## **PROTEUS**

- Fanless, stand-alone SBC
- Low power and high performance
- GPS, Bluetooth or ZigBee wireless
- Atmel Trusted Platform Module Device
- PCI-Express mini card support



**Intel Architecture** – Based on the Intel Atom Z5xx series processor with CPU speeds from 1.1GHz up to 1.6GHz, PROTEUS delivers exceptional performance-per-watt in a very compact, COM Express-like form factor.

**Low Power Design** – Ideally suited for wired and wireless, netcentric multi-media applications requiring low power and high performance.

**Expandability** – PROTEUS interfaces directly to LVDS displays and has an integral touchscreen controller and provides two sockets for PCI-Express mini cards. Options include onboard GPS, Bluetooth and ZigBee support.

**Application-ready Development Kits** – Eurotech's fullfeatured application-ready Development Kits help customers begin application development quickly.

- Infotainment
- Interactive Kiosks
- Access Control
- HMI
- Medical

PROTEUS is a stand-alone single board computer aimed at wired and wireless, net-centric multimedia applications, especially in situations where low power and high performance are required.

PROTEUS offers a choice of 1.1GHz or 1.6GHz processor, with options for 512MB or 1GB soldered down RAM and 2GB or 4GB soldered Parallel ATA Flash memory. Coupled to the extremely low heat generation of the Atom processor, PROTEUS is perfect for applications needing high end performance in a fanless, rugged package.

In addition to a full range of standard PC peripherals, the PROTEUS interfaces directly to LVDS displays and has an integral touchscreen controller. Options exist for the provision of onboard GPS, Bluetooth and ZigBee support. Two sockets for PCI-Express mini cards allow easy and flexible expansion for applications requiring wireless local and wide area networking. Additional non-volatile storage may be added either using MicroSD Flash or via the SATA interface provided by the board.

PROTEUS supports Windows and Wind River Linux



## **System Architecture**

PROCESSOR	Intel <sup>®</sup> Atom™ processor options Z530 Processor 1.6GHz (2.3W)
	Z510 Processor 1.1GHz (2W)
GRAPHICS/VIDEO	Ultra low power integrated 3D Graphics
	2 x single-channel LVDS 24-bit interface to two connectors
	1 x backlight connector
AUDIO	HD audio CODEC and 2W audio amplifier supporting;
	mic in, line in, speakers out and headphones
MEMORY	Up to 1GB (400/533MHz) DDR2 SDRAM
	4GB parallel ATA Flash on board (optional)
OPERATING ENVIRONMENTS	Microsoft <sup>®</sup> Windows <sup>®</sup> XP, XP Embedded
	Wind River Linux 3.0
	Specific RTOS support (call for details)
PHYSICAL/OTHER	155mm x 110mm
	COM Express extended module mechanical footprint
	Commercial temperature 0°C to +70°C
	Power supply 8.5 to 24V DC (+12V nominal)
	Atmel Trusted Platform Module Device, TCG v1.2 compatible
	SMBUS interface
PERIPHERALS	4, 5 and 8 wire resistive touchscreen interface
	USB 2.0 supporting low/full/high speed modes
	2 x user accessible ports (Pin header, one client configurable)
	2 x ports connected to PCI Express MiniCard socket
	1 x port connected to board edge Type A connector
	Gigabit Ethernet port supporting 10/100/1000baseT
	Output to board edge RJ-45 connector
	Supports 1 x serial ATA 300
	1 x SATA connector
	1 x power connector for 2.5" SATA drive
	1 x serial port used for general purpose RS232 TX/RX port
	1 x MicroSD socket
PCIEXPRESS	Chipset PCI Express interfaced to:
	x1 PCI Express to PCIe MiniCard socket
	x1 PCI Express switch to:
	x1 PCle Gigabit Ethernet controller
	x1 PCIe serial ATA controller
	x1 PCle MiniCard socket
MODULES (optional)	20-channel GPS receiver SirFStar III chipset module
	Bluetooth or ZigBee wireless comms provided by onboard modules
TEST SUPPORT	JTAG interface (Intel XDP)

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