

# ABOX-5000

Intel 6th-Gen Skylake Core i7/i5/i3 CPU w/ 4 GbE/ 4 ISO COM/ 2 DP/ VGA/ 4 USB 3.0/ Fast Expansible Slot/ 9-36V Fanless Computer



Delay Time



Power Ignition



Wide Range



Wireless



Battery Backup

Taiwan Patent No. M447854  
Taiwan Patent No. M448011

## System

|                    |   |
|--------------------|---|
| <b>CPU</b>         | Intel Gen6 Core i7-6700TE (8M Cache 2.4GHz up to 3.4GHz)<br>Intel Gen6 Core i5-6500TE (6M Cache 2.3GHz up to 3.3GHz)<br>Intel Gen6 Core i3-6100TE (4M Cache 2.7GHz)<br>Intel Pentium Processor G4400TE (3M Cache, 2.40 GHz) |
| <b>Memory</b>      | 2 x DDR4 2133 MHz SO-DIMM up to 32GB  |
| <b>Chipset</b>     | Intel® Q170 Platform Controller Hub   |
| <b>LAN Chipset</b> | 3 x Intel i210-AT and 1 x i219LM (support iAMT) Gb/s<br>Ethernet Controllers Onboard Support PXE and WOL  |
| <b>Watchdog</b>    | 1 ~ 255 Level Reset   |

## I/O

|                      |   |
|----------------------|---|
| <b>Serial Port</b>   | 4 x RS 232/422/485 w/1.5KVrms isolation (Auto Direction Control)                      |
| <b>USB Port</b>      | 4 x USB 3.0 Ports   |
| <b>LAN</b>           | 4 x RJ45 Ports for GbE (Optional for 4 x POE 15.4W per port)                          |
| <b>Video Port</b>    | 2 x Display Port and 1 x VGA Port (Triple Independent Display)                        |
| <b>DIO Port</b>      | 8 x GPI and 4 x GPO connector w/1.5KVrms isolation                                    |
| <b>Audio</b>         | 1 x Line-out and 1 x Mic-in (Line-in Optional)  |
| <b>Expansion Bus</b> | 3 Full and 1 Half Mini-PCIe Slot (2 x SIM Card Socket for 3G/LTE)                     |
| <b>FES Expansion</b> | Support PCI-E, USB, SMBus, GPIO and SATA (Customized for Customer without NRE charge) |

## Graphics

|                   |  |
|-------------------|--|
| <b>Graphics</b>   | Intel® HD Graphics 530<br>DirectX Video Acceleration (DXVA) for Accelerating Video Processing - Full AVC/VC1/MPEG2 HW Decode<br>Supports DirectX 11/10.1/10/9 and OpenGL 4.0 |
| <b>Resolution</b> | Max Resolution (HDMI1.4) : 4096x2304@24Hz<br>Max Resolution (DP) : 4096x2304@60Hz  |

## Storage

|             |   |
|-------------|---|
| <b>Type</b> | 2 x 2.5" Drive Bay for SATA Type HDD/SSD, Support RAID 0, 1<br>1 x SATA DOM |
|-------------|---|

## Features

- Intel® 6th-Gen Quad Core i7 LGA1151 CPU
- 4 x RS-232/422/485 with 1.5KVrms isolated
- 8 x GPI and 4 x GPO with 1.5KVrms isolated
- 4 x GbE LAN (optional for 4 x PoE)
- Dual Hot Swappable SATA Storage
- 9-36VDC input and operating Temp.: -40 ~ 70°C
- Fast Expansible Slot support PCI-E, USB, SMBus, GPIO and SATA

## Power Requirement

|                          |   |
|--------------------------|---|
| <b>Power Input</b>       | 9V - 36V DC Power Input   |
| <b>Power Protection</b>  | Automatics Recovery Short Circuit Protection  |
| <b>Power Management</b>  | Vehicle Power Ignition for Variety Vehicle  |
| <b>Power Off Control</b> | Power off Delay Time Setting by BIOS and Software   |
| <b>Battery (UPS)</b>     | Internal Battery Kit for 10 Mins Operating (Optional)<br><b>Patent No. : M447854 - Build-in Battery</b> |

## Environmental

|                            |   |
|----------------------------|---|
| <b>Operating Temp.</b>     | -40°C ~ 70°C (Default CPU 17Watt)   |
| <b>Storage Temp.</b>       | -40°C ~ 80°C  |
| <b>Relative Humidity</b>   | 0% RH - 95% RH  |
| <b>Vibration(random)</b>   | 2.5g@5~500 Hz with SSD  |
| <b>Vibration Operating</b> | MIL-STD-810G, Method 514.5, Category 20,<br>Ground Vehicle-Highway                                  |
| <b>Truck Storage</b>       | MIL-STD-810G, Method 514.5, Category 24, Integrity Test   |
| <b>Shock</b>               | Operating: MIL-STD-810G, Method 516.5, Procedure I,<br>Trucks and semi-trailers=15G (11ms) with SSD |
| <b>Crash Hazard</b>        | MIL-STD-810G, Method 516.5, Procedure V,<br>Ground equipment=100g                                   |
| <b>Certifications</b>      | CE, FCC Class A   |

## Mechanical

|                     |   |
|---------------------|---|
| <b>Construction</b> | Aluminum Alloy                                |
| <b>Mounting</b>     | Wall-mount, VESA-mount, Din Rail Mounting Kit |
| <b>Weight</b>       | 3860g (Barebone)                              |
| <b>Dimensions</b>   | 240(L) x 226(W) x 79(H) mm                    |

## Ordering Information

|                    |   |
|--------------------|---|
| <b>Part Number</b> | ABOX-5000-i7S Optional for i5S/i3S/C1S  |
| <b>Description</b> | Intel 6th-Gen Skylake Core i7/i5/i3 CPU w/ 4 GbE/ 4 ISO COM/ 2 DP/ VGA/ 4 USB 3.0/ Fast Expansible Slot/ 9-36V Fanless Computer |