

MILPONS 1000 RUGGED EMBEDDED COMPUTER



MILPONS 1000 - front

ABOUT

Powered by Quad Core 3rd Gen Intel® Core™ i7 Processor (6M Cache, up to 3.30 GHz), MILPONS 1000 integrates 2 GbE LAN, 4 GigE PoE+ ports, and one PCIe x16 expandable slot. With maximum dual channel 16GB memory, DVI-D/HDMI and VGA triple display, two 2.5" SATA 6Gp/s HDD/ SSD, one SATA 3Gp/s SSD/ HDD supports SATA DOM, one of 2 Mini PCIe supports SIM card for WiFi, 3G/GPRS, and still keep outstanding thermal design for -25°C to +70°C industrial operating temperature range. MILPONS 1000 provides 2 fully integrated Gigabit Ethernet interfaces for either 1000 Mb/s or 10/100 Mb/s operation rates by each and jumbo frames up to 9018 bytes.

Enabling accurate time synchronization, wake-up function, and boot up through the extensible firmware interface (PXE), MILPONS 1000 integrates fully power management function to optimize voltage efficiency. Empowering 4 GigE IEEE 802.3at PoE+ ports, ECS-7710 is the ideal option for GigE cameras required efficient power supply and distances connection. Improving network traffic load-balancing by optimized parallel and pipelined architectures, the 2 gigabit Ethernet controllers of MILPONS 1000 enables to smooth the network traffic loading for most demanding occasions.

FEATURES

- 3rd Gen Intel® Core™ i7/ i5/ i3 Ivy Bridge mobile processor
- Fanless, -25°C to 70°C operating temperature
- 6x Gigabit LAN with 4 IEEE 802.3at PoE+
- Intel® QM77 chipset
- 1x PCI expansion slot
- EN 50155, EN 50121-3-2 compliant
- Rich I/O : 4x COM, 4x USB 3.0, 2x USB 2.0, 2x Mini PCIe 1x with SIM card socket)
- Supports 2x DisplayPort, DVI-D, VGA, LVDS, up to 3x independent displays
- 2x SATA III (6Gbps) 2.5" SSD/ HDD, mSATA



MILPONS 1000 - back

System

Processor	Gen3 Intel® Quad Core™ i7/i5/i3 Ivy Bridge 6M Cache 3.30 GHz
Chipset	Intel® QM77
BIOS	AMI
SIO	IT8783F
Memory	DDR3 1066/1333/1600 MHz, DDR3L 1066/1333 MHz Max. 16GB 2x 204-pin SO-DIMM Sockets

I/O Ports

Serial	3x COM RS-232 1x COM RS-232/485/422
USB	4x USB 3.0, 4x USB 2.0 (2 External, 2 Internal)
LED Indicators	Power, HDD, CFast Card
Isolated DIO	8 DI/8 DO, 5-24V input
GPIO	16x GPIO (internal)

Expansion

JST Connector	1x internal 6-pin to USB 2.0
PCI	1x for PCI expansion card
Mini PCIe	1 miniPCIe Socket: PCIe + USB + SIM Card Socket 1 miniPCIe Socket: PCIe + USB

Graphics

Graphics Processor	Intel® HD4000
Display Memory	1.7 Gb shared DB-15 VGA: 1920 x 1200 max DVI-D: 1920 x 1080 max
Display Interfaces	Display Port 1: 2650 x 1600 max Display Port 2: 1920 x 1200 max LVDS: 1920 x 1200 max

Storage

SATA	2 SATA III 6Gbps 1 SATA II 3Gbps - Support Horizontal Type SATA DOM
mSATA	2 SATA II 3Gbps
Storage Expansion	CFast slot, external hot-swap, push In-Out ejector

Ethernet

LAN 1	Intel® 82579LM Gigabit LAN, Wake on LAN, PXE Support
LAN 2-3	Intel® 82574L Gigabit LAN, Wake on LAN, PXE Support
LAN 3-6 (PoE)	Gigabit IEEE 802.3at (25.5W/48V) PoE Ports by Intel® with Power On/Off Control

Power

Input Voltage	6 to 36V, DC-in 1 Mini DIN
Power Interface	One 3-pin Terminal Block for DC-IN : V+, V-, Frame Ground ATX: 2-Pin Remote Power On/Off Switch
Power Adapter	AC to DC +24V / 5A 120W Max. (Optional)
Surge Protection	On-board LT4356 for Power Input High Voltage Surge Protection

Mechanical

Chassis/Mounting	Aluminum housing, Wall mount by bracket, DIN rail mount
Size (W x D x H)	10.2" x 8.5" x 3.1" (260mm x 215mm x 79mm)
Weight	4.6 lbs. (2.1Kg)

Environmental

Operating Temperature	-13°F to 158°F (-25°C to 70°C)
Storage Temperature	-40°F to 185°F (-40°C to 85°C)
Humidity	10 to 95%, Non-condensing
Relative Humidity	95% at 70°C
EMC	CE, FCC, RoHS

Additional

Trusted Platform Module	Infineon SLB9635, LPC Interface (optional)
Watchdog Timer	Reset: 1 to 255 sec/min per step
HW Monitor	Temperature & voltage auto-throttle on CPU overheat

Designed to Meet

MIL-STD-901D	Shock
MIL-STD-461E	EMI (Electromagnetic Interference)
MIL-STD-167-1A	Vibration
MIL-STD-810G	Temperature/Immersion/Humidity