

MILAXON 2000 RUGGED EMBEDDED COMPUTER



MILAXON 2000 - front



MILAXON 2000 - back

ABOUT

The MilAxon 2000 Slim Profile Rugged Military Computer is powered by the 5th Generation Broadwell-U Dual Core processor from Intel. The excellent thermal efficiency of Intel's 14nm Broadwell lithography allows the MilAxon to provide profuse computing power in a slim profile chassis. The MilAxon 2000 can independently support 3 LCD displays (5 if two displays are cloned) with 4k resolution each. This makes the slim and compact MilAxon 2000 ideal for multiple monitor consoles where space is at a premium and heat is a concern. The MilAxon 2000 has a fanless operating temperature from -25°C to 70°C. Why fanless? Because fans fail, which leads to further cascading failures in the system. Rugged Science focuses on fanless, solid state designs to ensure premium operation for critical systems in challenging environments. Internally, the MilAxon 2000 rugged computer features 2 mini-PCIe sockets, which allow for easy adaptation for mobile applications that require 3G/ 4G/ LTE/ WiFi/ GPRS/ UMTS support.

Like all Rugged Science Military Division Products, the MilAxon 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

FEATURES

- 5th Generation Intel® SoC (Broadwell-U)
- Supports 4K Resolution, up to 3 independent displays
- Fanless, -25°C to 70°C Operating Temperature
- 2 Gigabit LAN
- 2 Front-access SSD/ HDD Tray
- 2 Mini PCIe support 3G/ 4G/ LTE/ WiFi/ GPRS/ UMTS
- 2 External SIM Card Socket
- 16 DIO: 8 DI / 8 DO

System

Processor	5th Generation Intel® Core™ i7/ i5/ i3 U-Series Processor (Broadwell-U)
BIOS	AMI
SIO	IT8786E
Memory	2 DDR3L 1333/1600 MHz SO-DIMMs, up to 16GB

I/O Ports

Serial Interface	4x COM RS-232/ 422/ 485
USB	4x USB 3.0, 2x USB 2.0 (3 External, 1 Internal)
LED Indicators	Power, HDD, PoE
Isolated DIO	16x (8 DI, 8 DO)
SIM Card	2x SIM Card socket (external)

Expansion

Mini PCIe	2 Mini PCIe Socket : 1 supports PCIe/ USB/ External SIM 1 supports PCIe/ USB/ External SIM/ mSATA
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Graphics

Graphics Controller	Intel® HD Graphics 6000
Display Interfaces	DVI-D: Up to 1920 x 1080 @ 60Hz Display Port 1: 3840 x 2160 @ 60Hz Display Port 2: 3840 x 2160 @ 60Hz

Storage

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

Ethernet

LAN 1	Intel® I218 Gigabit LAN supports iAMT 9.5
LAN 2	Intel® I210 Gigabit LAN

Power

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

Mechanical

Chassis/Mounting	Aluminum housing, Wall mount by bracket, DIN rail mount
Size (W x D x H)	10.1" x 5.6" x 1.9" (257mm x 141mm x 48mm)
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	5 to 95%, Non-condensing
Relative Humidity	95% at 70°C
EMC	CE, FCC, EN 50155, EN 50121-3-2

Additional

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

Designed to Meet

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

