E-MPU

Rugged, hi-performance, fast connection 19” MIL-compliant PC

PICMG 1.3 Single Board Computer
Dual Intel LV XEON 2.8 GhzGHz with 2Gbyte RAM
PCIe, PCI-X and PCI interface
Dual Gigabit Ethernet
Dual Serial ATA/150 –
Dual EIDE Ultra ATA/100
Ultra XGA
Quad USB Interfaces
Expansion Board for 2 Serial Ports and FDisk

Non Volatile Memory
HD Serial ATA 80GB 7200 r/min
RW-DVD Device

Redundant Gigabit Interface
N.2 ports with 10/100/1000 Base-T Gigabit Ethernet
PCI 2.3 compliance Bus Speed up to 133 MHz
Redundant Link Management Capabilities

Serial Interface
N.2 RS-232 Serial Port
(9 pins 16550 UART)
Up to 115,2 Kbps per port

Dual Head Graphic Video Adapter
Memory Size: 128MB DDR
Memory Interface: 64 Bits
Bus Interface: PCI Express x16

Audio Board
Pp to 6 (5.1) channels for connecting 2, 4 or 6 loudspeakers and top-quality recording and playback at up to 48 kHz.

Analog I/O
16 single ended or 8 differential input channels
12 Bits resolution
200 Ks/sec
Range +/- 0,05 , +/- 10 V

Frame Grabbing
4 channels video capture card

BT878 video capture chipset, low latency DMA access

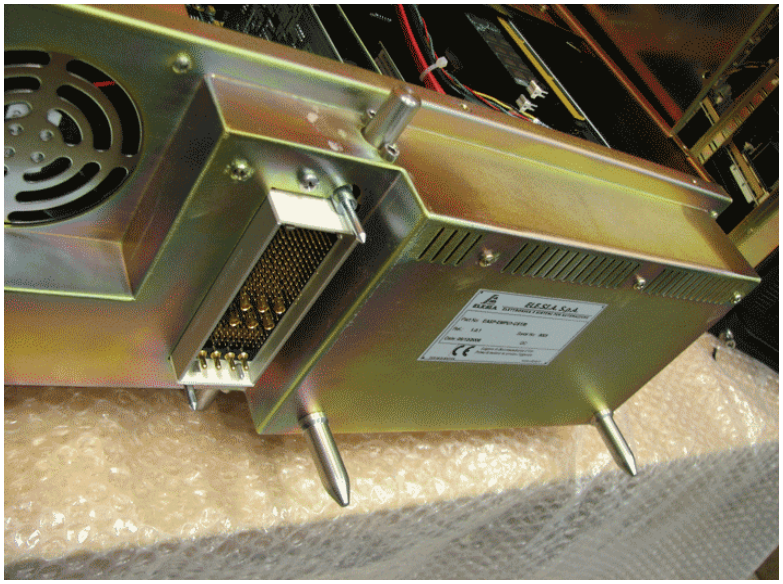
PICMG 1.3 Backplane
N.1 PICMG 1.3 System host slot
N.2 PCIe Slots
N.4 PCI-X Slots

The **E-MPU** envelope is a hardware and software integrated assembly to deliver a 4U high performance rugged processing unit.

The main characteristic of the unit is the total absence of the standard peripheral connectors on the rear. The E-MPU makes use of the Single Connector Architecture (SCA). The unit uses a single hi-density, hi-reliability connector on the rear to let all I/O interfaces user available including the power supply itself.

The high density connector on the unit rear will plug in the fixed mating connector, hosted in Ele.Si.A. E-MPU bay from which user cabling will start. The E-MPU bay will be fastened in the user rack.

*Note :*The hi-density Single Connector is not installed into the Development Machines, and the user has the full standard I/O connection accessibility.



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SPECIFICATION

Power Supply

Main power: 450W+

EPS12V 2.x compliant

Input Voltage: 115 VAC / 230VAC

Input Frequency Range: 47Hz to 63Hz

EMI/RFI compliance

Cooling

3 x 80 mm ball bearing fans on the front with dust filters and Air Chamber

1 fan on power-supply

150+ CFM (total)

Adaptive Temperature controller

Operating System

Linux Kernel 2.6.9

Notes: Contact factory for any different I/O configurations

Firmware on Host CPU

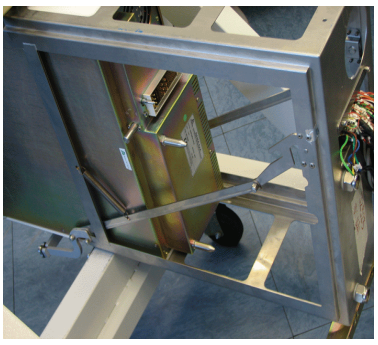
VCE 405 release1.0.1 (PPCBOOT 1.1.5)

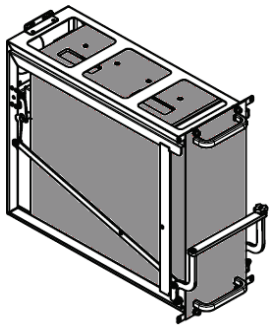
Humidity

90% noncondensing @ 35°C (without coating)

Environmental compliance

EN 60950-1: 2001+A11: 2004	Information Technology equipment – Safety –
EN 55022:1998+A1+A2	Info Technology equipment – Emissions Amendment A1:2000 to EN 55022:1998 Amendment A2:2003 to EN 55022:1998
EN 55024:1998+A1+A2	Info Technology equipment – Immunity Amendment A1:2000 to EN 55024:1998 Amendment A2:2003 to EN 55024:1998
EN 61000-3-2:2000	EMC limits for harmonic current emissions
EN 61000-3-3:1995 +A1:2001	Voltage fluctuations Part 3-3: Limits Amendment A1:2001 to EN 61000-3-3:1995
MIL STD 810 F mthd 501.4-502.4	Operating Temperature Low -High (0° to 50 °C)
MIL STD 810 F mthd 501.4-502.4	Storage Temperature Low -High
MIL STD 810 F mthd 507.4	Humidity (90 at 30°C)
MIL STD 810 F mthd 516.5	Shock (proc I) 20g acceleration peak
MIL STD 810 F mthd 514.5	Vibration (proc. I)50 to 7Hz 0.5 inch double





Order Information

EASP-EMPU1-CST	Fast Plug-In unit with single rear connector (male)
EASP-EMPU1-CST/D	Standard Chassis without rear connector (development machine)
EASP-EMPU1-ACC	Mechanical bay with single female connector, mating the fast Plug-in unit.