

Datasheet



Model : PFXPEBBD42DNN1  
 PFXPEBBD42CNN1  
 PFXPEBBD21BNN1  
 PFXPEBBD40NNN1  
 PFXPEBAD21ANN1  
 PFXPEBAD20NNN1

PE-4000B Atom™ N2600 Models

PE-4000B Atom™ N270 Models

Model Number Configuration

PFXPE \* \* \* \* \* NN 1  
 (1) (2) (3) (4) (5) (6)

(1) PC family		(2) PC type		(3) Power		(4) RAM		(5) Operating system		(6) Storage device	
B	Built-in	B	N2600 Model	D	DC	4	4GB	2	Windows® Embedded Standard 7	D	SSD
		A	N270 Model			2	2GB			C	CFast 16GB (N2600 models)
								1	Windows® Embedded Standard 2009	B	CFast 8GB (N2600 models)
										A	CF 8GB (N270 models)
								0	None	N	None

Functional Specifications

		N2600 Model	N270 Model
CPU		Intel® Atom™ Dual Core N2600 1.6GHz	Intel® Atom™ N270 1.6GHz
OS		Windows® Embedded Standard 2009 (32bit) or Windows® Embedded Standard 7 (32bit)	Windows® Embedded Standard 2009 (32bit)
L2 Cache Memory		1MB	512KB
Main Memory		2GB or 4GB (DDR3 800MHZ)	2GB (DDR2 533MHZ)
Chipset		NM10	945GSE
Graphics Accelerator		DirectX 10.1 and OpenGL 3.0 support Hardware accelerated video decode Video decoder: Support MPEG4, VC1, WMV9, H.264	Integrated 3D graphics engine, Based on Intel™ GMA 950 architecture, delivers sophisticated graphics for large display applications
Video Memory		Up to 512MB	Up to 128MB
Graphics		RGB : Up to 1920 x 1200 at 85Hz HDMI : Supports 1920 x 1200 max data rate: up to 1.65Gb/s Supports HDMI 1.3: up to 1080 p support Dual independent displays : VGA + HDMI or VGA	RGB : Up to 1600 x 1200 at 85Hz
interface	Serial (COM1)	RS-232C (D-Sub 9-pin, plug)	RS-232C (D-Sub 9-pin, plug)
	Serial (COM2)	RS-232C (D-Sub 9-pin, plug)	RS-232C (D-Sub 9-pin, plug)
	Serial (COM3)	RS-232/422/485(D-Sub 9-pin, plug) port with auto flow control (by BIOS setting)	-
	Serial (COM4)	RS-232/422/485(D-Sub 9-pin, plug) port with auto flow control (by BIOS setting)	-
	Serial (COM5)	RS-232/422/485(D-Sub 9-pin, plug) port with auto flow control (by BIOS setting)	-
	Serial (COM6)	RS-232/422/485(D-Sub 9-pin, plug) port with auto flow control (by BIOS setting)	-
	Ethernet (LAN1)	10/100/1000Mbit/s (RJ-45 Modular jack)	10/100/1000 Mbit/s (RJ-45 Modular jack)
	Ethernet (LAN2)	10/100/1000Mbit/s (RJ-45 Modular jack)	-
	Ethernet (LAN3)	10/100/1000Mbit/s (RJ-45 Modular jack)	-
	USB (TYPE A)	USB 2.0 x 5	USB 2.0 x 2
	Video	Analog RGB x 1, HDMI x 1	Analog RGB x 1
	Audio	Line-in, Line out, Mic-in	-
	Expansion Slot	Mini PCIe (full size) x 1	Mini PCIe (half size) x 1
	Digital I/O*1	8 points (selectable I/O)	-
Others	-	PS2 x 1	
Watchdog timer		255 levels timer interval, programmable, 1 to 255 s	
Storage		SSD x 1	
		CFast x 1	CF x 1

\*1: Isolation:None, Interface Method: CMOS I/F 5V tolerant, External power supply: +5VDC ±5% 300mA(VDD), Max.Current at I/O pin total: 85mA

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## General Specifications

	N2600 Model	N270 Model
International Safety Standards		
Rated Input Voltage	12 to 24Vdc ±5%	9 to 36Vdc ±5%
Power Consumption	Typically 16W	Typically 15W
In-Rush Current	30A or less	
Surrounding Air Temperature	0 to 60°C [32 to 140°F] (with air flow, speed = 0.7m/sec.) 0 to 50°C [32 to 122°F] (without airflow)	0°C to 70°C [32 to 158°F] (with airflow, speed=0.7m/sec) 0°C to 60°C [32 to 140°F] (without airflow)
Storage Temperature	-40 to 85°C [-40 to 185°F]	
Ambient Humidity	95% RH (Wet bulb temperature: 40°C [104°F] max. - no condensation)	
Storage Humidity	10 to 85% RH (Wet bulb temperature: 29°C [84.2°F] max. - no condensation)	
Pollution Degree	For use in Pollution Degree 2 environment	
Air Pressure (altitude range)	2,000m [6,560ft] max.	
Vibration	2...9 Hz: 1.75 mm (0.07 in.) 9...200 Hz: 4.9 m/s <sup>2</sup>	
Shock resistance (in operation)	CFast/SSD/CF: 50 G at wall mount, half sine, 11 ms	
Electromagnetic Compatibility (EMC)	Immunity to High Frequency Interference Electromagnetic Emissions Class A	
Structure	IP40	
Cooling Method	Passive heat sink, fan less operation	
Weight	Approx. 2.5kg (5.5lbs)	
External Dimensions	264.5 x 69.2 x 133mm (10.41 x 2.72 x 5.24in.)	254.8 x 58.7 x 149.2mm (10.03 x 2.31 x 5.88in.)

## External dimensions/Parts Identifications

N2600 Model		N270 Model	
		mm	mm
		in.	in.
<ul style="list-style-type: none"> <li>(1) USB1 and USB2</li> <li>(2) USB3 and USB4</li> <li>(3) Digital I/O</li> <li>(4) HDMI</li> <li>(5) COM1</li> <li>(6) VGA</li> <li>(7) USB5</li> <li>(8) CFast memory card</li> <li>(9) LEDs</li> <li>(10) LAN1 and LAN2</li> <li>(11) COM2</li> <li>(12) Power switch</li> <li>(13) LAN3</li> <li>(14) DC input power supply</li> <li>(15) EXT.1 (not used)</li> <li>(16) EXT.2 (not used)</li> </ul>	<ul style="list-style-type: none"> <li>(17) COM3</li> <li>(18) COM4</li> <li>(19) MIC</li> <li>(20) COM5</li> <li>(21) LIN-IN</li> <li>(22) COM6</li> <li>(23) LINE-OUT</li> </ul>	<ul style="list-style-type: none"> <li>(1) VGA</li> <li>(2) COM1 and LEDs (Rx/Tx)</li> <li>(3) Compact Flash memory card</li> <li>(4) COM2 and LEDs (Rx/Tx)</li> <li>(5) USB1 USB2</li> <li>(6) LAN1</li> <li>(7) keyboard and mouse connector</li> <li>(8) Reset button</li> <li>(9) Power button</li> <li>(10) LEDs</li> <li>(11) DC input power supply</li> </ul>	