

ANTARES ICE 1U



FEATURES

High performance – Intel® Core™ i7/Core™ i5 processor in a 1U chassis

Rugged – Designed to meet MIL-STD-810F shock & vibration levels

Feature rich – PCIe and Mini PCIe expansions, dual HDMI, front panel display

Simple – Comprehensive set of standard PC peripheral ports

Advanced – Hyperthreading, virtualisation and remote management

Future proof – consistency and longevity of supply

- Multi-media infotainment
- Machine control
- Communications control
- Media servers
- Data concentrators
- Asset monitoring
- Digital signage

The ANTARES ICE 1U is a 1U high, 19" rack mount computer intended for use as an industrial PC or embedded (diskless) platform. Based upon Eurotech's ANTARES single board computer, the ANTARES ICE 1U offers new levels of performance using Intel Core i7 processors, providing advanced features such as virtualisation, hyperthreading and remote system management via Intel's AMT feature (available even if the operating system has crashed). These features are coupled with a rugged chassis system and the longevity of supply associated with all Eurotech products.

Following the format set by the popular APOLLO ICE 1U, standard PC peripherals are broken out via the rear panel, together with the power connector for the universal AC or optional DC PSU, and an expansion card bay offering two PCIe slots.

The front panel provides 2 USB ports, a recessed RESET button and a 256x64 pixel monochrome LCD display, together with access to the DVD and optional removable hard drives. Hard drive arrangements (SATA) are extremely flexible, with the ability to fit a single 3.5" internal drive and up to two 2.5" drives fitted into a removable caddy which sits behind an access cover in the front panel. Alternatively a second 3.5" internal drive can be fitted in place of the 2.5" caddy. Options also exist to run embedded operating systems from Flash memory directly on the ANTARES embedded SBC, allowing critical data such as the operating system and application to be accessed without the need for rotating hard drives. Flash memory is provided via an SD card slot on the ANTARES which is accessible from the rear panel of the ICE unit via a retaining access cover.

Further expansion capability exists via two PCI Express MiniCard sockets (with SIM support) located on the ANTARES embedded SBC and accessed via panels on the unit. These are ideally suited to the addition of wireless communication modules such as 3G modems or Wi-Fi cards, and mounting points exist on the rear panel for the fitting of SMA antenna connectors for this purpose.

The ANTARES ICE supports Windows Embedded Standard, Windows 7 and Fedora Linux.

System Architecture

PROCESSOR	Intel® Core™ i5 520E 2.4GHz Intel® Core™ i7 610E 2.53GHz Intel® Core™ i7 620LE 2GHz Intel® Core™ i7 620UE 1.06GHz Intel® Celeron P4505 1.86GHz
CHIPSET	Mobile Intel® QM57 Express Chipset
SUPPORTED OS	Windows Embedded Standard, Windows 7 and Fedora Linux
MEMORY	Up to 8GB
PCI EXPRESS	2 x PCI Express 2 x PCI Express MiniCard sockets with SIM support
GRAPHICS	2 x HDMI Optional VGA on 1U Front panel monochrome 256x64 pixel LCD display
USB SUPPORT	2 x USB front panel connectors 4 x USB rear panel connectors
ETHERNET	2 x Gigabit Ethernet ports supporting 10/100/1000baseT Intel 82577 - PXE/Intel AMT Intel 82574L - PXE
SERIAL PORTS	1 x RS232 via rear panel 1 x RS232/RS485/RS422 (software selectable) via rear panel 2 further internal RS232 ports available for custom builds
TPM	Atmel AT97SC3204 TPM 1.2 factory fit option
THERMAL SOLUTION	Fanless option available
BIOS	Phoenix Trusted Core BIOS
H/W MONITORING	Software monitoring of temperatures and voltages Tamper detect switch on chassis lid
OPTICAL DRIVE	DVD/RW via front panel
HARD DRIVES	Drive position 1 - internal 3.5" SATA Drive position 2 - internal 3.5" SATA or 2 x 2.5" SATA in caddy behind access cover on front panel
WATCHDOG	Watchdog timer support
OPERATING TEMPERATURE	+5°C to +50°C
MECHANICAL	1U high, 19" rack mount chassis (352mm deep) Passivated, painted mild steel
EMC	Designed to meet Emissions: EN55022:1998, A1, A2 Conducted Emissions EN55022, A1, A2 Class B Radiated Emissions EN55022, A1, A2 Class B Immunity: EN55024:1998, A1, A2 FCC Verification: Part 15B, Class B
MOBILE COMMS	Designed to meet the Radio and Telecommunications Terminal Equipment Directive 1999/5/EC
SHOCK & VIBRATION	Designed to meet Vibration Shock 514.5 Category 20 In accordance with MIL-STD-810F, Method 516.5
POWER SUPPLY	Universal AC (90-132V, 180-264V AC @ 47-63Hz, auto-ranging) DC – details TBA – 24V DC nominal

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