

ETX® form-factor Single Board Computer with interchangeable ETX CPUs, dual Ethernet, and PC/104-Plus™ expansion



Highly Integrated Single Board Computer (SBC)

Pluto integrates an I/O application layer, COM layer, and thermal layer into a compact, ETX form-factor board-level subsystem.

Price/Performance Advantage

Pluto offers a configurable ETX COM CPU core allows you to match a Pluto SBC to the precise price/performance needs of your application.

Access to Latest Technology

Pluto's ETX-based design provides you with access to the latest CPU and I/O technology, while protecting your investment from CPU obsolescence via plug compatible ETX CPU modules.

Fast Time-to-Market

Pluto is a fully operational, off-the-shelf subsystem that is ready for immediate deployment in your application. No custom baseboard development is necessary.

Development Kit

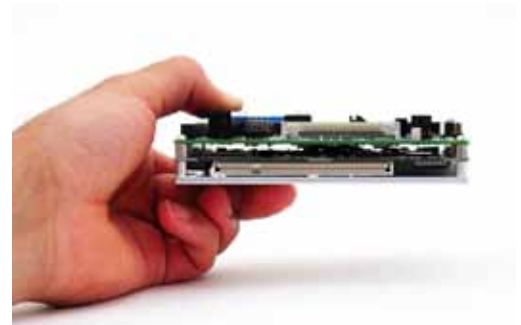
Complete Development Kits are available with all the components you need to get started on your embedded design project. Each kit contains a Pluto SBC, cable kit, and software CD.

Software Support

Pluto runs Linux, Windows® XP™, and Windows Embedded Standard™. All OS drivers are shipped with the product.

Key Features

- ◆ Interchangeable ETX CPU core module provides price/performance flexibility and protects against product obsolescence
- ◆ Choice of 1.6GHz Intel® Atom™ N270 or N450; or Intel Core Duo™ LV CPUs
- ◆ Supports up to 2GB of DDR2 SODIMM SDRAM
- ◆ Provides I/O connectors for a wide range of interfaces:
 - Dual 10/100Mbps Ethernet
 - IDE, SATA, and floppy
 - Quad USB 2.0
 - One RS-232/422/485 and three RS-232 serial ports
 - CRT, LVDS, and TV video output
 - PS/2 keyboard and mouse
- ◆ On-board CompactFlash socket
- ◆ Operating temperature of -40°C to +85°C or -20°C to +71°C, model dependent
- ◆ An ETX CPU module mounted on the bottom side improves thermal management and increases the space for I/O functions and connectors.
- ◆ Expands via stackable PC/104-Plus (ISA & PCI) modules



Pluto is a compact, highly-integrated computing subsystem that can be used in a wide variety of embedded computing applications.

PLUTO SBC: ETX-sized Single Board Computer

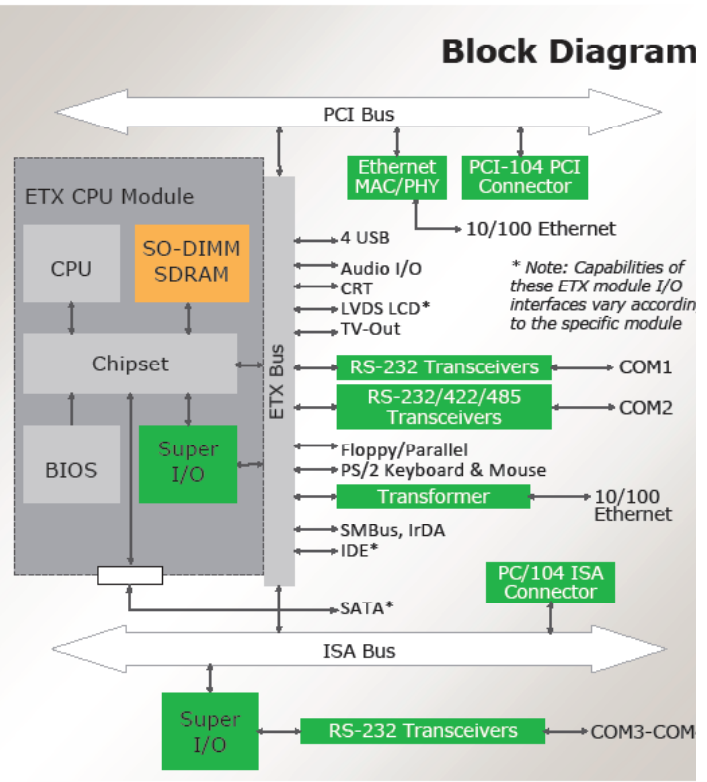


SPECIFICATIONS

Processor	Choice of 1.6GHz Intel Atom N270, 1.6GHz Intel Atom N450, or 1.66GHz Core Duo LV CPU
Front side bus	Atom N270: 533MHz Atom N450: 667MHz Core Duo LV: 667MHz
Memory	1GB or 2GB SO-DIMM DDR2 SDRAM
Chipset	Atom N270: 945GSE with ICH7M Atom N450: ICH8M Core Duo LV: 945GME with ICH7M
BIOS	Phoenix-Award BIOS
Mass storage	2 SATA ports support 1 device each; 1 IDE port supports 2 IDE devices including CompactFlash IDE Type II socket
Serial ports	3 RS-232 ports (COM1, 3 & 4) 1 RS-232/422/485 port (COM2)
USB ports	4 USB 2.0
Networking	1 10/100Base-T Ethernet from ETX CPU 1 10/100Base-T Ethernet from RealTek 8103EL chip on baseboard
Display	LCD flat panel interface (LVDS); VGA CRT; TV output; SDVO interface
Keyboard/Mouse	PS/2 keyboard and mouse
Parallel/Floppy	Shared parallel and floppy interface
Watchdog timer	Non-maskable interrupt or reset modes
Other I/O	SMBus, IrDA interface
Audio	AC'97 audio CODEC; mic in, line in/out
Expansion bus	PC/104-Plus (ISA & PCI) interface
Power input	+5VDC +/- 5%
Power consumption	PLT-Nxxxx-xG: 10.3W idle, 14.2W loaded PLT-945RK-xG: 14.2W idle, 23.5W loaded
Operating temperature	PLT-N270RK-xG: -20°C to +71°C (-2°F to +160°F) All other models: -40°C to +85°C (-40°F to +185°F)
Operating humidity	0-90% non-condensing
Dimensions (L x W x H)	PLT-Nxxxx-xG: 4.5 x 3.7 x 1.18 in. (114 x 95 x 30 mm) PLT-945RK-xG: 4.5 x 3.7 x 1.578 in. (114 x 95 x 40 mm)
Weight	PLT-Nxxxx-xG: 11.7 oz (332 g) PLT-945RK-xG: 19.2 oz (544 g)
RoHS	Compliant

ORDERING INFORMATION

PLT-N270XT-2G	Pluto Embedded Computer, 1.6GHz Atom N270 CPU, 2GB SO-DIMM SDRAM, -40°C to +85°C
PLT-N270XT-1G	Pluto Embedded Computer, 1.6GHz Atom N270 CPU, 1GB SO-DIMM SDRAM, -40°C to +85°C
PLT-N270RK-2G	Pluto Embedded Computer, 1.6GHz Atom N270 CPU, 2GB SO-DIMM SDRAM, -20°C to +71°C
PLT-N270RK-1G	Pluto Embedded Computer, 1.6GHz Atom N270 CPU, 1GB SO-DIMM SDRAM, -20°C to +71°C
PLT-N450RK-2G	Pluto Embedded Computer, 1.6GHz Atom N450 CPU, 2GB SO-DIMM SDRAM, -40°C to +85°C
PLT-N450RK-1G	Pluto Embedded Computer, 1.6GHz Atom N450 CPU, 1GB SO-DIMM SDRAM, -40°C to +85°C
PLT-945RK-2G	Pluto Embedded Computer, 1.66GHz Core Duo LV CPU, 2GB SO-DIMM SDRAM, -40°C to +85°C
PLT-945RK-1G	Pluto Embedded Computer, 1.66GHz Core Duo LV CPU, 1GB SO-DIMM SDRAM, -40°C to +85°C
DK-PN270RK	Pluto N270 Development Kit includes: PLT-N270RK-1G, cable kit, OS drivers
DK-P945RK	Pluto 945 Development Kit includes: PLT-945RK-1G, cable kit, OS drivers



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