# ABOX-E7DS

### High performance Industrial Box Computer

*Intel 6/7th I7/I5/I3 Desktop multi-core processors, with PCIe and MXM expansion*

## Specification

### V2.0

## Key features:

◆ Support Intel® 6/7th Core™ i7/i5/i3 Desktop processors;

◆ Q170 industrial chipset;

◆ 2x DDR4 SO-DIMM, max. up to 32GB, dual channel support;

◆ 3x Display interface;

◆ Max. expansion up to 10 USB ports;

◆ Max. expansion up to 6 Intel RJ45 ports;

◆ Max. expansion up to 8 serial ports;

◆ 3x Disk storage support, 2x PCIe slot support;

◆ Optional power solution (DC 9~36V wide voltage optional)

## Product Image

# Specification parameter

## System

| | | |
|---|---|---|
| Processor | CPU | Intel· 6/7th Core™ i3/i5/i7 Desktop LGA1151 CPU, TDP=65W (PWM intelligent fan active heat dissipation) |
| | 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<br>1 x 2.5″ HDD, support 5~9.5mm, internal<br>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)<br>1 x DVI-D (Max. support resolution: 1920x1200, @30Hz)<br>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 802.11 b/g/n, 3G/4G Optional)<br>1 x SIM slot |
| AUDIO | Chipset | Realtek ALC662VD |
| | Ports | 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 | N/A |
| | Watchdog | 1 x Internal USB 2.0 (optional) |
| | COM | 2 x 9pin COM pin-header (S232) |
| | GPIO | 8 x GPIO (4 in 4 out, DI low level, DO high level, DI/DO BIOS configurable, Optional<br>8 x GPIO (4 in 4 out, photoelectric isolated, 5V~40V wide voltage input, OMRON relay output, DB25, optional) |
| | PCIe | 1 x MXM 3.0 (support 4x GigE)<br>1 x PCIe 3.0 16x +1 x PCIe 3.0 4x<br>1 x PCIe 3.0 16x +1 x PCI (one out of two twice, support half/full, half-length card, length ≤185mm) |
| Power | Type | DC |
| | Ports | 1 x 4pin 5.08 phoenix terminal, with hole lock |
| | Input | DC 18~36v, max. power consumption up to 240W |
| LED/Switch | Power on | 1 x power on button (Including status LED light) |
| | Reset | 1 x reset/reboot button (Long press>3s when power off, clear CMOS; press 0.2~1s when power on) |
| Watchdog | | Programmable 255 seconds |
| OS | version | 6th Core™: Windows 7/8.1/10 32 bits/64 bits, Linux<br>7th Core™: 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 | PWM intelligent fan active heat dissipation |
| Weight | 4.65kg |
| Dimension | 268mm(L) x 194.2mm(W) x 118.5mm(H) |
| Mounting | Desktop, wall mount, VESA mount |
| Fan | 2x 4010 temperature controlled fan |

## Environmental

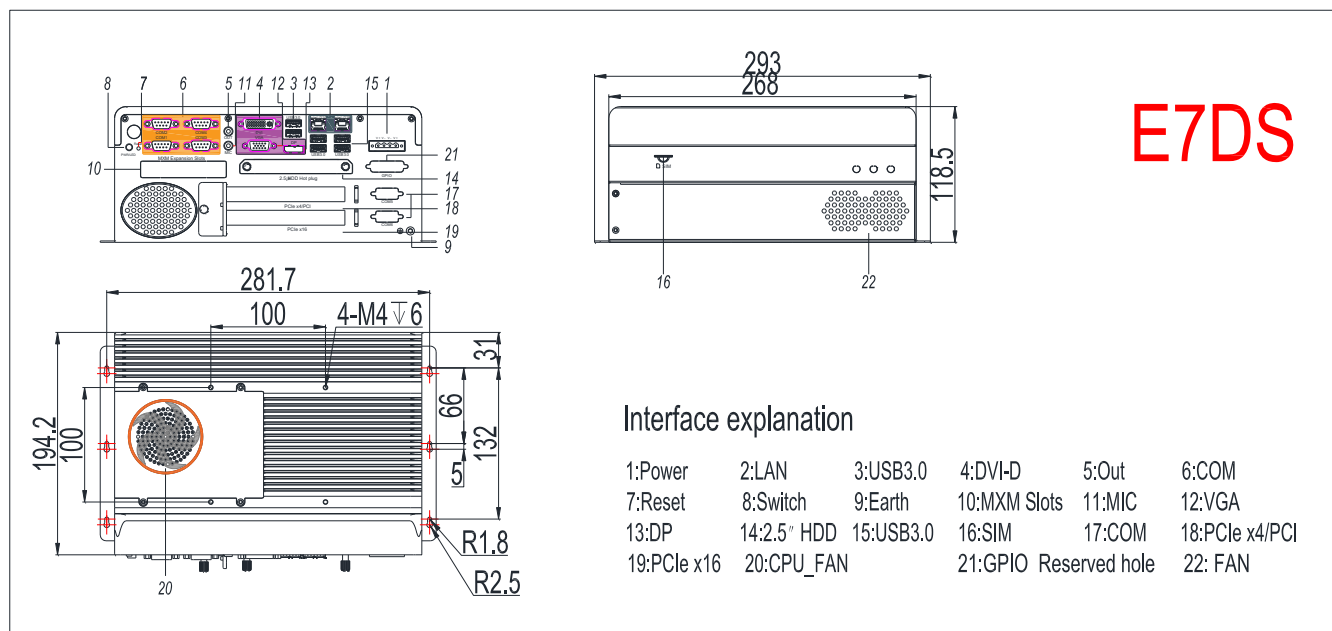| | |
|---|---|
| Operating temp. | Operating temp.: -20~60°C (industrial SSD); Operating temp.:0~40°C (commercial HDD) |
| Storage | -40~80°C |
| Humidity | 10%~90%@40°C (non-condensation) |
| Vibration | SSD：3Grms@5~500Hz，random，1 hr/axis；<br>2.5″HDD：1Grms@5~500Hz，random，1 hr/axis |
| Shock | 10G/peak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

# Interface and Dimension



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:COM | 18:PCIe x4/PCI |
| 19:PCIe x16 | 20:CPU_FAN | | 21:GPIO Reserved hole | | 22: FAN |

*TAICENN*, *is a leading global* **solution provider** *of Embedded Box IPC, Touch panel IPC and industrial monitor, which are designed specifically for systems and applications that require excellent performance, high-level reliability and stability, long supply period and supports.*