

Low-cost Multi-function Box PC

Fanless Ultra Low Power Celeron 400MH Box PC

■ **IPC-BX/M620(PCW)C**
x1 PC Card slot



■ **IPC-BX/M620(PCW)CP**
x2PCI/ISA slots, x1 PC Card slot



Manual can be downloaded from our website

Features

- Ultra Low Power Celeron 400MHz (FSB 100MHz) CPU / 256MB memory
- Naturally air-cooled, fanless system
- Reliable, virtually noiseless operation when used with CONTEC'S PC-SDD V Series silicon disk drives (Silicon disks are ideal for use in harsh environments such as those experiencing extremes in temperature, humidity, or vibration)
- Embedded CPUs and chipsets contribute to long-life availability
- CONTEC customized BIOS [Phoenix Technologies, Ltd.] provides BIOS level support
- Interfaces include PCMCIA (CardBus compliant), Audio (AC97 compliant), 100BASE-TX and RAS
- External secondary-IDE connector for optional CD-ROM
- DVI video output (VGA conversion adapter included)
- CMOS data can be stored on EEPROM, providing system boot-up even if the battery is drained



IPC-BX/M620(PCW)C



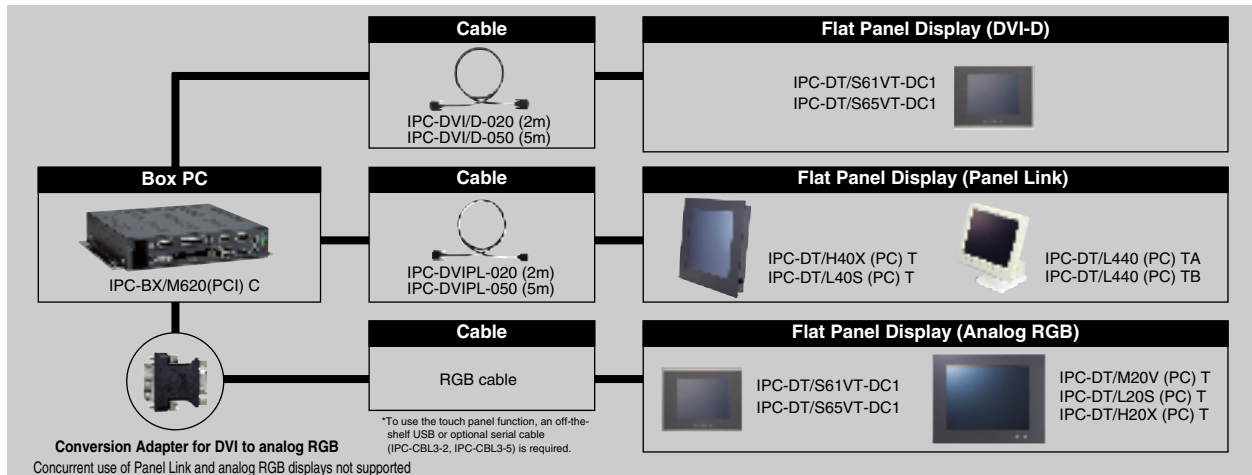
IPC-BX/M620(PCW)CP

	Differences		
	IPC-BX/M630(PCI)	IPC-BX/M620(PCW)	IPC-BX/M600(PCW)
CPU	Low Power Pentium III 800MHz (FSB 133MHz)	Ultra Low Power Celeron 400MHz (FSB 100MHz)	Low Power Mobile Celeron 400MHz (FSB 100MHz)
Memory	256MB standard / Max. 512MB		128MB standard / Max. 256MB
Video	DVI-I I/F (DVI-I 29-pin) Concurrent use of Panel Link and analog RGB displays not supported.		CRT I/F (HD-SUB 15-pin) Panel Link I/F (Half pitch 20-pin)
Audio	AC97 compliant (LINE IN, LINE OUT, MIC)		-
IDE HDD I/F	2.5-inch HDD or silicon disk drive (supports x2 drives but one of the two must be an SDD)		Internal 2.5-inch IDE HDD or silicon disk drive
Expansion board slot	2-slot Units: x2 PCI slots 4-slot Units: x4 PCI slots	2-slot Units: x2 PCI/ISA shared slots 4-slot Units: x2 PCI/ISA shared slots, x2 PCI slots	

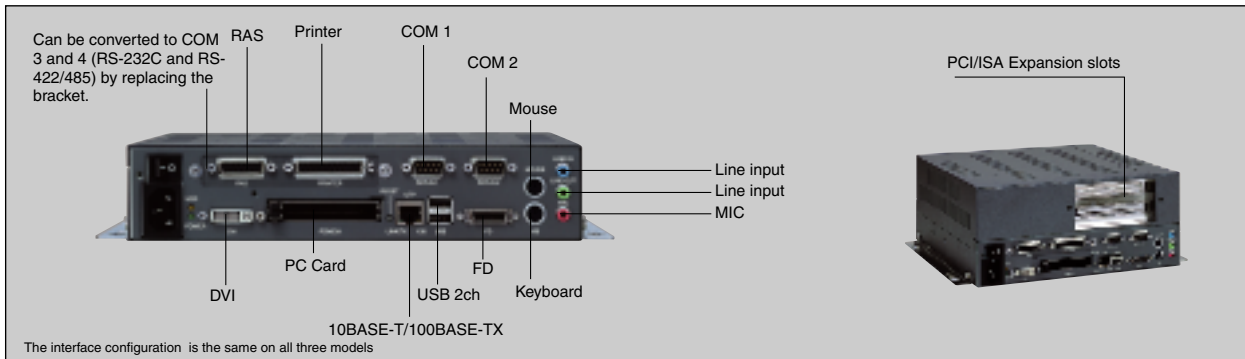
All share the same outside dimensions and installation methods
The lay-out of interface connectors on the 600 Series is significantly different than the lay-out on the 630 and 620 series.
For configuration details, consult the product data sheets on our website

For Dimensions see Page A-10

■ Connection



Interface



Specifications

Model	IPC-BX/M620(PCW)C	IPC-BX/M620(PCW)CP
CPU	Ultra Low Power Celeron 400MHz, FSB100MHz(Intel)	
Main memory	256 MB standard *1 / Max. 256MB (3.3V 144-pin SO-DIMM PC100 Socket x 2)	
PC card slot	x2 PCMCIA Type I, II or x1 Type III (Not bootable from ATA card), CardBus compliant	
LAN	Ethernet 100BASE-TX/10BASE-T RJ-45 connector, Intel ICH2 integrated	
Expansion bus slot	-	PCI/ISA shared slot x 2 *9, Installable board length: 240mm (Max.)
Video Controller	Intel 815E (Built into the controller)	
Resolution	640 x 480 (16,770,000 colors)*2, 800 x 600(16,770,000 colors), 1,024 x 768(16,770,000 colors), 1,152 x 864(16,770,000 colors), 1,280 x 960(16,770,000 colors)*3, 1,280 x 1,024(16,770,000 colors)	
CRT I/F	DVI-I 29-pin *4	
LCD I/F	-	
Keyboard I/F	PS/2 type keyboard -compliant (6-pin MINI DIN connector)	
FDD I/F	Equipped with a dedicated 26-pin, half-pitch connector: 2 modes (Optional FDD: PC-FDD25BH)	
IDE HDD I/F	Ultra DMA/100 2.5-inch IDE HDD or silicon disk drive: 1 internal unit (One more unit can be added. Either of the two must be a silicon disk drive.)	
Serial I/F	RS-232C(general-purpose): 2ch (SERIAL PORT1,2) 9-pin, D-SUB connector RS-232C(touch panel): 1ch (SERIAL PORT3) [inside the DVI connector] *5*6 RS-422/485(general-purpose): 1ch (SERIAL PORT4) [inside the RAS connector] *6	
Parallel I/F *4	Bi-directional, Centronics-compliant, 25pin D-SUB connector	
USB I/F	2ch (USB 1.1)	
General-purpose I/O	3 Opto-isolated input and output (NOTE: x1 output also serves as an external WDT output and x1 input also serves as remote reset.They are available when bracket is changed.)	
Audio	AC97 compliant, LINE IN/LINE Out/MIC: mini jack	
RAS function *4	WDT: 1sec to 255sec (RESET, interrupt or external output is according to Time Expiration),Remote reset: External input signal	
RTC / CMOS	Lithium backup battery life: 10 years or more	
Supported OS	Windows 2000 Professional, Windows NT Workstation 4.0, Windows XP Embedded, Windows NT Embedded 4.0	
Power supply	Auto-sensing 85~132 VAC or 170~265 VAC (47~63 Hz)	
/ Instantaneous blackout	/ Less than 20ms	
Power consumption (Max.)	50VA	
Power outage	One minute each for 3.0kVAC (input-output), 2.0kVAC (input-FG), and 0.5kVAC (output-FG)	
Dielectric strength	50MΩ(500VDC)	
Operating temperature	0~50°C when using SDD / 5~45°C when using HDD / 5~45°C when using FDD	
/ Storage temperature	-10~60°C	
/ Humidity *7	10~90% RH (no condensation)	
Floating Dust Particles / Corrosive Gases	Must not be excessive / None	
Jamming Resistance		
Static Resistance	Contact discharge/4kV (IEC1000-4-2Level2, EN61000-4-2Level2) Atmospheric discharge/8kV (IEC1000-4-2Level3, EN61000-4-2Level3)	
Line noise	AC line/2kV, Signal line/1kV (IEC1000-4-4Level 3, EN61000-4-4Level 3)	
Vibration resistance *8		
Sweep resistance	10~57Hz / Semi-amplitude: 0.15mm, 57~150Hz / 2.0G, 80 min. each in x, y, and z directions (JIS C0040 compliant, IEC68-2-6 compliant)	
Impact resistance *8	10G, half-sine shock for 11 ms in x, y, and z directions (JIS C0041 compliant, IEC68-2-27 compliant)	
Grounding	Class D grounding (previous class 3 grounding)	
Dimensions (mm)	262(W) x 262(D) x 55(H)	262(W) x 262(D) x 115(H)
Weight	Approx. 3.3kg	Approx. 4.2kg

*1: A 256 MB memory module is plugged in one socket. *2: Not available if Windows XP Embedded is used
 *3: Not available if Windows NT Workstation 4.0 or Windows NT Embedded 4.0 used
 *4: The interface can connect the PC to a CONTEC Panel Link input type display (using an optional cable) or an ordinary analog RGB input display (using the bundled DVI-analog RGB adapter).
 *5: The interface is used for the CONTEC Panel Link or touch panel type display.
 *6: Serial ports 3 and 4 can be used as general-purpose RS-232C ports by replacing the bracket(Bundled). In that case, the touch panel, RAS functions (WDT time-out output and remote reset input), RS-422/485, general-purpose inputs, and parallel interfaces are disabled.
 *7: When no floppy disk is used.
 *8: When no HDD or FDD is used. *9: The following signals cannot be used on ISA bus slots. -5V, IOCHK, REFRESH, MASTER

Options

Name	Description
Memory (144-pin SO-DMM)	
PC-MSD128-144H	128MB SD Memory
PC-MSD256-144V	256MB SD Memory
Touch Screen Monitor (DVI-D Video)	
IPC-DT/S61VT-DC1	Embedded LCD Touch Screen Monitor 6.5" Flat Panel Display (640 x 480 DC12V)
IPC-DT/S65VT-DC1	Open Frame LCD Touch Screen Monitor 6.5" Flat Panel Display (640 x 480 DC12V)
DVI-D Cable	
IPC-DVI/D-020	DVI-D cable (2m)
IPC-DVI/D-050	DVI-D cable (5m)

Name	Description
Touch Screen Monitor (Panel Link)	
IPC-DT/H40X(PC)T	15" TFT display (1024 x 768)
IPC-DT/L40S(PC)T	12.1" TFT display (800 x 600)
Panel Link Cable	
IPC-DT/L440(PC)TA	DVI-D to Panel Link conversion cable (2m)
IPC-DT/L440(PC)TB	DVI-D to Panel Link conversion cable (5m)