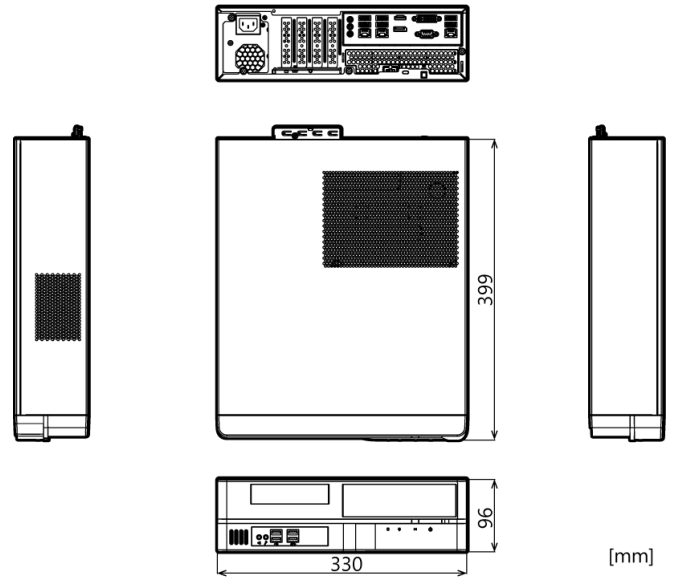
Item	Model	Description
HDD	HDD-2TS-3H	3.5-inch 2TB SATA Hard Disk Drive

CAUTION

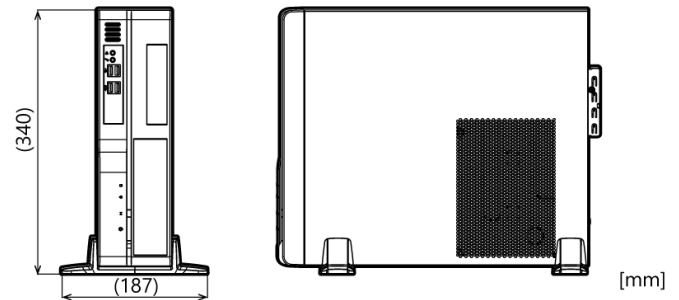
If a product other than our optional one is used, the normal operation may be impaired or the functions may be limited.

Physical Dimensions

Horizontal Installation

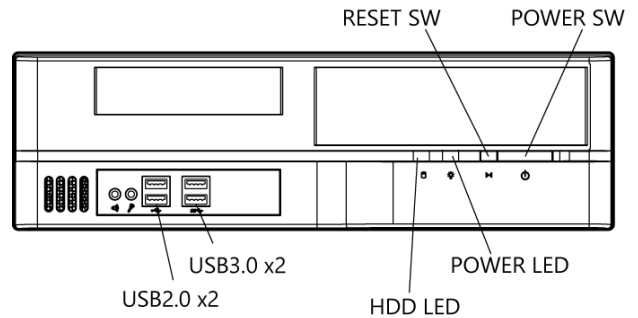


With the Vertical Stand



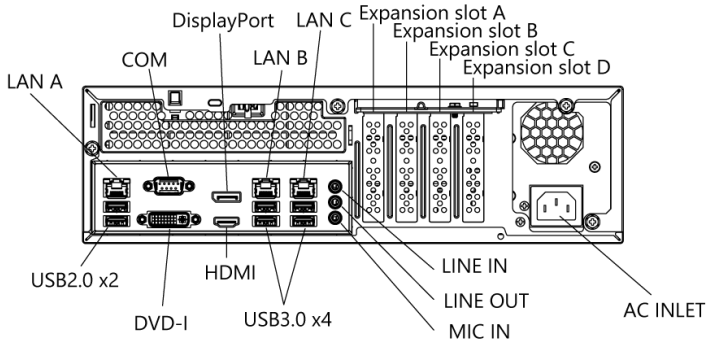
Component Name

Front View



Name	Function
USB2.0	USB2.0 (Type-A connector) 2 ports
USB3.0	USB3.2 Gen1 (Type-A connector) 2 ports
HDD LED	SATA device LED
POWER LED	Power LED
RESET SW	System reset switch
POWER SW	Power switch

Rear View



	Name	Function
Rear	AC INLET	AC100 - 240V power input connector
	Expansion slot A	PCI Express(x16) slot x 1 Low Profile
	Expansion slot B	PCI slot x1 Low Profile
	Expansion slot C	PCI Express(x4) slot x 1 Low Profile
	Expansion slot D	PCI Express(x4) slot x 1 Low Profile
	LAN	1000BASE-T/100BASE-TX/10BASE-T (RJ-45 Connector) I211: Ethernet x 3
	USB2.0	USB2.0 (Type-A Connector) x 2
	COM	RS-232C/RS-422A/RS-485 (9pin D-SUB Connector (female)) 1 port
	DVI-I	DVI-I x 1 (25pin, female)
	DisplayPort	DisplayPort x 1 (20pin, female)
	HDMI	HDMI x 1 (19pin, female)
	USB3.0	USB3.2 Gen1 (USB3.0) (TYPE-A Connector) x 4
	LINE IN	Line input (3.5Φ PHONE JACK)
	LINE OUT	Line output (3.5Φ PHONE JACK)
	MIC INPUT	Mic input (3.5Φ PHONE JACK)

Model Name description

LPC-1700 type name rule

Model name LPC-1700

Type name J 1 1 A 0 A 0 1 3 0 0 0 0

No. 1 2 3 4 5 6 7 8 9 10 11 12 13

No.	Item	No.	Contents
1	Region	J	fixing
2	CPU	1	Intel® Celeron® Processor G4900T 2.9GHz
		3	Intel® Core™ i5-8500T Processor 2.1GHz
		5	Intel® Core™ i7-8700T Processor 2.4GHz
3	Memory	1	8GB: (8GB DDR4 2666MHz x 1)
		2	16GB: (8GB DDR4 2666MHz x 2)
		3	32GB: (16GB DDR4 3200MHz x 2)
4	Storage1	0	None
		1	2TB 3.5" HDD
		2	4TB 3.5" HDD
		A	256GB 2.5" SSD (TLC)
		B	512GB 2.5" SSD (TLC)
		C	1TB 2.5" SSD (TLC)
		D	2TB 2.5" SSD (TLC)
5	Storage2	0	None
		A	256GB 2.5" SSD (TLC)
		B	512GB 2.5" SSD (TLC)
		C	1TB 2.5" SSD (TLC)
		D	2TB 2.5" SSD (TLC)
6	Optical drive	0	None
		A	Optical drive
7	RAID	0	None
		R	Software RAID(Mirroring)
8	OS	0	None
		1	Windows 10 IoT Enterprise 2019 LTSC 64bit (JP/EN/CHN/KOR)
		2	Windows 10 IoT Enterprise 2019 LTSC 64bit (with Office) (JP/EN/CHN/KOR)
9	Keyboard & mouse	0	None
		1	USB JPN109Keyboard (JP109)
		2	USB Optical mouse
		3	USB JPN109Keyboard (JP109) + USB Optical mouse
		4	USB EN104Keyboard (US104)
		6	USB EN104Keyboard (US104) + USB Optical mouse
10	Expansion COM(B)	0	None
		1	RS-232C x 1
11	CCC	0	None
		1	CCC
12	Reserved	0	
13	Reserved	0	

LPC-1700 Model Name (Standard Model)

Model Name	CPU	Memory	OS	Storage
LPC-1700-J436000100000	Core i5 8500 Processor (3.0GHz)	32GB Non ECC	Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)	SATA HDD 2TB

* Storage 2, optical drive, RAID, additional COM(B), keyboard & mouse are not available for the models shown above.