

OPS Computer Module General User Manual



This is a general OPS module manual; actual product may vary slightly from descriptions.

1. Safety Instructions

For safety, read these safety instructions before use. Improper use may cause injury, property loss or product damage. Do not repair it yourself.

WARNING	
Disconnect power immediately if serious faults occur: <ul style="list-style-type: none"> • Smoke, strange odors or abnormal noise • No image, no sound or distorted image Stop using the unit, unplug and get service from qualified personnel.	
Keep liquids, metal objects and combustibles away from the unit. <ul style="list-style-type: none"> • If liquid/metal gets inside, cut power at once and call qualified service. • Take extra care when children are nearby. 	
Do not open or modify the unit without authorization. <ul style="list-style-type: none"> • Internal high voltage may cause electric shock. Contact your dealer for service. 	
Do not place items on the unit. <ul style="list-style-type: none"> • No liquid containers (vases, pots, cosmetics, liquid medicine) on top. • Liquid spills may cause short circuit, fire or electric shock. • Do not step on or hang objects from it. 	
Do not install the unit in unsuitable locations. <ul style="list-style-type: none"> • Keep away from damp/rainy/snowy areas/hot-spring steam to prevent malfunction/electric shock. • Keep open flames such as lit candles away from the device. 	
Unplug the device during thunderstorms. <ul style="list-style-type: none"> • Do not touch it in lightning weather to avoid electric shock. • Keep components with above-safety voltage out of children's reach. 	
Do not cover or block the ventilation openings. <ul style="list-style-type: none"> • Blocked vents cause overheating, which may lead to fire, product damage or shorter service life. • Do not cover with tablecloths or similar items. • Do not place the unit with vents facing down. • Do not install on carpets or bedding. 	
Do not handle the power cord with wet hands, as this may cause electric shock.	

CAUTION	
Avoid high-temperature installation; heat may damage housing and internal parts. <ul style="list-style-type: none"> • Keep away from heat sources: radiators, heaters, stoves and other heat-emitting equipment. • Avoid direct sunlight to prevent overheating and malfunction. 	
Operating Temp: -10℃~50℃; Operating Humidity: 10%~90%RH	
Storag Temp: -20 ℃ ~60 ℃; Storag Humidity: 10%–90% RH, non-condensing	
<ul style="list-style-type: none"> • Power supply: DC 19 V, 4.74 A / 6 A, via 3C-certified adapter or OPS slot power. 	
When transporting this product: <ul style="list-style-type: none"> • Use original carton and cushioning materials when moving or shipping for repair. 	

Product specifications are subject to change without prior notice.

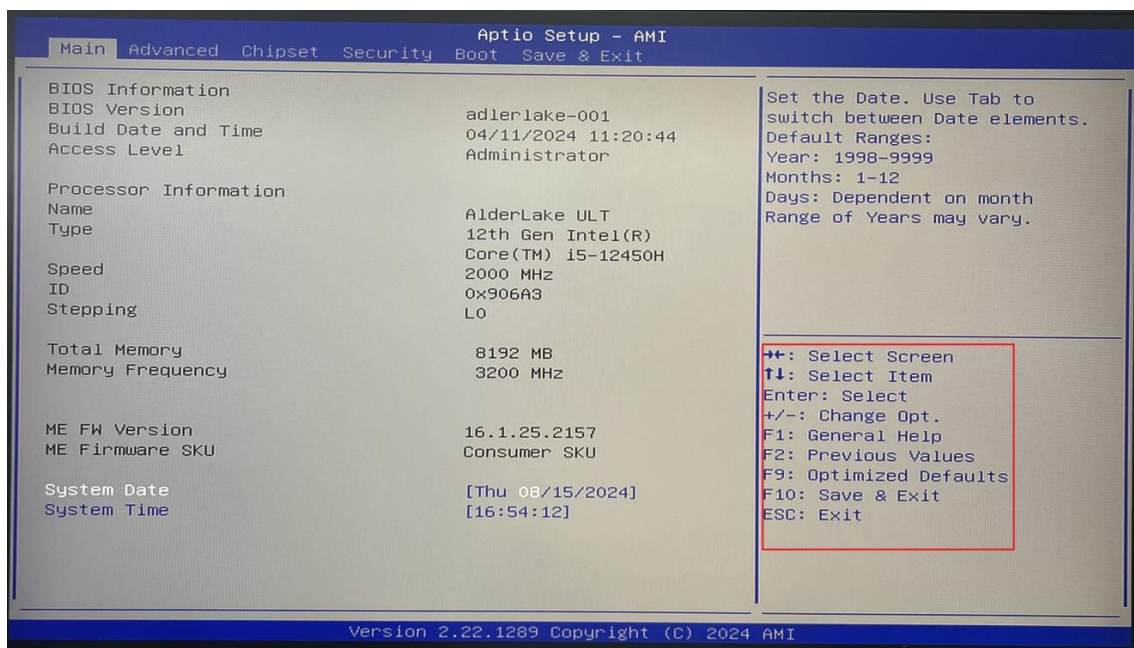
※ Note:

- Disregarding cautions may cause minor injury or product damage.
- The applicable altitude depends on the selected power supply.
- Read the installation manual before power connection.

2. Common BIOS Functions

2.1 Entering the BIOS Setup

Connect a USB keyboard. Before the computer starts, press and hold the <DEL / Delete> key to enter the BIOS setup utility (if it does not open, restart or power off and repeat the above steps). Use the arrow keys to select the desired BIOS setup options, and press F10 to save after making changes (F9 restores the factory default settings).



Note: Non-professional users should not change BIOS settings at will; otherwise, problems such as failure to enter the system may occur.

2.2 Selecting the Boot Device

Connect a USB keyboard. Before the computer starts, press and hold the <F11> key to open the boot device menu (if it does not open, restart or power off and repeat the above steps).



3. System Restore

(Restoring the system will wipe the C: drive and desktop files. Back up important files before operating.)

- **One-Key Restore Button (for commercial or mobile-cart installations)**

Before powering on the computer, use a suitable object such as a ballpoint pen tip, toothpick or paper clip to press and hold the round pinhole corresponding to [Restore] on the front of the OPS module, then power on the computer; release the button when the interface shown in Figure B appears. After the restore is completed, the system will restart and boot automatically.



一键还原按键

- **External-Keyboard Backup and Restore**

Insert a wired USB keyboard into the USB port on the OPS module or on the display. Before powering on the computer, press and hold Ctrl+F3 simultaneously for system backup; release the keys when the interface shown in Figure A appears. After the backup is completed, the system will restart automatically. (For system restore, press and hold Ctrl+F4; when the interface shown in Figure B appears, the system will restart automatically after the restore is completed.)



Figure A

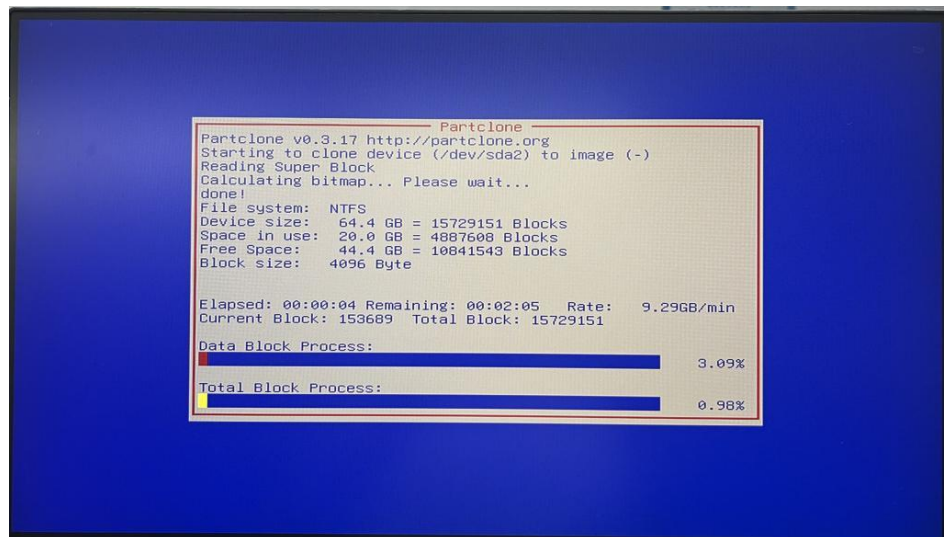
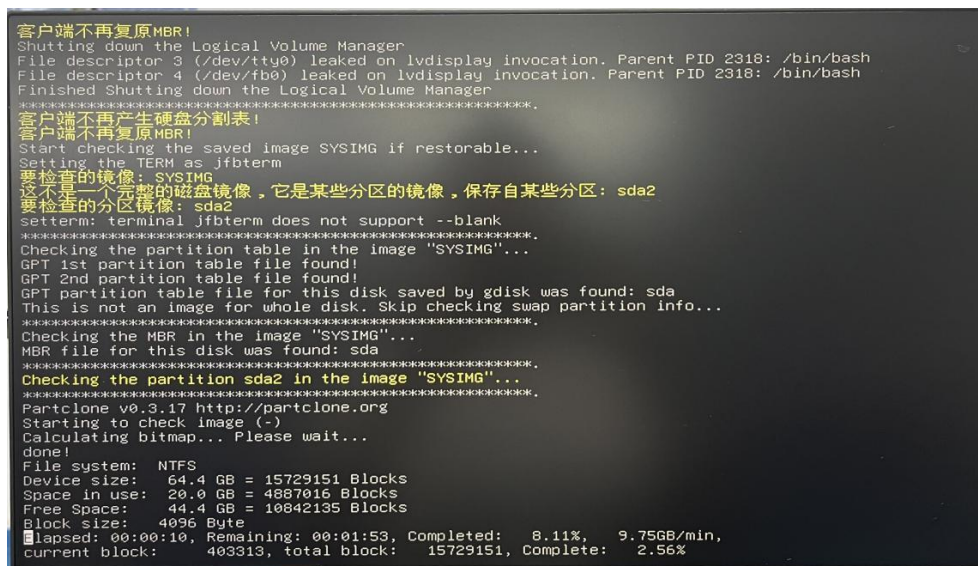


Figure B

4. Common Fault Troubleshooting

No.	Common Fault	Checks and Suggested Solutions
1	The display shows “No Signal” or “Waiting for Device Connection” after power-on	<p>Check whether the OPS computer and the tail-board sub-card are powered normally;</p> <p>If the display is a dual-system unit and cannot switch to the OPS signal automatically, try switching manually;</p> <p>If possible, swap-test with the OPS computer module of another normal display; if only one unit is available, connect the external display port on the OPS to the display or a monitor with a DP/HDMI cable to determine whether the OPS module is faulty.</p>
2	The OPS computer reports no operating system, or the boot loader cannot load	<p>First restore the system using the system restore method in Section 4 of this manual;</p> <p>If the system cannot be restored, enter WinPE and format the C: drive; if there is no partition, re-partition and reinstall the system.</p>

No.	Common Fault	Checks and Suggested Solutions
3	The OPS computer restarts in a loop after power-on	Check whether the CPU cooling fan spins normally; Use antivirus software to check whether the system is infected with a virus; Restore the system using the method in Section 4 of this manual.
4	Blue screen or system freeze when entering the system or during use	Check whether there are incompatible drivers or software; Restore the system using the method in Section 4 of this manual.
5	Startup Repair appears after power-on due to power loss or improper shutdown during use	1. Use a USB keyboard and select "Start Windows Normally" when the repair option appears at startup; 2. If the system cannot start, restore it using the method in Section 4 of this manual.
6	The computer runs slowly	Restore the system using the method in Section 4 of this manual; For a mechanical hard drive, use third-party software to check for bad sectors, or upgrade to an SSD; Check whether the free space on the system partition is too small; Check whether the CPU cooling fan spins normally.
7	No sound from the display after startup	First check whether the graphics and audio drivers are installed; If the drivers are intact, change the default playback device: right-click the speaker icon in the taskbar at the bottom-right corner → Playback devices → select the device shown as the display and set it as default.
8	USB devices cannot be detected or do not work properly	Check whether the chipset driver or USB driver is compatible with the mainboard; use driver update tools such as DriverGenius to update the related drivers online; Restore the system using the method in Section 4 of this manual.
9	Touch cannot be calibrated correctly on the display	1. Restore the system using the method in Section 4 of this manual; 2. Reinstall the manufacturer's display software.
10	The system cannot be restored	1. Use a USB drive with WinPE to check whether the factory partition is damaged; if it is not damaged, format the C: drive and restore the system again.
If the common troubleshooting steps above cannot solve the problem, contact your equipment supplier. If the unit needs to be returned to the factory for repair, pack it in the original packaging and include a note describing the fault symptoms and the return address, so as to speed up the repair process.		

5. Product Maintenance

OPS pluggable computer products are high-tech precision electronic products. Please maintain them with proper methods, so as to avoid damage or malfunction caused by improper operation.

5.1 Enclosure

Do not peel off the protective film on the unit body, and avoid scratching the body with sharp objects. Before cleaning, make sure the unit is powered off; do not clean it with a damp cloth, so that conductive liquids such as water droplets do not get inside the unit. When cleaning the base, remove the unit from the base first and keep it in a safe place, to prevent it from slipping or falling and being damaged.

5.2 Placement

This product is an ultra-lightweight computer product!

When used alone, do not place this product on the edge of a desk, so that it does not fall to the ground and get damaged when you are not paying attention.

Always keep an eye on the placement of the product's external devices and their cables, so that you do not accidentally trip over the cables or other devices and cause this product to slide or fall.

5.3 Heat Dissipation

Heat dissipation is very important for computer products. Please pay attention to the placement of this product and do not block the cooling air outlets or air intakes. If the product is used in a dusty environment, it is recommended to clean the dust from the air intakes every six months. Do not place the product on soft surfaces such as beds or sofas, as this may block the cooling air ducts, impair heat dissipation and even cause system freeze.

5.4 Ports

Do not block the ports on the unit with other objects, or scratch them with sharp objects and damage the pins. If contact is poor, use a soft brush to wipe off the dust.