M50B

Small-size and High-Performance Fanless Embedded System

M50B is a fanless embedded product with a small size and high performance, featuring onboard 6th-generation Intel® Core™ i7/i5/i3 U series processors, onboard J1900 processor + BayTrail platform chip, and onboard Intel® Celeron™ J6412/Intel® Atom™ X6425E processor. It supports WIN7 (64bit), WIN10, LINUX, and other operating systems. The design is simple with compact dimensions, a fanless structure, and excellent sealing for dust prevention, heat dissipation, and vibration resistance.M50B is primarily used in various embedded intelligence fields such as mechanical testing equipment, industrial automation control, and robot controllers.

Product Features

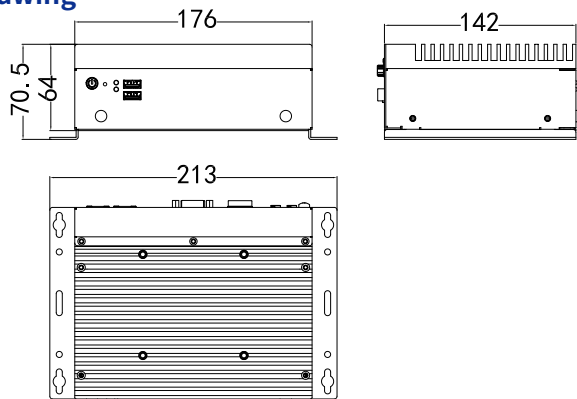| Fully sealed and fanless | Low power consumption and high performance | Small size | Operating in a wide temperature range | Rich and expandable port |

Product Dimensions Drawing

176   142

70.5 64

213

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

Product Specifications

Item		Description
System Configuration	Processor	M50B-E: Intel® Celeron J1900 2.0Ghz, quad-core, Intel® Celeron ™ J6412/Intel® Atom™ X6425E processor, onboard processors which are non-replaceable
		M50B-H: supports Intel® I3-6100U/I5-6300U/I7-6600U processor, and onboard processors which are non-replaceable
	Chipset	M50B-E：Intel® BayTrail、Elkhart lake
		M50B-H：Intel® SkyLake-U
	Memory	BayTrail: supports 1 x 204Pin DDR3L SO-DIMM slot
		Standard configuration: 4GB, with the slot supporting up to 8GB and the PC memory supporting up to 8GB
		Elkhart lake: supports 1 x 260Pin DDR4 SO-DIMM slot, with the slot supporting up to 32GB and the PC memory supporting up to 32GB
		SkyLake-U: supports 1x 260Pin DDR4 SO-DIMM slot
		Onboard 4GB; the slot supporting up to 16GB, and the PC memory supporting up to 20GB
I/O Port	LAN Port	2 x RJ45 10/100/1000Mbps LAN port,expandable up to 4LAN ports . LAN1 supporting Wake-on-LAN
	Display	Provide 1 VGA and 1 HDMI display, and support dual display
	USB	BayTrail: supports up to 1 x USB3.0 + 5 x USB2.0 port
		Elkhart lake: Standard configuration 1x USB3.0 + 3 x USB2.0 port, supporting up to 1x USB3.0 + 5x USB2.0 port
		SkyLake-U: supports up to 2 x USB3.0 + 4 x USB2.0 port
	COM	2~4x serial port, COM1~COM4, RS232/485/422 (optional)
	Audio	1 group of Audio ports (supporting MIC-IN and LINE-OUT)
Expansion Bus	Motherboard Integration	BayTrail/ SkyLake-U：
		1 x M.2 key E slot (for WIFI function)
		1 x M-SATA slot (for 4G or storage function. The 4G function and storage expansion cannot be used simultaneously)
		Elkhart lake：
		1 x M.2 key B-slot (for 5G or storage)
		1 x Mini-PCIE slot (for 4G or WiFi)
		1 x M.2 key M or PCIEx4 (X2 resources), horizontal (supporting M.2 key M function by default)
Storage	Hard Disk	1 x SATA port (with optional 2.5-inch HDD or SSD)
	M-SATA/M.2	BayTrail/SkyLake-U: supports 1x M-SATA slot
		Elkhalt lake: supports 1 M.2 KEY M and 1 M.2 KEY B slots
Working Environment		0℃~+45℃ (HDD) -10℃~+60℃ (wide-temperature SSD/DOM) Note: The air flow rate in the working environment of the PC must be greater than 0.5m/s.
Storage Environment		-40℃~+85℃; humidity: 5%~95% (non-condensing state)
Installation Method		Wall-mounted, desktop, VESA standard arm
Product Dimensions		176 mm (W) × 142 mm (D) × 64 mm (H) (excluding mounting bracket)
Power Supply		1 x 4Pin Phoenix terminal power port External AC 220V power adapter for power supply or DC 9-30V wide voltage input (optional) Standard single-voltage DC output of the complete PC: Intel® SkyLake-U: DC 19V single power supply Intel® BayTrail/Elkhart lake: DC 12V single power supply
Operating System		Intel® BayTrail/SkyLake-U: supports WIN7 (64bit), WIN10, LINUX (Kernel 2.6) and other operating systems Intel® Elkhart lake: LINUX systems with high kernel versions such as WIN10, CentOS, Linux and Ubuntu

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