

# CYBOX-AE7L

**High performance fanless industrial box computer**

*Intel 7<sup>th</sup> Core i7/i5/i3 Desktop multi-core processors*



## Specification

V2.0



## Key features:

- ◆ Support Intel® 7<sup>th</sup> Core™ i7/i5/i3 desktop multicore processors;
- ◆ Q170 industrial chipset;
- ◆ 2x DDR4 SO-DIMM, Max. up to 32GB, Dual channel support;
- ◆ 3x Display ports;
- ◆ Max. expansion up to 10 USB ports;
- ◆ Max. expansion up to 6x Intel RJ45 port;
- ◆ Max. expansion up to 6x COM ports;
- ◆ Optional power solution (DC 18~36v wide voltage optional)

## Product Image



## Specifications

System		
Processor	CPU	Intel® 7 <sup>th</sup> Core™ i3/i5/i7 Desktop LGA1151 CPU, TDP=35W (fan-less)
	Chipset	Intel® Q170 Chipset
	BIOS	AMI SPI 64Mb, support ACPI, CPU temperature, system voltage monitoring
Memory	Interface	2 x DDR4 SO-DIMM, @1.2V, 1866/2133/2400/2666 MHz
	Capacity	Max. single RAM up to 16G, Dual channels, Expansion up to 32GB
Storage	Interface	1 x 2.5" HDD, support 5~9.5mm, hot pluggable
		1 x 2.5" HDD, support 5~9.5mm, Internal
		1 x M.2 SATA 3.0 (22*42mm), Internal
Display	Chipset	CPU integrated Intel® HD Graphics, support DirectX12
	Ports	1 x DP (Max. support resolution: 4096x2304 x24bpp, @ 60Hz)
		1 x DVI-D (Max. support resolution: 1920x1200, @ 30Hz) 1 x VGA (Max. support resolution: 2048x1536)
Network	Chip	2 x Intel® Ethernet Connection; LAN1: I210-AT, LAN2: I219-LM, support WOL
	Wireless	1 x Mini-PCIE (Half/ full, support 802.11b/g/n, 3G/4G, optional)
		1 x SIM slot
Audio	Chips	Realtek ALC662 5.1 Channel HAD Code
	Port	1 x Mic-in + 1 x Audio-out
I/O	USB	6 x USB 3.0
	COM	4 x DB9 RS232 (COM1/COM2 support RS485/RS422/RS232, BIOS controllable)
Expansion I/O	Front signal	1x 6 pin front panel controlled signal (Power on, restart, status LED, optional)
	Watchdog	1 x Internal USB 2.0 (Optional)
	COM	2 x 9pin COM pin-header (RS232)
	GPIO	8 x GPIO (4 IN 4 OUT, DI low level, DO high level, DI/DO BIOS configurable, Optional)
		8 x GPIO (4 IN 4 OUT, photoelectric isolated, 5V~40V wide voltage input, OMRON relay output, DB25, optional)
MXM	1 x MXM 3.0 (support 4x GigE)	
Power	Type	DC
	Port	1 x 4pin 5.08 phoenix terminal, with hole lock
	Input	18~36V, Max. power support 240W
LED/Switch	Power on	1 x power on button (including status LED light)
	Reset	1 x reset/restart button (Long press ≥3s when power of, clear CMOS; press 0.2~1s reset when power on)
Watchdog		Programmable 255 seconds
OS	version	Windows 7/8.1/10 64 bits, Linux
RAID	Mode	0, 1
Structure		
Treatment	Hard anodizing treatment, scratch resistant	
Color	Iron grey, industrial grey color	

Cooling	Fan-less design
Weight	4.12kg
Dimension	268mm(L) x 194.2mm(W) x 67.7mm(H)
Mounting	Desktop, wall mount, VESA mount (100 x 100mm)

### Environmental

Operation temp.	Operating temp.: -20~60°C (Industrial SSD) Operating temp.: 0~40°C (HDD)
Storage	-40~80°C
Humidity	10%~90%@40°C (non-condensation)
Vibration	SSD: 3Grms@5~500Hz, random, 1 hr/axis; 2.5" HDD: 1Grms@5~500Hz, random, 1 hr/axis
Shock	10G/peak (11ms sec)

### Interface and Dimension

The technical drawings include:  
 - A top view showing the layout of components with callouts 1 through 17.  
 - A side view showing the device's profile with dimensions 293, 268, and 67.7.  
 - A front view showing the VESA mounting holes with dimensions 281.7, 100, 4-M4, 6, 31, 66, 5, 132, R1.8, and R2.5.

#### Interface explanation

1:Power	2:LAN	3:USB3.0	4:DVI-D	5:Out	6:COM
7:Reset	8:Switch	9:Earth	10:MXM Slots	11:MIC	12:VGA
13:DP	14:2.5" HDD	15:USB3.0	16:SIM	17:GPIO	Reserved hole

## Ordering Information

CYBOX-AE7L-71	Intel Kabylake i3-7100T/1*DVI-D/1*DP/1*VGA/2*RJ45/6*USB/4*RS232/DC/Mic In/Line-Out
CYBOX-AE7L-72	Intel Kabylake i5-7500T/1*DVI-D/1*DP/1*VGA/2*RJ45/6*USB/4*RS232/DC/Mic In/Line-Out
CYBOX-AE7L-73	Intel Kabylake i7-7700T/1*DVI-D/1*DP/1*VGA/2*RJ45/6*USB/4*RS232/DC/Mic In/Line-Out
Memory	DDR4L 4G/8G/16G/32GB
Storage	SSD: 32GB/64GB/128GB/256GB/512GB/1TB HDD: 500GB/1TB
Wireless module	Wifi: 802.11b/g/n Mini PCIe 150M 3G/4G: Telit Asia Pacific 4G module



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