

BOX-PC Fanless, Atom N2600 1.6GHz BX-955S Series



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

Model	CPU	Memory	Video Output	Pre-installed OS (storage device)
BX-955SD-DC6000	Intel(R) Atom™ Processor N2600 (1.6GHz)	2GB	DVI-I	Without OS / Storage
BX-955S-DC6311				Windows Embedded Standard 2009 (CFast 4GB)
BX-955SD-DC6311				Windows Embedded Standard 7 (CFast 8GB)
BX-955SD-DC6312 *1				Windows Embedded Standard 7 (CFast 16GB) (Japanese, English, Chinese, Korean)
BX-955SD-DC631N				

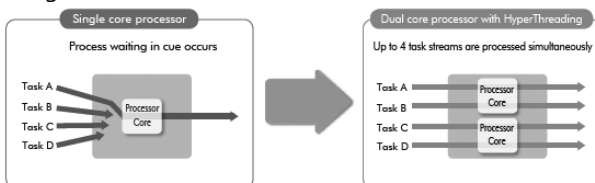
*1 It does not correspond to analog RGB. Contec provides model for analog RGB output. For more details on this, contact your retailer.

Features

Dual core energy saving processor with Hyper Threading Technology

This product uses a dual core, four-thread Intel(R) Atom N2600 1.6 GHz processor. This enables the product to perform stable concurrent processing at the same time of multiple applications such as communication, control, and HMI applications.

Compared to the conventional BX955, this product boasts CPU performance that is twice that of its predecessor, which enables this product to be applied to uses that require higher levels of calculation processing.



Contributes to Reductions in Running Cost and Energy Usage

Although this product guarantees sufficient performance, it sports low power consumption. The slitless and fanless design leads to a reduction in maintenance and inspection work. What's more, as a resource-saving PC, this product assists our customers in their implementations of plans to reduce running costs and energy usage.

Serving the downsizing of equipment, a small footprint design for A5-sized installation area

This product adopts space-saving design of 182(W) x 155(D) x 35(H), permitting placement in the smaller, A5-sized space with opening of only 50mm. It largely serves downsizing of your equipment, fits any area with the aestheticness kept. It is also possible to attach to the VESA standard 75 x 75, 100 x 100mm using the optional fittings.

Remote power management function to reduce operation tasks

This product supports timed/automated system start-up (Resume By Alarm). For example, it enables unattended operation, such as starting to show information of an establishment in unison at opening time. Also, it supports system start-up externally via network (Wake On LAN) and

This product is a small PC for embedded use that is equipped with an Intel(R) Atom N2600 1.6 GHz, low-power, dual core processor. This product has a fanless and slitless case, uses CFast for storage, and has a completely spindleless design. This product is equipped with various expansion interfaces such as 1000BASE-T, USB 2.0, and serial.

This product is the successor to the BX955 and has achieved high calculation capabilities such as an improved CPU processing capability that is twice that of its predecessor. In addition, this product assists our customers in their implementations of plans to reduce running costs and energy usage. Thanks to its installation compatibility, this product can be swapped into existing systems.

Its rich variety of expansion interfaces, such as 1000BASE-T, USB 2.0, and serial, and its usage of CFast cards for storage enable this product to be designed in a completely spindleless manner.

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modem (Power On by Ring). It encourages significant labor saving in operation.

Major types of peripherals are supported with rich interfaces including two CFast card slots

It has a variety of extended interface such as 1000BASE-T x 2, USB2.0 x 4, serial (RS-232C) x 2. It has two CFast card slots that can use for OS and data. They are very useful because you can use one slot for system start-up and the other for maintenance, system log, or taking away the collected data.

Falling-off prevention tools and fixing clamps provided to avoid trouble caused by disconnected cable

This product stays trouble-free, being equipped with USB removal prevention fitting and cable clamp for connectors with no locking mechanism, such as USB cable, and with hardware to properly mount and avoid falling out of CFast card.



-Safety design required for embedded applications

For Windows Embedded Standard installed model, it is possible to use the EWF*1 function of OS. It is designed for safety required for embedding purpose, for example, prohibiting unwanted writing to the CFast card with EWF function will relieve the concern about the writing limits to the CFast card and prevent an unintentional system alteration.

*1 EWF (Enhanced Write Filter) is a function specific to Windows Embedded Standard that protects the disk from being actually written by redirecting the writing to RAM.

-A wide range of power supplies (10.8 - 31.2VDC) supported

As the product supports a wide range of power (10.8 - 31.2VDC), it can be used in a variety of power environments. The separately available AC adapter adds support for 100VAC power.

Specification

Function specification

Model	BX-955Sx-DC6xxx	
CPU	Intel(R) Atom™ Processor N2600 (1.6GHz)	
Chip set	Intel(R) NM10	
BIOS	BIOS (mfd. by AMI)	
Memory	2GB (204pin SO-DIMM×1), PC3-8500 DDR3 SDRAM	
Video	Controller	Intel(R) GMA3650 (with Intel(R) Atom™ Processor N2600)
	Video RAM	Main memory shared
	Video BIOS	64KB(C0000H-CFFFFH)
	Display I/F	DVI-I/F x 1(29 pin connector x 1)
System resolution *1*2	DVI	640 x 480, 800 x 600, 1,024 x 768, 1,280 x 768, 1,280 x 1,024, 1,360 x 768, 1,400 x 1,050, 1,600 x 900, 1,600 x 1,200, 1,920 x 1,080, 1,920 x 1,200 (16,770,000 colors)
	Analog RGB	640 x 480, 800 x 600, 1,024 x 768, 1,280 x 768, 1,280 x 1,024, 1,360 x 768, 1,400 x 1,050, 1,600 x 900, 1,600 x 1,200, 1,920 x 1,080, 1,920 x 1,200 *3 (16,770,000 colors)
Audio	HD Audio compliant	
	LINE OUT: φ3.5 Stereo mini jack Full-scale output level 1.2Vrms(Typ.), MIC IN: φ3.5 Stereo mini jack Full-scale input level 1.5Vrms(Typ.)	
CFast card slot	2 slots, CFast CARD Type I, bootable	
	BX-955SD-DC6000 : -	
	BX-955SD-DC6311, BX-955SD-DC6311 : CFast is finished mounting. (4GB)	
	BX-955SD-DC6312 : CFast is finished mounting. (8GB) BX-955SD-DC631N : CFast is finished mounting. (16GB)	
Serial I/F	RS-232C (general-purpose) : 2ch(SERIAL PORT1,2) 9pin D-SUB connector (male) Baud rate : 50 - 115,200bps	
LAN *4	I/F	1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector x 2(Wake On LAN support)
	Controller	LAN-A : Realtek 8111E Controller LAN-B : Realtek 8111E Controller
USB I/F	4channels (USB 2.0-compliant)	
Keyboard/mouse I/F	None *5	
General-purpose I/O	None	
Hardware monitoring	Monitoring CPU temperature, board temperature, power voltage	
Watch dog timer	Software programmable, 255 level (1sec - 255 sec) Causes a reset upon time-out	
RTC/CMOS	Lithium backup battery life : 10 years or more The real-time clock is accurate within □ 3 minutes (at 25□ □ per month)	
Power Management	Power management setup via BIOS	
	Power On by Ring / Wake On LAN Supports ACPI Power management	
Power supply	Rated input voltage	12 - 24VDC *6
	Range of input voltage	10.8 - 31.2VDC
	Power consumption	12V 2.5A (Max), 24V 1.4A (Max)
	External device power supply capacity	- CFast card slot : +3.3V 1A (500mA x 2) - USB I/F : +5V 2A (500mA x 4)
Physical dimensions (mm)	182(W) x 155(D) x 35(H) (No protrusions)	
Weight	About 1.3kg	

- *1 It may not be possible for the screen to be displayed correctly depending on the specifications of the connected display.
Also, when an analog RGB display is connected and when the OS is Windows Embedded Standard 7 and a DVI display is connected, although all the resolutions shown in this table can be set for the resolution setting of the OS, use the product with a resolution that matches the specifications of the connected display.
- *2 On Windows Embedded Standard 2009, the primary display is fixed as shown below.
BX-955SD-DC6311 : Analog RGB
BX-955SD-DC6311 : DVI
- *3 You cannot set the resolution to 1,920 x 1,200 when the OS is Windows Embedded Standard 7 and an analog RGB display is connected.
- *4 If you use the 1000BASE-T, be careful of the operating temperature. For more details on this, refer to chapter 3, Installation Requirements.
- *5 Use USB I/F for the keyboard / mouse.
- *6 Use a power cable shorter than 3m.

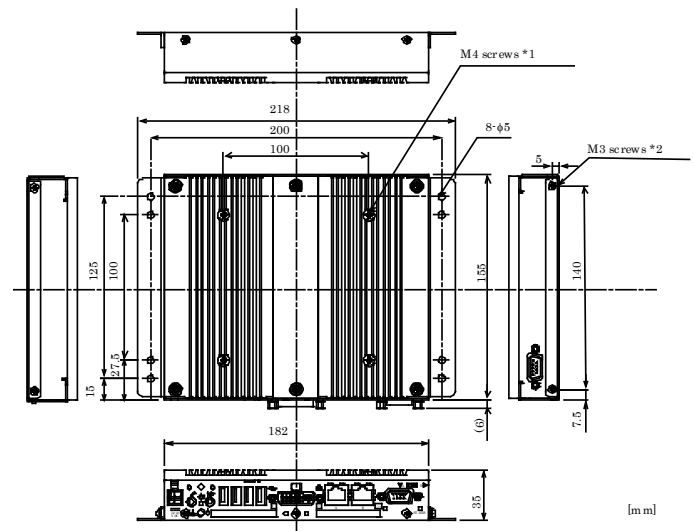
Installation Environment Requirements

Model	BX-955Sx-DC6xxx	
Ambient specifications	Operating temperature *1	0 - 50°C (When using 1000BASE-T : 0 - 45°C)
	Storage temperature	-10 - 60°C
	Humidity	10 - 90%RH (No condensation)
	Floating dust particles	Not to be excessive
	Corrosive gases	None
	Line-noise resistance	Line noise AC line / ±2kV *2, 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) Atmospheric discharge / ±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)
	Vibration resistance	10 - 57Hz/semi-amplitude 0.375 mm 57 - 500Hz/5.0G 60 min. each in x, y, and z directions (JIS C 60028-2-6-compliant, IEC 60068-2-6-compliant)
	Impact resistance	100G, half-sine shock for 6 ms in x, y, and z directions (JIS C 60068-2-27-compliant, IEC 60068-2-27-compliant)
	Grounding	Class D grounding (previous class 3 grounding), SG-FG / continuity
	Standard	VCCI Class A, FCC Class A CE Marking (EMC Directive Class A)

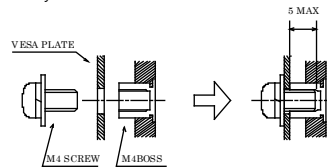
*1 For more details on this, please refer to chapter 3, "Installation Requirements".

*2 When IPC-ACAP12-04A is used.

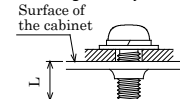
Physical Dimensions



*1 The length (L) from the tip of M4 boss to the M4 screw tip should be 5mm or less. If not doing so, it may be exactly fixed.



*2 When you fasten the bundled attachment fittings to be fixed to the body, you should use the attached screws (M3 x 8). Otherwise, the length (L) from the surface of the cabinet to the screw tip should be 6mm or less. If not doing so, it may be damaged.



Supported OS

- Windows® Embedded Standard 2009 32bit Japanese
- Windows® Embedded Standard 7 32bit Japanese / Multi-Language

List of Options

AC adapter

IPC-ACAP12-04A : AC adapter
(Input: 100-240VAC, Output: 12VDC 4A)

Power supply unit

PWI-60D6D2 : Power supply unit
(Input: 12-24VDC, Output: 24VDC 2.5A)

CFast Card (SLC)

CFS-4GB-A : 4GB CFast Card

CFS-8GB-A : 8GB CFast Card

CFS-16GB-A : 16GB CFast Card

* Information about the option products, see the Contec's website.

Packing List

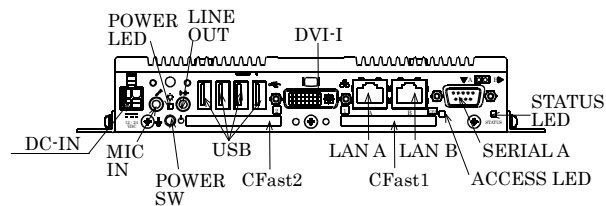
	[without OS] BX-955SD-DC6000	[with OS] BX-955S-DC6311 BX-955SD-DC6311 BX-955SD-DC6312 BX-955SD-DC631N
Name	Pcs.	Pcs.
BOX-PC	1	1
The attachment fittings	2	2
CFast card removal prevention fitting 1	1	1
CFast card removal prevention fitting 2	1	1*1
USB removal prevention fitting (base)	1	1
USB removal prevention fitting (angle)	4	4
Washer assembled screw (M3 x 6)	4	4
Washer assembled screw (M3 x 8, black)	6	6
Washer assembled and cross recessed hexagonal bolt (M4 x 10, black)	4	4
Power supply connector complete set		
Power connector	1	1
Contact	4	4
Cable clamp	2	2
DVI-analog RGB conversion adapter	1	1
Product guide	1	1
IPC Precaution List	1	1
Warranty Certificate	1	1
Serial number label	1	1
Royalty consent contract	—	1
Setup Procedure for Models with Pre-Installed OS	—	1
Recovery Media *2	—	1

*1 It is attached to the main body.

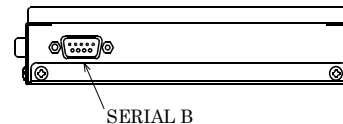
*2 Please confirm latest information on the CONTEC homepage.

Component Name

Front View



Side View



Name	Function
POWER-SW	Power switch
POWER LED	Power ON display LED
ACCESS LED	CFast disk access display LED
STATUS LED	Status LED
DC-IN	DC power input connector
LINE OUT	Line out (ø3.5 PHONE JACK)
MIC IN	Mike in (ø3.5 PHONE JACK)
LAN A	Ethernet 1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector
LAN B	Ethernet 1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector
USB	USB port connector x 4
SERIALA	Serial port A connector (9pin D-SUB/male)
SERIALB	Serial port B connector (9pin D-SUB/male)
DVI-I	Display (29pin D-SUB/female)
CFast1	CFast card slot
CFast2	CFast card slot 2