



## AWS EVO

ADVANCED MISSION COMPUTER  
WITH DUAL REMOVABLE DISK

# AWS EVO

## ADVANCED SWaP MISSION COMPUTER

The AWS EVO is a high performance rugged Mission Computer designed for multi-media applications.

Featuring multiple display control and audio interfaces, the AWS EVO is SWaP-C optimized and has a fanless design with no external airflow prescriptions.

The AWS EVO features a powerful 64-bit 7th Gen Intel® Xeon® E3 Processor (Kaby Lake) with Intel® Hyper-Threading Technology (4 cores, 8 threads), and an up to 32GB DDR4 dual-channel memory with an ECC support option to provide an excellent overall performance. Video outputs include three independent ports (2x HDMI + 1x VGA) while input/output ports include Audio, 4x Gigabit Ethernet ports, 2x USB 3.0 ports and 4x USB 2.0 ports, PS/2, 4x COM ports and 2x SATA 6 Gb/s ports with RAID support. The AWS EVO comes with several storage options: an internal mSATA module, a Type II CFlash slot accessible from the front panel and two front-mounted hot-swappable SATA ports suitable for the installation of two 2.5" SSDs with Secure Erase option.

An internal MiniPCI Express slot is available for further expansion in alternative to the mSATA option.

The AWS EVO is compliant to MIL-STD-810G certifications and to RTCA/DO-160G.



## Product Features

-  SWaP-C optimized
-  Fanless design
-  7th Gen Intel® Xeon® E3 processor
-  Triple display support + Audio
-  2x removable SSD, CFAST and mSATA
-  MIL grade qualifications

## Technical Specifications

### System

Processor Module	14nm Intel® Xeon® E3-1505M v6 3.0/4.0GHz (Turbo), 8M, 25W (4C/GT2)
Memory	2x 16GB Dual channel 2133 MHz DDR4 memory in dual SODIMM sockets, ECC support
Video Outputs	Intel® Generation 9 LP Graphics Core Architecture, supporting 3 independent and simultaneous displays (2x HDMI, 1x VGA)
Ethernet	1x 10/100/1000 GbE LAN interface with I219 controller 3x 10/100/1000 GbE LAN interfaces with I210 controller
Serial	4x programmable serial ports RS232/RS422/RS485
USB	2x USB 3.0 on the front panel (Omnetics Quick Lock USB 3.0 Micro-D connectors) 2x USB 2.0 (on MIL-DTL-38999 connector) 2x additional USB 2.0 ports type A standard receptacles internally available (maintenance)
PS/2	2x PS/2 for keyboard and mouse
Audio	Intel® HD Audio integrated in chipset 1x AUDIO IN (left/right) 1x AUDIO OUT (left/right)
I/O Expansion	4x discrete inputs 1x MiniPCI Express slot for additional interfaces such as MIL-STD-1553 or ARINC-429 Additional I/O routed on J2 connector
Internal Storage Devices	1x mSATA slot
Removable Storage Devices	2x removable 2.5" SATA SSD with secure erase option 1x removable CFAST card
Software	Windows 10/8.1 64-bit, Windows 7 32/64-bit, Linux, 64-bit, Extended Support (BSP) WES 7 32/64-bit, Linux 64-bit

### Power Section

Power Input	28V nominal (15 to 36 Vdc continuous range). Input tolerance according to MIL-STD-704F
Power Consumption	80W
Features	Tolerant to power interruptions up to 50ms (integrated hold-up module) Over voltage protection Over current protection Input transient protection

### Mechanical Features

Dimensions (W x D x H)	256.0 mm x 203.0 mm x 116.0 mm
Weight	5.3 Kg
Cooling	Fanless design, no external forced airflow is required
Interfaces	3x MIL-DTL-38999 Military circular connectors 2x USB 3.0 Quick Lock USB 3.0 Micro-D connectors 2x HDMI (with mating retention via custom backshell)

### Environmental Features

Operating Temperature	-45°C / +71°C (RTCA/DO-160G Section 4, Category B2)
Storage Temperature	-55°C / +85°C (RTCA/DO-160G Section 4, Category B2)
Altitude	Operative: max 25.000 feet (RTCA/DO-160G Section 4, Category B2)
Humidity	Up to 95% (RTCA/DO-160G Section 6, Category A)
Shock	6g shock, 11ms (RTCA/DO-160G Section 7, Category A)
Crash Safety	20g shock, 11ms (RTCA/DO-160G Section 7, Category B)
Vibrations	Rotary wing: qualified according to RTCA/DO-160G Section 8, Category U Curve G Fixed wing: qualified according to RTCA/DO-160G Section 8, Category S Curve M
Waterproofness	IP65 rated according to EN 60529 RTCA/DO-160G Section 10, Category W
Fungus Protection	Fully protected according to MIL-STD-810G and RTCA/DO-160G
EMI / Electrical Features	Compliant to MIL-STD-461G (aircraft) and RTCA/DO-160G





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