

MVP-5100 Series

Fanless Embedded PC with Intel® Core™ i7/i5/i3 9th Gen. or Celeron® 8th Gen. CPU

Features

- Intel® Core™ 9th Gen. or Celeron® 8th Gen. CPU
- Up to 32GB DDR4 2,400MHz RAM
- Intel® H310 Chipsatz (optional: Intel® C246)
- 2x DisplayPorts, 1x DVI, 1x VGA, 3x GbE, 4x COM and more
- Mini PCIe / M.2 3042 / 2x USIM expansions



MVP-5100 Series – Strong computing power and robust, fanless design

ADLINK's MVP-5100 Series fanless embedded computing platforms, which include the 9th generation Intel® Core™ processor, are optimized for edge computing applications. The MVP-5100 series combines high-performance computing, scalable feature and I/O improvements, and industrial-grade reliability in a compact fanless platform and provides reliable long-term operation for performance-critical applications in industrial automation, logistics, transportation, and smart city environments. The Embedded PC series consists of a classically robust design. The MVP-5100 series supports DDR4 memory and thus more computing and graphics power with an Intel® HD Graphics 530.

High performance for industrial requirements

The embedded systems combine outstanding performance with extensive connectivity and are easy to use. The robust housing allows the use under difficult conditions. With the use of a ninth-generation Intel Core i3, i5 or i7 processor or a Celeron LGA processor, the embedded computer focuses on high performance with minimal power consumption. Together with unique image and video processing and efficient remote monitoring, the MVP-5100 series meets the requirements for use in critical applications with the highest demands on reliability. Proven applications in industrial environments include machine vision, motion sensors and system monitoring.

Flexible connection options and high resistance

The MVP-5100 series offers in each version two independently working DisplayPorts, including VGA and DVI-D connection and is therefore also ideally suited for digital signage scenarios. Up to 32GB DDR4 RAM and optionally two SATA III HDD or SSD hard disk can be installed. Temperature fluctuations from 0 to +50 °C as well as acceleration and vibration (up to 100 Grms with SSD) survive the industrial computers without any problems. The series can be operated with power supplies in a voltage range of 12-24V and thus offers flexibility for different application scenarios. Three USB 3.1 ports as well as three USB 2.0 ports on the front panel and six COM ports also offer plenty of connection options for additional devices.

Ordering Information	MVP-510A	MVP-5101	MVP-5102	MVP-5103	MVP-5104
CPU	Intel® Core™ i7-9700E	Intel® Core™ i7-9700TE	Intel® Core™ i5-9500TE I	Intel® Core™ i3-9100TE	Intel® Celeron® G4900T
Number of cores	8	8	6	4	2

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Specifications	MVP-5100 Series
SYSTEM	
CPU	Intel® Core™ i7/i5/i3 9th Gen. or Intel® Celeron® 8th Gen. CPU
Chipset	Mobile Intel® H310 (optional: Intel® C246)
RAM	4GB DDR4 non-ECC 2,400 MHz, dual SODIMMs, up to 32GB (optional: 4/8/16/32GB ECC, only for Intel® Core™ i3/Celeron with Intel®C246)
Storage	2x SATA III for HDD/SSD (Intel®C246 chipset supports RAID 0/1) 1x CFast socket (type II)
AMT	Supports Intel® AMT / vPro™ with C246
TPM	TPM 2.0
Expansions	1x Full size mini PCIe Up to 2x PCIe
Operating System	WinIO IoT Enterprise CBB 64-bit Linux Ubuntu 18.04
INTERFACE	
Ethernet	3x Intel® GbE: 2x i211AT + i219
USB	3x USB 3.1 GenI ports (2x USB 3.1 up to Gen2 with C246) 3x USB 2.0 ports 1x USB 2.0 port (internal)
COM	COM1/2: 2x RS-232/422/485 COM3/4: 2x RS-232 (Optional COM5/6: RS-232, shared with DI/O)
Digital I/O	8-CH DI and 8-CH DO
Video	1x VGA 2x DisplayPort 1x DVI-D
Audio	1x Mic-in and Line-out (optional: speaker-out)
Other	2x USIM
ENVIRONMENTAL	
Cooling	Fanless
Power Supply	DC input: 12-24V (± 10% tolerance) AC input: 160W AC/DC adapter (optional)
Operating Temperature	0°C ~ 50°C Extended temperature range: -20° ~ 50°C (MVP-510A) -20° ~ 60°C (MVP-510I/ 2/ 3/ 4)
Storage Temperature	-40° ~ 85°C (excl. storage)
Vibration / Shock Resistance	Vibration: Operating – 5 Grms, random, 5-500 Hz, 3 axes (w/ SSD/CFast) Operating – 0.5 Grms, random, 5-500 Hz, 3 axes (w/ HDD) Shock: Operating – 100 G, half sine 11ms duration (w/ SSD/CFast)
Humidity	~ 95% @ 40°C, non-condensing
Dimensions	210 (W) x 240 (D) x 86 (H) mm
Weight	4.1 kg
Mounting	Wallmount
Certifications	Safety: UL/cUL, CB, CCC EMC: EN61000-6-4/-2, CE & FCC Class A ESD: Contact +/-4KV, Air +/-8KV