

M60A

Low-power and High-Performance Fanless Embedded System

M60A is a low-power and high-performance fanless embedded product. The chassis of the product is cast from aluminum alloy, featuring a compact structure and fanless design. It has excellent sealing, dustproof, heat dissipation and vibration resistance performance, making it suitable for use in harsh environments with high levels of pollution, heavy dust, and severe electromagnetic interference. The product utilizes IntelC236/ H110/Baytrail and other platform technology solutions, supporting Intel®Core™ 6/7/8/9 CPU, multiple Gigabit LAN port, and PCI/PCIE extension. The complete PC offers comprehensive functionality and strong environmental adaptability, making it suitable for mid-to-high-end customer requirements. It can be widely applied in various embedded fields such as machine vision, autonomous driving, highway lane control, mechanical inspection equipment, and industrial automation control.



Product Features



Fully sealed and fanless



Low power consumption and high performance

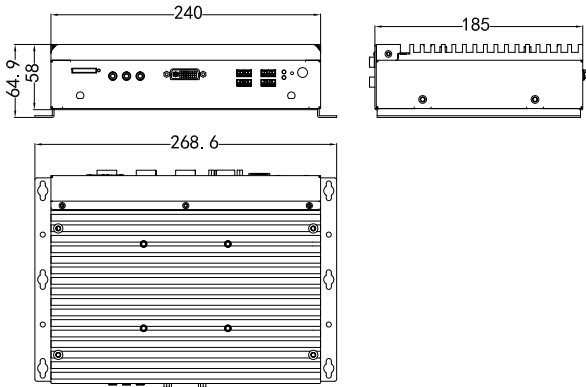


Operating in a wide temperature range



Rich and expandable port

Product Dimensions Drawing



(Please refer to the user manual to check detailed specifications and dimensions) (unit: MM)

Product Specifications

Item		Description		
System Configuration	Processor	M60A-E: Intel® Celeron J1900 2.0Ghz quad-core, onboard processors which are non-replaceable		
	Chipset	M60A-H: Intel® H110/C236: supports 6/7/8 Gen Intel® Core™ I3/I5/I7 series; supports 9th Gen Intel® Core™ I3/I5 series, LGA1151, CPU TDP ≤65W		
		M60A-E: Intel® BayTrail		
I/O Port	Memory	M60A-H: Intel® H110/C236		
	LAN Port	M60A-E (BayTrail): supports 1x 204Pin DDR3L SO-DIMM slot, up to 8GB, with 8G DDR3L memory requiring chips on both sides		
		M60A-H (H110/C236): supports 2x 260Pin DDR4 SO-DIMM memory slot, with 1 slot supporting up to 32GB and the PC supporting up to 64GB		
	Display	2/4/6 x RJ45 10/100/1000Mbps LAN port optional		
	USB	M60A-E (BayTrail)/M60A-H(H110): supports any two displays of VGA, HDMI and DVI-D, but does not support three displays simultaneously		
		M60A-H (C236): supports independent and simultaneous three displays of VGA, HDMI and DVI-D		
Expansion Bus	COM	M60A-E (BayTrail): 1 x USB3.0 + 7 x USB2.0 port		
	GPIO	M60A-H(H110): 4 x USB3.0+4 x USB2.0 port		
		M60A-H (C236): 8 x USB3.0 port		
	Audio	Optional 4/5/6 serial ports. COM1~COM6 support optional RS232/485/422 (MAX), and the expansion box can have up to 10 COM ports. The 4 serial ports of the expansion box are in RS-232 mode		
		1 x 8-channel GPIO (1 × 10 Phoenix terminals)		
	Motherboard Integration	1 group of audio ports (supporting MIC-IN, LINE-IN and LINE-OUT)		
		1 x M-SATA slot (for 4G or storage)		
	Expansion Box	1 x SIM card slot, supporting external SIM card for easy installation		
		1 x M.2 key E slot (for WIFI function)		
		M60A-H (C236): supports 1 x M.2 keyM (PCIe X4 signals)		
		M60A-H (H110): supports 1 x M.2 keyM (PCIe X1 signal)		
		Dual expansion card I: 2x PCI (optional)		
		Dual expansion card II: 1 x PCI + 1x PCIe x 16 (optional)		
Storage	MSATA M.2	Quad-expansion cards I: 4x PCI (optional)		
		Adapting to M60A-H (H110/C236): PCIe slot for PCIe3.0 x16 signals		
		Adapts to M60A-E (J1900): PCIe slot for PCIe3.0 x1 signals		
Working Environment	Hard Disk	Remarks: PCI slot supports PCI2.3 standard; the size supported by PCI card is 106.68mm high and 174.63mm long, and that of PCIe card is 106.68mm high and 167.65mm long		
	MSATA	Provides 2x SATA interface, supports 2x 2.5-inch laptop hard disks and hot swap function		
		Provides 1x M-SATA slot		
		M60A-H (C236): supports 1 x M.2 keyM (PCIe X4 signal)		
Storage Environment	Installation Method	M60A-H (H110): supports 1 x M.2 keyM (PCIe X1 signal)		
		CPU power consumption	With hard disk drive (HDD)	With the solid state/electronic hard disk
		CPU TDP<35W	0°C~+45°C	-10°C~+60°C
		CPU TDP=35W	0°C~+40°C	-10°C~+60°C
Product Dimensions	Power Supply	35W<CPU TDP≤65W	0°C~+40°C	-10°C~+50°C
		Note: The air flow rate in the working environment of the PC depends on the specific configuration.		
		Without the expansion box:		
		M60A-E: 240mm (W) × 185mm (D) × 58mm (H)		
Power Supply	Product Dimensions	M60A-H: 240mm (W) × 185mm (D) × 78mm (H)		
		With the expansion box:		
		M60A-E-2P: 240mm (W) × 196.8mm (D) × 113mm (H)		
		M60A-H-2P: 240mm (W) × 196.8mm (D) × 133mm (H)		
Power Supply	Power Supply	1 x 4Pin Phoenix terminal power port		
		External AC 220V power adapter or DC 9-36V wide voltage input (optional):		
		M60A-H (Intel® H110/C236): Standard configuration DC 19V single power supply (optional 9VDC-36VDC wide voltage module)		
		M60A-E (Intel® BayTrail): Standard configurationDC 12V single power supply (optional 9VDC-36VDC wide voltage module)		

Note: EVOC Intelligent reserves the right to final interpretation of product specifications and ordering information etc.

Ordering Information

Part No.	Model	Specification
0010-162111	M60A-E-01	Fanless PC/ Intel®BayTrail chipset/ Celeron J1900 2.0Ghz quad-core processor/ 4GB memory/ 128G SSD/ serial port*6/ USB3.0*1+ USB2.0*7/ Gigabit LAN port*2/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Line-out*1/ MIC*1/ Line-in*1/ 12V DC power supply/ 12V power adapter*1
0020-066581	M60A-E-01	Fanless barebone system/ Intel®BayTrail chipset/ Celeron J1900 2.0Ghz quad-core processor/ no memory/ no hard disk/ serial port *6/ USB3.0*1+ USB2.0*7/ Gigabit LAN port *2/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Line-out*1/ MIC*1/ Line-in*1/ 12V DC power supply/ no power adapter
0010-162121	M60A-E-2P-01	Fanless PC/ Intel®BayTrail chipset/ Celeron J1900 2.0Ghz quad-core processor/ 4GB memory/ 128G SSD/ serial port*10/ USB3.0*1+ USB2.0*7/ Gigabit LAN port*2/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Line-out*1/ MIC*1/ Line-in*1/ PCI extension*2/ 12V DC power supply/ 12V power adapter*1
0020-066591	M60A-E-2P-01	Fanless barebone system/ Intel®BayTrail chipset/ Celeron J1900 2.0Ghz quad-core processor/ no memory/no hard disk/ serial port *10/ USB3.0*1+ USB2.0*7/ Gigabit LAN port *2/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Line-out*1/ MIC*1/ Line-in*1/ PCI extension*2/ 12V DC power supply/ no power adapter
0010-162131	M60A-H-01	Fanless PC/ Intel®H110 chipset/ I5-7500T 2.7Ghz quad-core processor/ 4GB memory/ 128G SSD/ serial port*6/ USB3.0*4+USB2.0*4/ Gigabit LAN port*2/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Line-out*1/ MIC*1/ Line-in*1/ 19V DC power supply/ 19V power adapter*1
0020-066601	M60A-H-01	Fanless barebone system/ Intel® H110 chipset/ no CPU/no memory/ no hard disk/ serial port *6/ USB3.0*4+ USB2.0*4/ Gigabit LAN port *2/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Line-out*1/ MIC*1/ Line-in*1/ 19V DC power supply/ no power adapter
0010-162141	M60A-H-2P-01	Fanless PC/ Intel®H110 chipset/ I5-7500T 2.7Ghz quad-core processor/ 4GB memory/ 128G SSD/ serial port*10/ USB3.0*4+USB2.0*4/ Gigabit LAN port*2/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Line-out*1/ MIC*1/ Line-in*1/ PCI*1+PCIE*1 extension/ 19V DC power supply/ 19V power adapter*1
0020-066611	M60A-H-2P-01	Fanless barebone system/ Intel® H110 chipset/ no CPU/ no memory/ no hard disk/ serial port *10/ USB3.0*4+ USB2.0*4/ Gigabit LAN port *2/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Line-out*1/ MIC*1/ Line-in*1/ PCI*1+PCIE*1 extension/ 19V DC power supply/ no power adapter
0010-162151	M60A-H-21	Fanless PC/ Intel® C236 chipset/ I7-8700 3.2Ghz hexa-core processor/ 4GB memory/ 128G SSD/ serial port*5/ USB3.0*8/ Gigabit LAN port*4/
0020-066621	M60A-H-21	Fanless barebone system/ Intel® C236 chipset/ no CPU/ no memory/ no hard disk/ serial port*5/ USB3.0*8/ Gigabit LAN port*4/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Lineout*1/ MIC*1/ Line-in*1/ 19V DC power supply/ no power adapter
0010-173661	M60A-H-02	Fanless PC/ Intel®H110 chipset/ I5-7500T 2.7Ghz quad-core processor/ 8GB memory/ 128G SSD/ serial port*6/ USB3.0*4+USB2.0*4/ Gigabit LAN port*2/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Line-out*1/ MIC*1/ Line-in*1/ 19V DC power supply/ 19V power adapter*1
0010-173671	M60A-H-2P-02	Fanless PC/ Intel®H110 chipset/ I5-7500T 2.7Ghz quad-core processor/ 8GB memory/ 128G SSD/ serial port*10/ USB3.0*4+USB2.0*4/ Gigabit LAN port*2/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Line-out*1/ MIC*1/ Line-in*1/ PCI*1+PCIE*1 extension/ 19V DC power supply/ 19V power adapter*1
0010-173681	M60A-H-22	Fanless PC/ Intel®C236 chipset/ I7-8700 3.2Ghz hexa-core processor/ 8GB memory/ 128G SSD/ serial port*5/ USB3.0*8/ Gigabit LAN port*4/ VGA*1/ HDMI*1/ DVI*1/ GPIO*1/ Line-out*1/ MIC*1/ Line-in*1/ 19V DC power supply/ 19V power adapter*1

Optional Accessories

Part No.	Model	Specification
1100-004811	Power Adapter	60W 12V adapter accessory kit
1100-007411		150W 19V adapter accessory kit
1067-000341	EF-PWR-070ECS	DC 19V input
1067-000361	EF-PWR-072ECS	DC 12V input
1067-000351	EF-PWR-071ECS	DC9V-36V wide voltage input
1067-000451	M60A	Expansion box kit/ PCI*2/ RS232*4
1067-000461		Expansion box kit/ PCI*1/ PCIEx16*1/ RS232*4
1067-000471		Expansion box kit/ PCI*4 / RS232*4 / LPT*1

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FREE CHIP
CUSTOMIZATION
FLEXIBLE AND RAPID
DEPLOYMENT



Intel® H110/C236/BayTrail Compact Fanless System

M60A

- Good-looking

Professional and craftsmanship design
Highlight industrial aesthetics
- Free chip customization

Compatible with Intel H110/C236 /BayTrail chip platforms
- Flexible and rapid deployment

Modular kit design
Change required ports rapidly
- Wide voltage input

Optional 9~36VDC input
- Safety and stability

Rigorous Tests
Quality Assurance