

Computer MSP142



MSP142 tactical computer

The MSP142 delivers a highly mobile computing platform, for tactical scenarios, with a unique form factor.

It is based on an 8th generation Intel® processor, with up to 32 GB RAM, and features a removable SSD, with power supplied by a BB-2590 battery or DC input. Connectivity is not an issue, with support for multiple ethernet interfaces, USB 3, and HDMI.

The electromagnetic signature of MSP142 is very silent (MIL-STD 461F, Army, Ground), securing radio communications and offering strong protection against unwanted interference.

Built to perform in the most demanding environments, the MSP142 is a solid companion also for unusual operations.

Military-relevant rugged design

MilDef products are designed to operate in extreme environmental conditions and challenging electromagnetic operational scenarios. Operationally proven, MilDef products are actively employed in military operations in over 60 countries.

Customizable

Are you looking for additional features and functions? MilDef specializes in customized solutions, to include change of connectors, chassis modifications, mounting solutions, etc. Contact your nearest MilDef Sales Office and we will help you tailor a solution to meet your exact requirements.

Guaranteed performance

MilDef products are designed for the long lifecycles of military programs and come with a lifetime support program to ensure your equipment maintains peak performance for many missions to come.

We also guarantee the availability of spare parts for an additional 5 years after product end-of-life.

Features

- Intel® Core™ i7-8665UE CPU
- Removable SSD
- Removable BB-2590 battery
- Battery charging capability
- Up to 32 GB RAM

Computer MSP142

Connector Interfaces

DC IN (front)	<ul style="list-style-type: none"> 1x Power
ETH1 - ETH4 (front)	4 connectors which each has: <ul style="list-style-type: none"> 1x ETH 100BASE-TX
GPS (front)	<ul style="list-style-type: none"> 1x GPS
HDMI (front)	<ul style="list-style-type: none"> 1x HDMI
SERVICE (back)	<ul style="list-style-type: none"> 1x RS232 Service
USB1, USB2 (front)	2 connectors which each has: <ul style="list-style-type: none"> 1x USB 2.0

Other Interfaces

1x Battery Hatch (back)
1x Battery Cover (back)
1x SSD (front)
1x System Button (front)

Technical Specification

Removable battery	One BB-2590
Blanking	Double-pressing the System button
Computer Graphics	Intel® HD Graphics 620
Computer Processor	Intel® Core™ i7-8665UE
LAN 100BASE-TX	100BASE-TX standard
RAM memory	Up to 32 GB Non-ECC
MIL-STD-1275D	5.3.2.2 5.3.2.3 5.3.2.4
Power consumption	60 W without charging, 80 W with charging
Power input	11-32 VDC
Chassis material	Aluminum
Coating and color	Dupont AE03057704620 (RAL7046 Telegrey 2)
Dimensions	250 x 232.5 x 79.5 mm (9.8 x 9.2 x 3.1 in) (WxDxH)
Surface treatment chassis	Chromit-Al
Weight	3.4 kg (7.5 lbs) without battery
MTBF	128,443 h
CE	Compliant

Environmental Specification

Functional shock - Operating	MIL-STD-810G, Method 516.6, Procedure I - Functional Shock. Table 516.6-II, Terminal peak sawtooth pulse, Ground equipment 40 g 11 ms
------------------------------	--

High temperature - Operating	MIL-STD-810G, Method 501.5, Procedure II - Operation 55 °C (131 °F)
High temperature - Storage	MIL-STD-810G, Method 501.5, Procedure I - Storage 71 °C (160 °F)
Humidity	MIL-STD-810G, Method 507.5, Procedure II - Aggravated 95 ± 4 % RH Ten 24 h cycles
IP Class (Solid Particle Protection)	Class 6X
IP Class (Water)	Class X5
Low air pressure - Rapid decompression	MIL-STD-810G, Method 500.5, Procedure III - Rapid decompression 75.2 kPa, corresponding to 2,438 m (8,000 ft) 17 kPa, corresponding to 12,192 m (40,000 ft)
Low air pressure - operating	MIL-STD-810G, method 500.5, Procedure II - Operation/Air Carriage. Battery not included 57.2 kPa, corresponding to 4,572m (15,000 ft)
Low temperature - Operational	MIL-STD-810G, method 502.5, Procedure II - Operation -40 °C (-40 °F)
Low temperature - Storage	MIL-STD-810G, method 502.5, Procedure I - Storage -40 °C (-40 °F)
Noise level	Maximum noise level of 40 dB SPL A-weighting at 1 m (3.3 ft) distance
Salt fog	MIL-STD-810G Method: 509.5 5 % ± 1 % (by weight) Two cycles, 24 h wet + 24 h dry / cycle
Temperature Shock - Operating	MIL-STD 810G, method 503.5 procedures I - C 55 °C (131 °F) -40 °C (-40 °F)
Vibration - Helicopter	MIL-STD-810G. Method 514.6, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter
Vibration - Loose Cargo	MIL-STD-810G. Method 514.6, Procedure II - Loose cargo transportation, Category 5 - Truck/trailer - loose cargo
Vibration - Tracked Vehicles	MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, tracked vehicles
Vibration - Wheeled Vehicle	MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, wheeled vehicles

Computer MSP142

EMC Specification

EMI conducted CE102	MIL-STD-461F, Method CE102 BASIC CURVE 10 kHz to 10 MHz
EMI radiated RE102	MIL-STD-461F Navy Mobile & Army 2 MHz - 18 GHz
EMS conducted CS101	MIL-STD-461F, Method CS101, conducted susceptibility, power leads. CURVE #1 30 Hz to 150 kHz
EMS conducted CS114	MIL-STD-461F Army, Ground 10 kHz - 200 MHz
EMS conducted CS115	MIL-STD-461F Conducted susceptibility, bulk cable injection, impulse excitation
EMS radiated RS103	MIL-STD-461F Army 2 MHz - 1 GHz