



OpenVox Communication Co Ltd



UCP4130 Quick Start Guide

Version 1.0





OpenVox Communication Co Ltd

Address: Room 624, 6/F, Tsinghua Information Port, Book Building, Qingxiang Road, Longhua Street, Longhua District, Shenzhen, Guangdong, China 518109

Tel: +86-755-66630978, 82535461, 82535362

Business Contact: sales@openvox.cn

Technical Support: support@openvox.cn

Business Hours: 09:00-18:00(GMT+8) from Monday to Friday

URL: www.openvox.cn

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Revise History

Version	Release Date	Description
1.0	03/08/2021	First Version



Contents

1.	Appearance	6
2. I	Hardware Installation	8
	2.1 Gateway Module Board Installation	8
	2.2 Power Supply Installation	10
	2.3 Fan disassembly and installation	11
3. F	RAID Installation and Configuration (optional)	13
	3.1 CSM compatible module Configuration	13
	3.2 Configure RAID mode	14
	3.3 Install System	18
	3.4 View Info	18
	3.5 RAID Troubleshooting method	18
	3.6 Notes for RAID troubleshooting	19
<i>1</i> 1	nstall System	20



1. Appearance

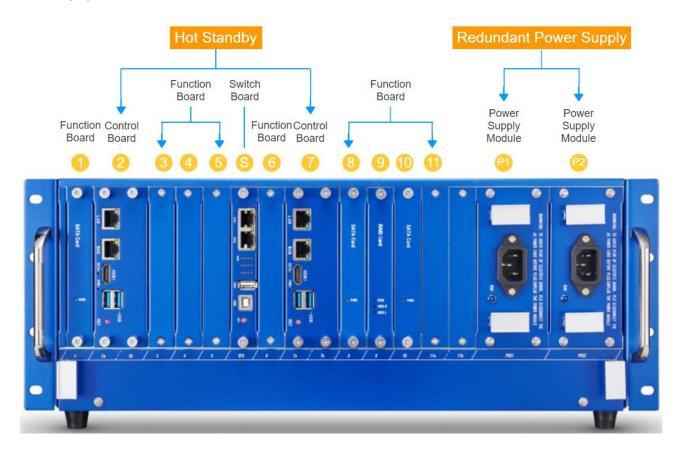


Figure 1-1 UCP4130 front panel

Function board: Gateway module board/SATA hard disk board/RAID board

UCP4130 is a modular design multi-functional hardware communication platform, mainly consisting of a 4U 19" chassis with drawer design and a blade type function board. The chassis provides up to 11 expansion slots and supports any combination of analog gateway/wireless gateway/E1 gateway interface boards, providing a comprehensive range of mainstream communication interfaces.

- VS-CCU-N2930AM/VS-CCU-I5
- VS-GWM801-S/VS-GWM801-O/VS-GWM801-OS
- VS-GWM401G/VS-GWM-401W/VS-GWM401L
- VS-ET2001/VS-ET2002/VS-ET2004

The two main control board slots support dual main control boards to realize a dual-system hot standby system. The function board slot also supports optional RAID (RAID0 and RAID1) to support



high-speed reading and writing while maintaining high reliability.

The following is the description of the module boards that can be installed in the UCP4130 chassis slot:

1: Gateway or SATA SLOT	6: Gateway or SATA SLOT
2a: Gateway or CPU SLOT (Support with SATA SLOT and Raid Card SLOT)	7a: Gateway or CPU SLOT (Support with SATA SLOT and Raid Card SLOT)
2b: Unavailable	7b: Unavailable
3: Gateway or Raid SATA SLOT	8: Gateway or Raid SATA SLOT
4: Gateway or SATA or Raid Card SLOT	9: Gateway or SATA or Raid Card SLOT
5: Gateway or Raid SATA SLOT	10: Gateway or Raid SATA SLOT
SFS: Gateway Switch Board	11a: Gateway or CPU SLOT (Support with MSATA)
	11b: Unavailable
PSS1: Power Supply Module	PSS2: Power Supply Module

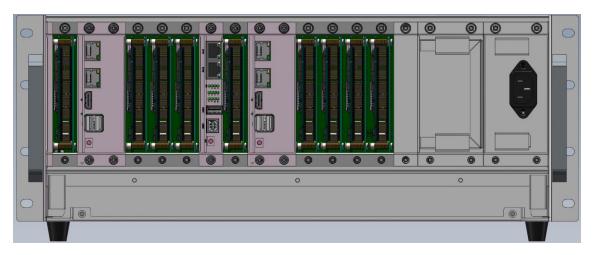


2. Hardware Installation

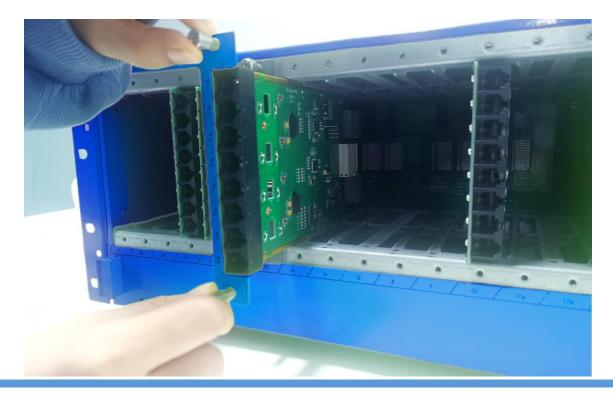
2.1 Gateway Module Board Installation

The default configuration of UCP includes chassis + main control board + fan box + 1 power supply module. The SFS slot is only used to install the main control board, and the gateway module boards can be replaced/added/removed in the remaining slots 1-11 for flexible expansion.

When installing the interface board, first remove the screws of the function board slot baffle:



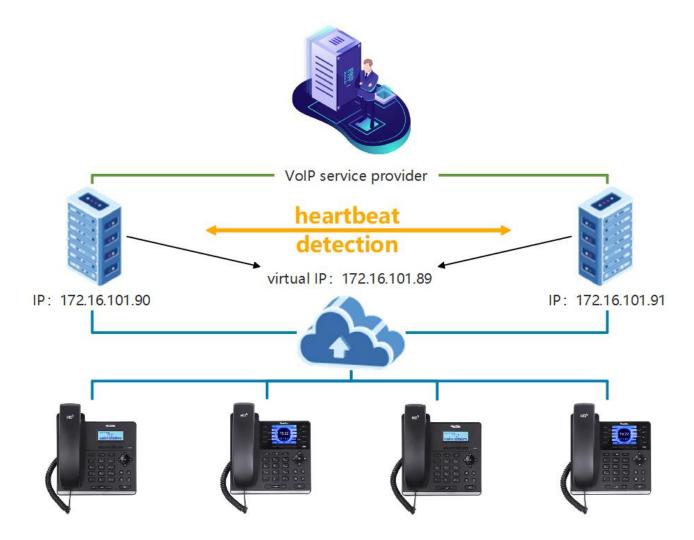
Align the interface of the telephony card with the slot as shown in the figure and insert it tightly. After the card is installed, put the screws on tightly.





All board modules are designed to prevent misinsertion. Slots are physically incompatible with inappropriate module boards and cannot be fully inserted. Even if an inappropriate module board is inserted, it will not cause any damage.

Meanwhile, it should be noted that the slot inserted into/pulled out from the chassis must be aligned with the guide rail, otherwise, it will cause some issue.



If you choose dual main control boards to build a dual-system hot standby solution, you need to insert two motherboards with the same hardware into the chassis, and install the same version of the VoIP system. One of them works as the main server in the "active" state and the other one is in the "standby" state. In the "standby" state, the configurations of the two machines are synchronized in real time. When the main server fails and goes down, the standby server will automatically take over the service to ensure uninterrupted business operation.

Note that before disassembling the main control board, you must execute the shutdown procedure first.



2.2 Power Supply Installation

The PSS slot is the area where the power supply module is installed, and the default power supply is installed in the PSS2 slot:



When installing the power module, you only need to remove the screws and the baffle, align the interface and insert, and then fix the screws.



The default configuration is 1 power supply module, and the power module supports hot swap.

Optional 2 power supply modules can form a redundant power supply solution, as a backup, to provide timely and powerful emergency treatment for accidents like a single power supply failure.



2.3 Fan disassembly and installation

Below the slot is the fan box. If you need to clean the fan, first remove the two screws shown in the figure:



Pull the handles on both sides to pull out the fan box. Be careful to handle it gently.



Wipe the case clean first, and use a dry cloth (not dampened with water) to wipe off the dust on the surface of the fan. It is recommended to use a blower to blow off the dust in the box.



After pulling out the fan box, you can see the filter underneath, you can use a brush and a vacuum cleaner to gently sweep away the accumulated dust.

When cleaning dust, remember not to let the inside of the device come into contact with liquid.



After cleaning, insert the fan box along the rail and push it back, then fix the screws.



3. RAID Installation and Configuration (optional)

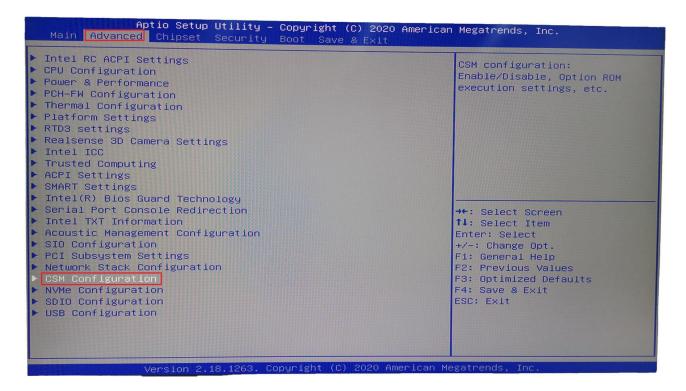
If the device is equipped with optional RAID, you can refer to this chapter for installation and configuration.

First, with the power supply disconnected, correctly install the RAID card and two hard drives.

3.1 CSM compatible module Configuration

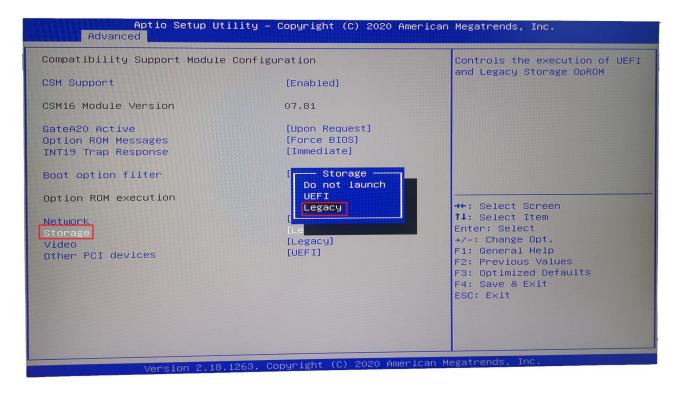
Repeatedly press the BIOS shortcut key (Esc or Delete) during the startup process to interrupt the device's startup and enter the BIOS setup interface.

If you are equipped with an I5 motherboard, you need to enter the BIOS settings first, select Advanced→CSM configuration.





Set Storage parameter as *legacy*, save the settings and restart.



3.2 Configure RAID mode

After powering on, keep pressing Ctrl + M to enter the Raid card and start configuring Raid mode.

Enter the configuration interface, select HBA 0: Marvell 0 and press Enter. If the Configuration Wizard cannot be selected, you should see two hard drives under the New_VD directory.

Choose New_VD to enter, choose delete, and press Y to confirm.



At this time, the two hard disks are transferred to Free Physical Disks.

Choose HBA 0: Marvell 0, enter. Select Configuration Wizard and enter.





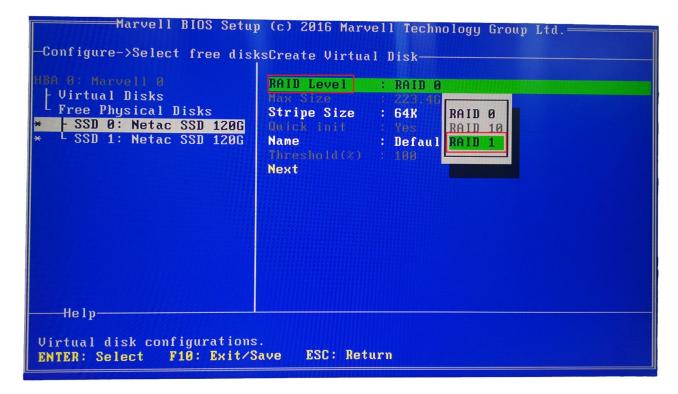
Press the space to select two hard disks.

After selecting, there will be an * mark in front of the corresponding hard disk.

```
—Marvell BIOS Setup (c) 2016 Marvell Technology Group Ltd.=
-Configure->Select free disks-
                             Port ID
                                               1
Virtual Disks
                             PD ID
                                               1
  Free Physical Disks
                             Type
                                               SATA SSD
  SSD 0: Netac SSD 120G
                             Status
                                               Unconfigured
    SSD 1: Netac SSD 120G
                             Size
                                               111.8GB
                                               NCQ TRIM 6Gb/s 48Bits
                             Feature Support:
                             Current Speed
                                               6Gb/s
                             Model
                                               Netac SSD 120GB
                             Serial
                                               AA000000234500003466
                             FW Version
                                               T0910A0
                             Rotation Rate :
                                               Solid state
                             S.M.A.R.T
                                            : Enable
Use space bar to select the free disks to be used in the array.
                                    F10: Exit/Save
                    SPACE: Select
ENTER: Operation
```

Move the cursor to the hard disk numbered 0 and press Enter.

Press Enter at the RAID Level on the right column and select RAID 1.





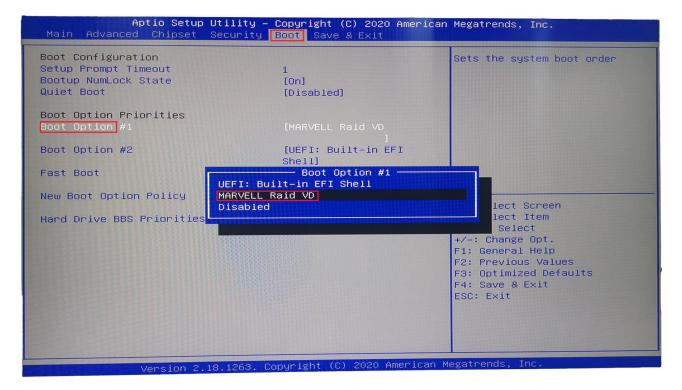
Name may be modified as appropriate.

```
Marvell BIOS Setup (c) 2016 Marvell Technology Group Ltd.
-Configure->Select free disksCreate Virtual Disk-
                             RAID Level
                                           : RAID 1
- Virtual Disks
Free Physical Disks
                             Stripe Size
                                           : 64K
  - SSD 0: Netac SSD 120G
  L SSD 1: Netac SSD 120G
                             Name
                                           : Raid_1
                             Next
  Help-
Virtual disk configurations.
                F10: Exit/Save
                                  ESC: Return
ENTER: Select
```

Choose Next and press Y to confirm. F10 to save and exit, press Y to confirm.

After power on, press Esc or Delete to enter the BIOS settings.

In Boot -> Boot Option, you can see the MARCELL Raid VD option, indicating that the setting is successful, just set this item as the preference.





3.3 Install System

Install the MSU management software on the system interface, see the attachment Marvell_MSU_Linux_v4.1.0.2032.zip, after decompression, use the command *rpm -ivh MSU-4.1.0.2032-1.x86_64.rpm* to install.

3.4 View Info

Visit http://172.XXX.XXX.XXX:8845/MSU/JumpPage.php?Target=StoragePage and you can view the RAID info on this equipment.

3.5 RAID Troubleshooting method

Description of equipment hardware operating status:

The RUN indicator of the RAID card is the running status.

The HDD R indicator is the SATA status of slot 10 on the right.

The HDD L indicator is the SATA status of slot 8 on the left



Description of equipment operating status:

In the case of normal operation, all but the PWR light will be flashing.

When the hard disk is broken, the corresponding status light will always be on.



How to turn on the buzzer switch:

After installing the MSU management software, log in to the software interface and enable the corresponding parameters.

3.6 Notes for RAID troubleshooting

After the device fails, you need to replace it with a new hard disk. First, determine the location of the bad hard drive, and then shut down the device.

After plugging in the new hard disk, turn on the device and the device will synchronize data normally.

Although the device is modular design, but does not support hot-plugging, it is strictly prohibited to insert or remove the module while the device is in operation.



4. Install System

UCP4130 supports pre-installation of FreePBX/Issabel/Elastix® IPPBX system, if you need to pre-install other systems please contact sales for confirmation.

If you need to install the system yourself, you can first insert the boot disk of the operating system into the device, and keep pressing the delete key after powering until you enter the BIOS interface.

Select Boot->Boot Option, select the startup disk, follow the prompts to save and exit. Then you will enter the system installation interface, follow the instructions to complete it step by step.

