

## MILCORTEX 2000 RUGGED EMBEDDED COMPUTER



MILCORTEX 2000 - front



MILCORTEX 2000 - back

## ABOUT

Step up to the Quad Core 5th Generation Intel Broadwell-H Processor inside of the rugged MilCortex 2000 military embedded computer. High performance computing productivity wrapped in a rugged, thermally efficient chassis make the MilCortex 2000 the ideal computer for military applications. Tested and designed to meet stringent military specifications, including MIL-S-901D, MIL-STD-167-1, and MIL-STD-461F, the MilCortex 2000 delivers cutting-edge performance, smart electrical protection, and trusted rugged reliability all in a single compact package. The MilCortex 2000 was designed to meet a broad range of application requirements and includes the Intel® QM87 chipset, dual channel DDR3L memory at 1600MHz, up to 32GB. Advanced Intel® Iris™ Pro Graphics 6200/ Intel® HD Graphics 5600 supports VGA, DVI-I, dual DisplayPort and eDP display interfaces, up to 3 independent 4K display.

Like all Rugged Science Military Division Products, the MilCortex 2000 features an embedded CPU and chipset that are on Intel's embedded road map. This translates to guaranteed support for a minimum of 7 years, in many cases much longer with industrially popular chips. Embedded road map chipsets can be a key obsolescence management tool when planning new military computing systems



MILCORTEX 2000 features 2 front-loading 2.5" SSD bays with convenient thumbscrew fasteners

## FEATURES

- Quad Core 5th Generation Intel® Core™ i7 Processor (Broadwell-H)
- VGA/ DVI-D/ DisplayPort/ eDP Interface, up to 3 Independent 4K Displays
- Fanless, -25°C to 70°C Operating Temperature
- 2 Independent Gigabit Ethernet LAN ports
- 3 Mini PCIe Socket for:  
3G/ 4G/ LTE/ WiFi/ GPRS/ UMTS
- 2 External SIM Card Socket
- 2 Front-access 2.5" SSD Tray
- 6V to 36V DC-in, 80V Surge Protection
- Configurable Ignition Power Control

# MILCORTEX 2000 SPECIFICATIONS



## System

<b>Processor</b>	Quad Core 5th Generation Intel® Core™ i7-5850EQ/ i7-5700EQ (Broadwell-H)
<b>Chipset</b>	Intel® QM87
<b>BIOS</b>	AMI
<b>SIO</b>	IT8786E
<b>Memory</b>	2 DDR3L 1600MHz SO-DIMM, up to 32GB

## I/O Ports

<b>Serial Interface</b>	4x COM RS-232/ 422/ 485
<b>USB</b>	4x USB 3.0, 3x USB 2.0 (2 External, 1 Internal)
<b>LED Indicators</b>	Power, HDD, PoE
<b>GPIO</b>	32x GPIO (16x internal)
<b>SIM Card</b>	2x SIM Card socket (external)

## Expansion

<b>SUMIT A, B</b>	2x SUMIT slot (optional) 3x Mini PCIe Socket :
<b>Mini PCIe</b>	2x Full-size for PCIe/ USB/ External SIM Card/ mSATA 1x Half-size for PCIe/ USB

## Graphics

<b>Graphics Processor</b>	Intel® Iris™ Pro Graphics 6200 (5850EQ) Intel® HD Graphics 5600 (5700EQ)  DB-15 VGA: 1920 x 1200 max DVI-D: 1920 x 1080 max
<b>Display Interfaces</b>	Display Port 1: 4096 x 2304 @ 60Hz Display Port 2: 4096 x 2304 @ 60Hz eDP: up to 4096 x 2304 @ 60Hz

## Storage

<b>SATA</b>	2x SATA III - 6Gbps (bottom load) 1x SATA III (Mini PCIe Type, 6Gbps) 1x SATA II - 3Gbps DOM
<b>Storage Expansion</b>	CFast slot, Push In-Out ejector 2x front-access 2.5" SSD/HDD tray

## Ethernet

<b>LAN 1</b>	Intel® I218 Gigabit LAN supports iAMT 9.5
<b>LAN 2</b>	Intel® I210 Gigabit LAN
<b>LAN 3-6 (PoE)</b>	Gigabit IEEE 802.3at (25.5W/48V) PoE+ by Intel® I210

## Power

<b>Input Voltage</b>	6 to 36V, DC-in
<b>Power Interface</b>	3-pin Terminal Block : V+, V-, Frame Ground Mini-DIN 4-pin
<b>Ignition Control</b>	16 mode (internal)
<b>Remote Switch</b>	3-pin Terminal Block : On, Off, IGN
<b>Surge Protection</b>	Up to 80V/1ms Transient Power

## Mechanical

<b>Chassis/Mounting</b>	Aluminum housing, Wall mount by bracket, DIN rail mount
<b>Size (W x D x H)</b>	10.2" x 6.9" x 3.1" (260mm x 175mm x 79mm)
<b>Weight</b>	6 lbs. (2.8Kg)

## Environmental

<b>Operating Temperature</b>	-13°F to 158°F (-25°C to 70°C) - Wide temp. version available (-40°C to 85°C)
<b>Storage Temperature</b>	-40°F to 185°F (-40°C to 85°C)
<b>Humidity</b>	10 to 95%, Non-condensing
<b>Relative Humidity</b>	95% at 70°C
<b>EMC</b>	CE, FCC, RoHS

## Additional

<b>Trusted Platform Module</b>	Infineon SLB9635, LPC Interface (optional)
<b>Watchdog Timer</b>	Reset: 1 to 255 sec/min per step
<b>Smart Management</b>	Wake-on-LAN, PXE supported
<b>HW Monitor</b>	Temperature & voltage auto-throttle on CPU overheat
<b>Audio Codec</b>	Realtek ALC892, 5.1 Channel HD Audio
<b>Audio Interface</b>	Line-out, Mic-in, Front Audio Header

## Designed to Meet

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

