RUGGED SCIENCE

MILCORTEX 1200 RUGGED EMBEDDED COMPUTER

MILCORTEX 1200 - front

ABOUT

The MILCORTEX 1200 rugged embedded computer is designed to take the heat. With an operating temperature range of -25°C to 70°C (-13°F to 157°F), it can withstand a wide range of harsh industrial or military environments. Most computer failures are a consequence of fans or disk drives breaking down in the field. The MILCORTEX 1200 was specifically designed sealed, fan-less, and completely solid state. With no moving parts, the possibility of mechanical failure is eliminated from the equation.

The MILCORTEX 1200 is a powerful and versatile industrial computer, driven by a 3rd Gen Intel® Quad-Core™ i3|i5|i7 series processor (6M Cache, up to 3.30 GHz) with up to 16GB DDR3L RAM. Ivy Bridge processors have increased power efficiency by as much as 25%, which permits an extremely low thermal design power of 35W and the ability to operate flawlessly in your tough industrial application. Graphics are managed by Intel HD4000 GPU and can support 3 independent displays, and up to 5 total displays with clones.

FEATURES

- **Fanless, solid-state design**
- **Powerful 3rd Gen Intel® Quad-Core™ i3|i5|i7 series processors (up to 3.30 GHz)**
- **4x COM ports (3x RS-232, 1x RS-232/485/422)**
- **2x Fiber 100Fx LANs**
- **4x Copper LANs**
- **Up to 16Gb RAM**
- **Exceptional thermal performance**

MILCORTEX 1200 - back

System

Processor	Gen3 Intel® Quad Core™ i7/i5/i3 Ivy Bridge 6M Cache 3.30 GHz
Chipset	Intel® QM87
BIOS	AMI
SIO	IT8783F
	DDR3 1066/1333/1600 MHz, DDR3L 1066/1333 MHz
Memory	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
GPIO	16x GPIO (internal)

Expansion

JST Connector	1x internal 6-pin to USB 2.0
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, Push In-Out ejector

Ethernet

LAN 1	Intel® 82579LM Gigabit LAN, Wake on LAN, PXE Support
LAN 2-4	Intel® 82574L Gigabit LAN, Wake on LAN, PXE Support
Fiber SPF	2x 1000Base SFP Ports Based On Intel® I350 Chipset

Power

Input Voltage	6 to 36V, DC-in
Power Interface	1x 3-pin Terminal Block : V+, V-, Frame Ground
	Mini-DIN 4-pin
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 6.9" x 3.1" (260mm x 175mm x 79mm)
Weight	6 lbs. (2.8Kg)

Environmental

Operating Temperature	-13°F to 158°F (-25°C to 70°C) - Wide temp. version available (-40°C to 85°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