

MVP-6010/6020 Series

Value Family 6th Generation Intel® Core™ i7/i5/i3 Processor-Based Expandable Fanless Embedded Computer

Features

- 6th Generation Intel® Core™ i7/i5/i3 Skylake FCLGA1151 processor + H110 (MVP-6010)/ Q170 (MVP-6020) chipset
- Dual-channel DDR4 SO-DIMM sockets support up to 32 GB memory
- 1 PCIe x16 and 3 PCI (MVP-6010)/ 2 PCIe x16 and 2 PCI (MVP-6020) expansion slots available, supporting Gen3 PCIe cards
- Support for 2 independent displays with on-board 2x DisplayPort, 1x DVI-D, and 1x VGA ports onboard
- 6 External USB ports (4x USB 3.0, 2x USB 2.0), 1 internal USB 2.0 port
- 3 Intel GbE ports with teaming function
- Built-in 8CH DI and 8CH DO, 2 software-programmable RS-232/422/485 + 2 RS-232 ports
- CFAST socket, one onboard SATA III port for 2.5" HDD/SSD installation, and SATA 6Gb/s
- Built-in wide-range 12V DC to 24V DC power input
- Fanless operation from 0°C to 50°C (with 35W CPU), and 0°C to 40°C (with 65W CPU)



Introduction

ADLINK's newly introduced MVP-6010/6020 Series value line of fanless embedded computing platforms, incorporating the 6th Generation Intel® Core™ processor, provides one PCIe x16 and three PCI or two PCIe x16 and two PCI expansion slots, 1 mini PCIe slot and single-side access for I/O ports, optimizing easy maintenance in industrial automation environments. The series retains the robust design of all ADLINK MXC/MXE lines, at a new extremely cost-effective price point.

The MVP-6010/6020 Series supports dual-channel DDR4 memory for more powerful computing and the Intel® HD Graphics 530 speeds graphics performance. Along with a versatile I/O array and flexible expansion capacity, the MVP-6010/6020 Series fully satisfies all the needs of industrial automation with the performance demanded by vision inspection, motion control, and surveillance applications. Fanless construction not only overcomes contaminant and noise challenges presented by harsh IA environments, the elimination of problematic structural elements that negatively affect MTBF greatly increases life cycle expectations for the platform.

Optional Accessories

- **Optional Fan Module**
Fan module for MVP-6010/6020 series
- **8/16/32 GB DDR4 Option**
Upgrade to 8/16/32 GB DDR4 memory
- **500 GB HDD Option**
Factory-installed 500 GB SATA hard disk drive
- **1 TB HDD Option**
Factory-installed 1 TB SATA hard disk drive
- **64 GB SSD Option**
Factory-installed 64 GB MLC SATA solid-state drive
- **160W AC-DC Adapter**
160W Industrial grade AC-DC adapter

Software Support

- Windows® 10/7/Embedded Standard 7
- Linux

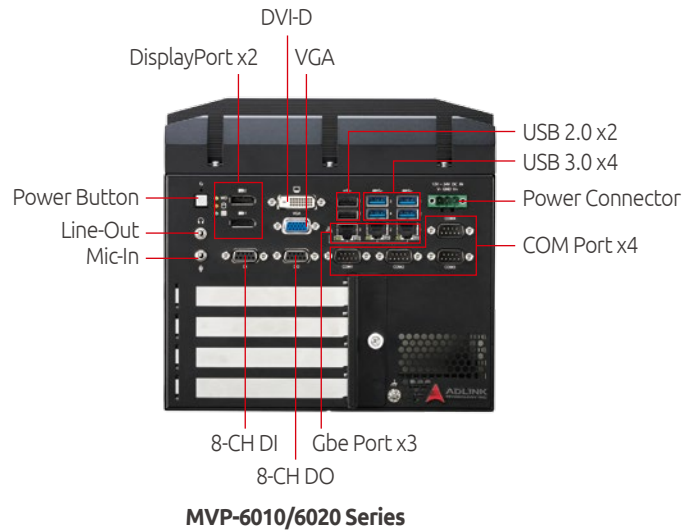
Ordering Information

- **MVP-6011**
Intel® Core™ i7-6700TE fanless embedded computer
1 PCIe Gen3 x16 + 3 PCI expansion slots
- **MVP-6012**
Intel® Core™ i5-6500TE fanless embedded computer
1 PCIe Gen3 x16 + 3 PCI expansion slots
- **MVP-6013**
Intel® Core™ i3-6100TE fanless embedded computer
1 PCIe Gen3 x16 + 3 PCI expansion slots
- **MVP-6015**
Intel® Core™ i7-6700 fanless embedded computer
1 PCIe Gen3 x16 + 3 PCI expansion slots
- **MVP-6021**
Intel® Core™ i7-6700TE fanless embedded computer
2 PCIe Gen3 x16 (x16 slot with x8 signals) + 2 PCI expansion slots
- **MVP-6022**
Intel® Core™ i5-6500TE fanless embedded computer
2 PCIe Gen3 x16 (x16 slot with x8 signals) + 2 PCI expansion slots
- **MVP-6023**
Intel® Core™ i3-6100TE fanless embedded computer
2 PCIe Gen3 x16 (x16 slot with x8 signals) + 2 PCI expansion slots
- **MVP-6025**
Intel® Core™ i7-6700 fanless embedded computer
2 PCIe Gen3 x16 + 2 PCI expansion slots

Specifications

Model Name	MVP-6011/6021	MVP-6012/6022	MVP-6013/6023	MVP-6015/6025
System Core				
Processor	Intel® Core™ i7-6700TE	Intel® Core™ i5-6500TE	Intel® Core™ i3-6100TE	Intel® Core™ i7-6700 (65W)
Chipset	MVP-6010 Series: H110 MVP-6020 Series: Q170			
Video	1 VGA + 2 DisplayPort + 1 DVI-D			
Memory	4 GB DDR4 2133 MHz (up to 32 GB)			
I/O Interface				
Expansion slots	1 PCIe Gen3 x16 + 3 PCI expansion slots for MVP-6010 Series 2 PCIe Gen3 x16(x16 slots with x8 signals) + 2 PCI expansion slots for MVP-6020 Series			
Ethernet	3 Intel® GbE ports 3 Intel® I211AT WOL function on each port Teaming			
Serial Ports	4 COM by DB9 connector 2 software-programmable RS-232/422/485 (COM1 & 2) [BIOS select] 2x RS-232 (COM3 & 4) The RS-485 support auto-flow control 2 KV surge protection on RS-422/485			
USB	6 external USB ports (4 USB 3.0 +2 USB 2.0) Each of the 6 external USB ports supports 1.6A. To ensure 40 mil/A trace design and 5V ± 5% voltage stability 1 internal USB 2.0 port			
DIO	8-CH DI and 8-CH DO			
Mini PCIe	1 internal mini PCIe socket			
USIM	1 USIM socket			
Audio	1 Mic-in and 1 Line out			
Power Supply				
DC Input	Built-in 12-24 VDC wide-range DC input 3P pluggable connector with latch (GND, V-, V+)			
AC Input	Optional 160 W external AC-DC adapter for AC input			
Storage Device				
SATA HDD	1 SATA port for 2.5" HDD/SSD installation(up to 6 Gb/s)			
CompactFlash Socket	1 Type II CFast			
Mechanical				
Dimensions	220(W) X 210(D) X 208.7(H)mm (8.67" x 8.27" x 8.21")			
Weight	4.7 kg (10.36 lbs)			
Mounting	Wall mount kit			
Environmental				
Operating Temperature	0°C to 50°C			0°C to 40°C
Storage Temperature	-40°C to 85°C (-40°F to 185°F) (excl. HDD/SDD/CFast)			
Humidity	~95% @ 40°C (non-condensing)			
Vibration	Operating, 5 Grms, 5-500 Hz, 3 axes (w/ CFast or SSD) Operating, 0.5 Grms, 5-500 Hz, 3 axes (w/ HDD)			
ESD	Contact +/-4KV, Air +/-8KV			
Shock	Operating, 100 Grms, half sine 11ms duration (w/ CFast or SSD)			
EMC	CE & FCC Class A			
Safety	UL/cUL, CB, CCC			

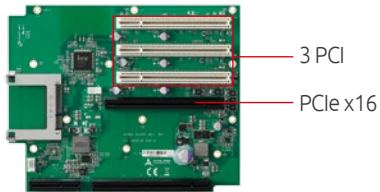
Product Illustration



Versatile Expansion

The MVP-6010/6020 Series offer various of expansion slot options for flexible function enhancement and easier system integration.

MVP-6010 Series (4 Slots)



MVP-6020 Series (4 Slots)

