

Gooxi

Purley platform 2U L-shaped server barebone



User Manual

V1.0

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Chapter I IPMI Rapid Deployment

1.1 Rapid deployment of IPMI process

How to quickly deploy the IPMI function of the server, the approximate process is shown in Figure 7-1 below .

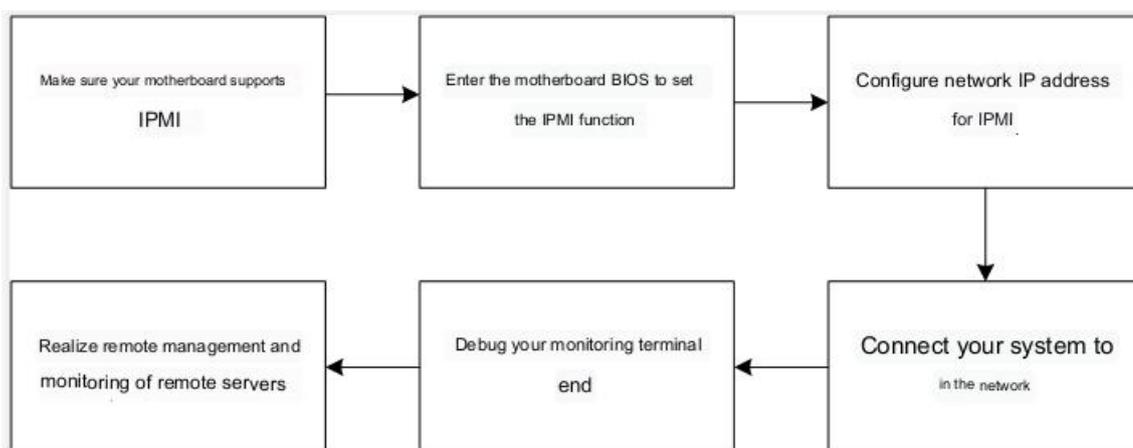


Figure 7-1 IPMI deployment process

1.1.1 Make sure the motherboard supports IPMI function

Check your motherboard manual and confirm that your motherboard supports IPMI, and then find the IPMI network port dedicated to the motherboard, or you can choose to share the network port, as shown in Figure 7-2 .

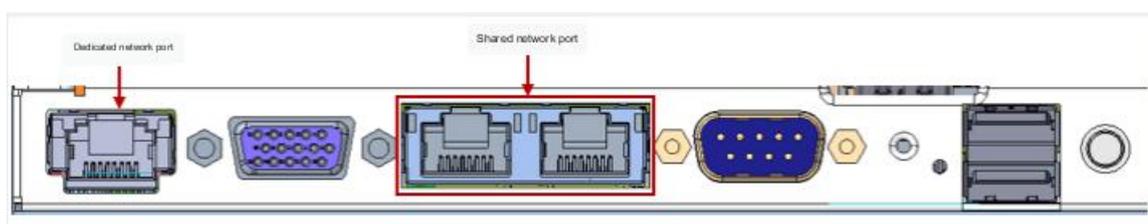


Figure 7-2 Dedicated network port on the motherboard

1.1.2 Enter BIOS to set IPMI function

Press ESC or DEL key to enter the motherboard BIOS system while the device is starting up , the BIOS setting interface is shown in Figure 7-3 below .

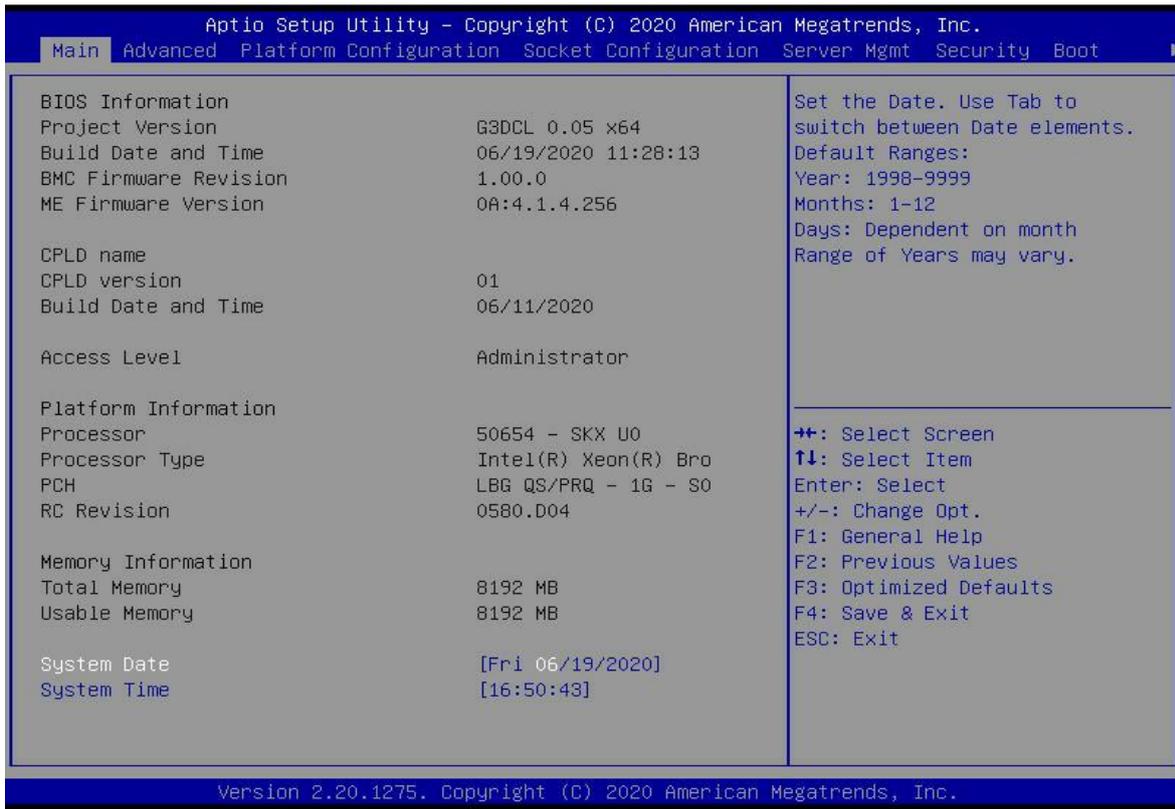


Figure 7-3 motherboard BIOS setting interface

After entering this interface, use the left and right keys on the keyboard to switch the menu item to the Server Mgmt option, and you will see the page shown in Figure 7-4 .

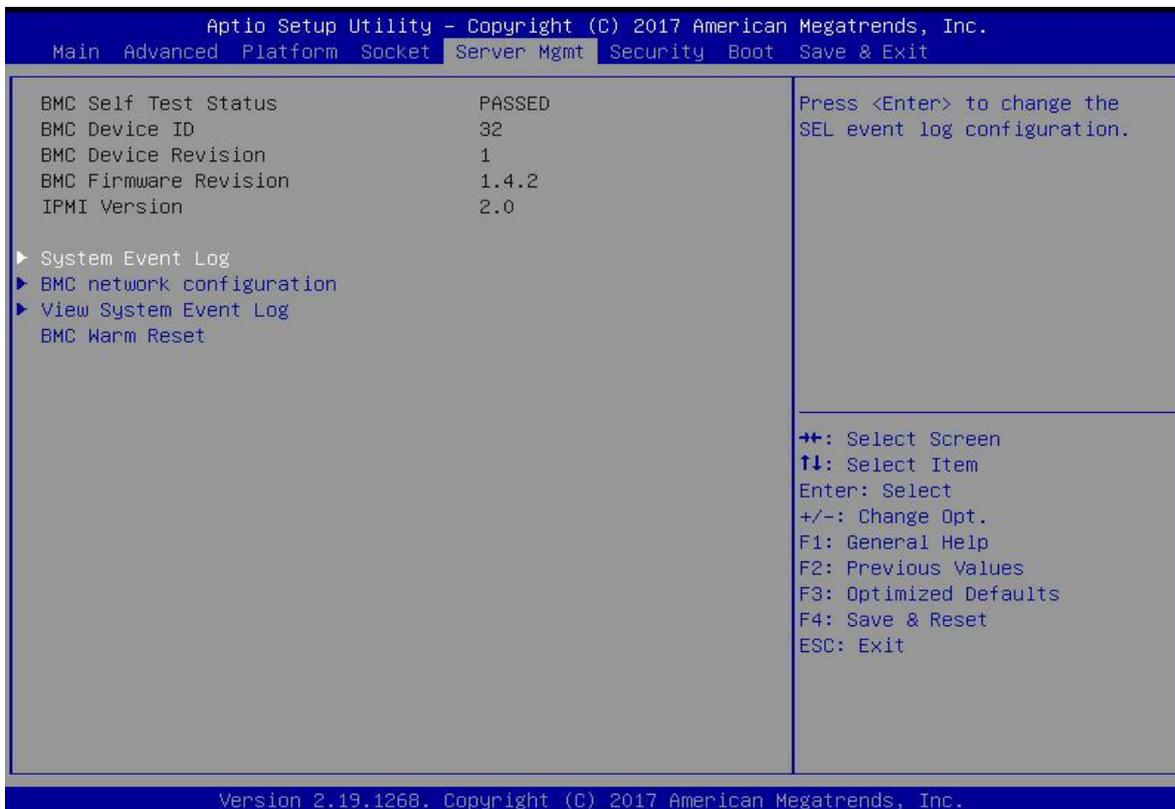


Figure 7-4 Server Mgmt interface

After entering this interface, enter the BMC network configuration option through the keyboard, and you will enter the following interface, as shown in Figure 7-5 .

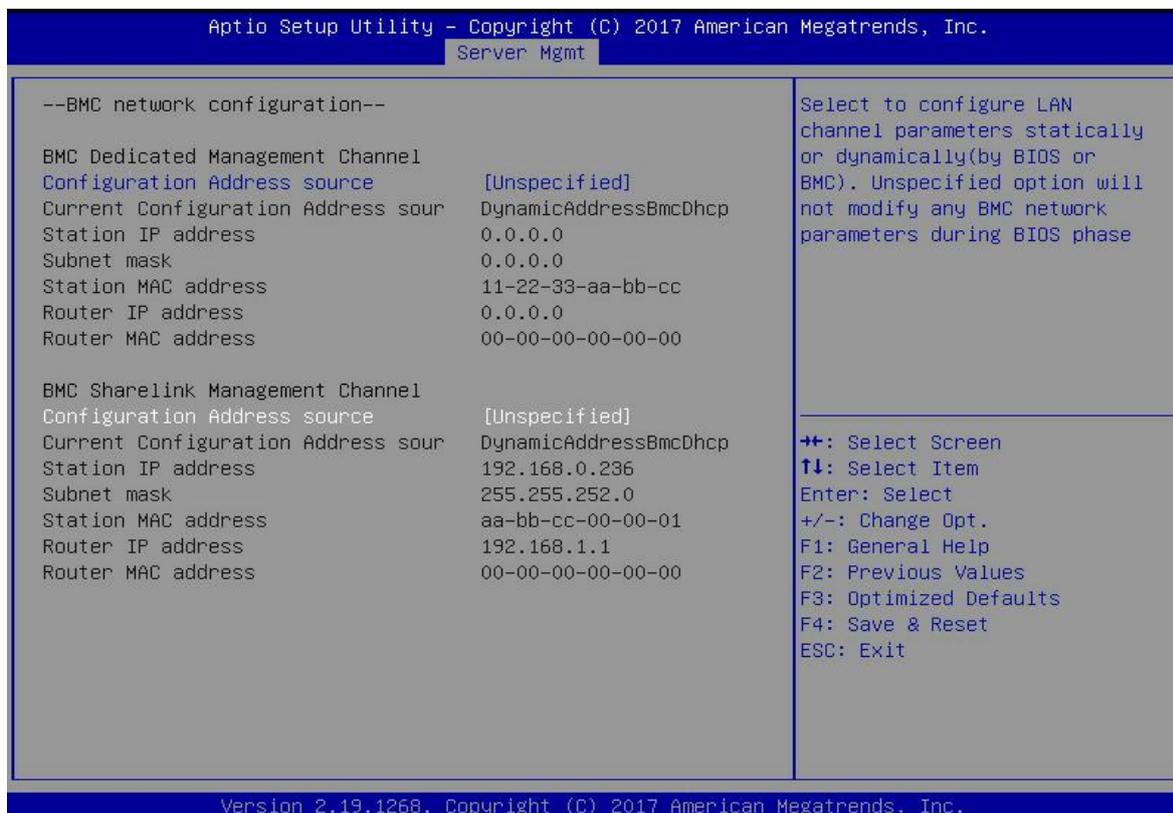


Figure 7-5 BMC network configuration options interface

On this page, you can see two configurable network ports, one is a dedicated network port, and the other is a shared network port for Sharelink . Here we take the shared network port as an example. If you connect a dedicated network port, the setting method is the same as that of the shared network port. Switch to the Configuration Address Source option and press Enter to set the network mode of the network port, as shown in Figure 7-6 .

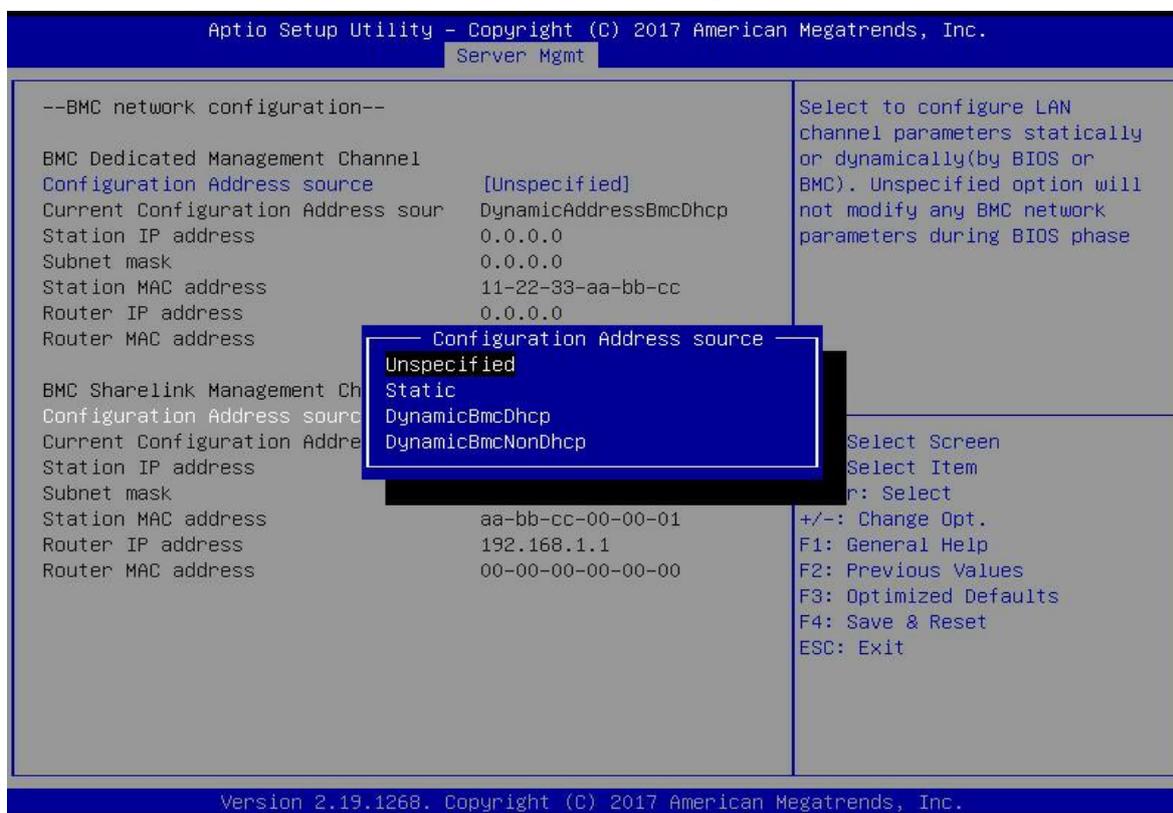


Figure 7-6 Configure network port network mode

There are four network modes that can be configured on this interface, namely Unspecified , Static , DynamicBMCDHCP , and DynamicBMCNonDHCP . Static is a static mode, you can manually set the IP address, DHCP

is a dynamic mode, setting this item allows BMC to automatically obtain an IP address from a DHCP server.

1.1.3 IPMI interface configuration Static mode

If you choose to configure Static mode for the IPMI interface, you should pay attention to the following issues:

- (1) If there are multiple IPMI devices in your LAN, it should be noted that the IP addresses between the devices cannot be repeated, otherwise communication cannot be established.
- (2) If the IP of your IPMI device is an intranet address, the terminal device communicating with it must be in the same network segment as the address of the IPMI device.
- (3) The IP address of the IPMI device can be mapped to the WAN through the routing device to realize remote management.
- (4) The IPMI port has the function of obtaining an IP address through DHCP.
- (5) IPMI supports TCP/IP v4 and TCP/IP v6 protocols.

Configure the IP address and subnet mask according to your actual situation. For example, here we set the IP address to 192.168.0.236 and the subnet mask to 255.255.252.0, as shown in Figure 7-7 below . After setting, press F4 to save and exit the BIOS interface.

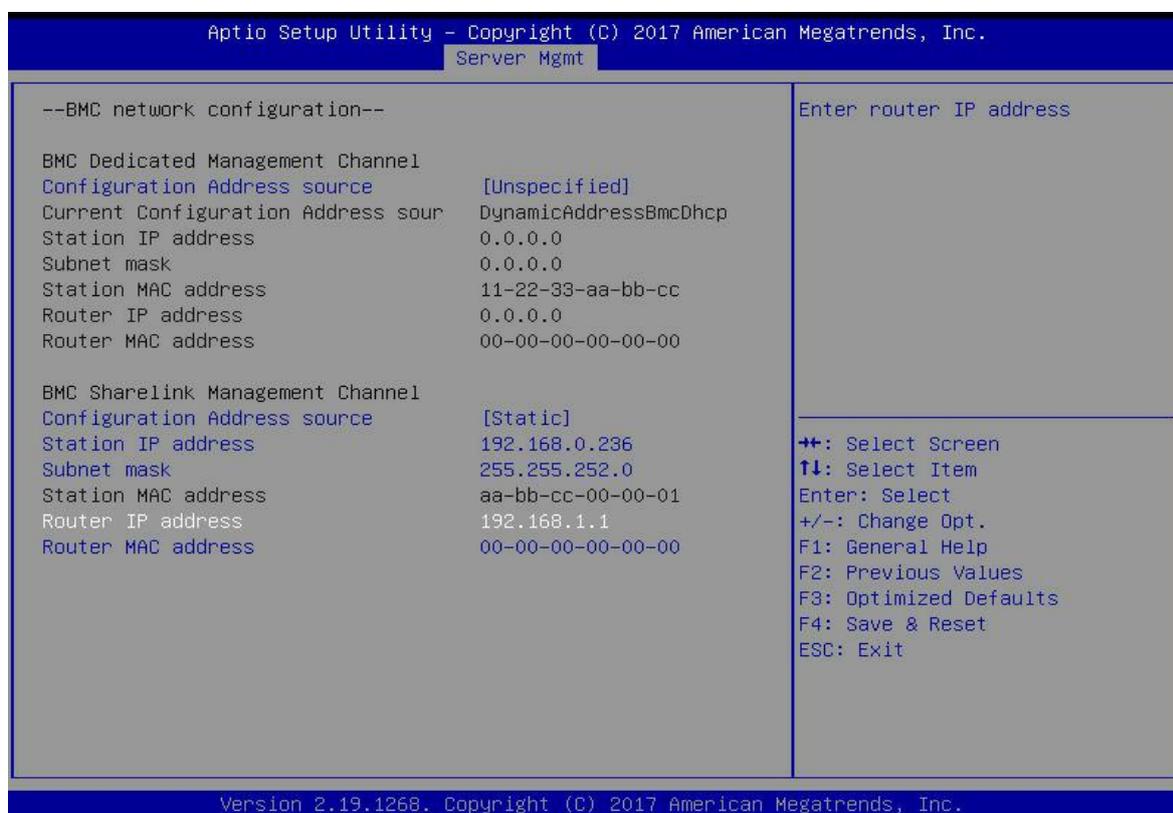


Figure 7-7 Satic mode settings

So far we have completed the operation of configuring the IPMI function.

1.1.4 IPMI configuration Java SOL

1. Press the key when the system starts to enter the BIOS setup interface.
2. Switch to the Advanced menu, select Serial Port Console Redirection , and press <Enter> .
3. Make sure the Console Redirection of COM0 is in [Enabled] state, if not, select Console Redirection and press <Enter> to set the state to [Enabled] . In order to ensure the normal operation of iBMC , this option has been set to [Enabled] by default .

1.2 Quick Start Instructions for IPMI Functions

After completing the previous configuration steps, we can start to log in to the IPMI management interface. The IPMI management interface can be accessed using a standard web browser. Here we recommend using Google Chrome , Firefox and IE browsers (IE 11 and above) for the best browsing experience. Since the new version of the operation interface is based on HTML5, the overhead on computer resources is relatively large. We recommend that users configure more than 8G of memory on the client side when using KVM.

1.2.1 Enter the operation interface

Take Google Chrome browser as an example, enter the IPMI access address in the address bar of the browser and press Enter to access the IPMI management interface. Since all HTTP links have been converted into HTTPS encrypted links, you will enter the privacy setting error page shown in Figure 7-8, the content of other browsers may be different.



Figure 7-8 Google Chrome Privacy Settings Error Page

On this page, click “Advanced” >> “Continue” to access the IPMI management page normally and enter the login page, as shown in Figure 7-9 .

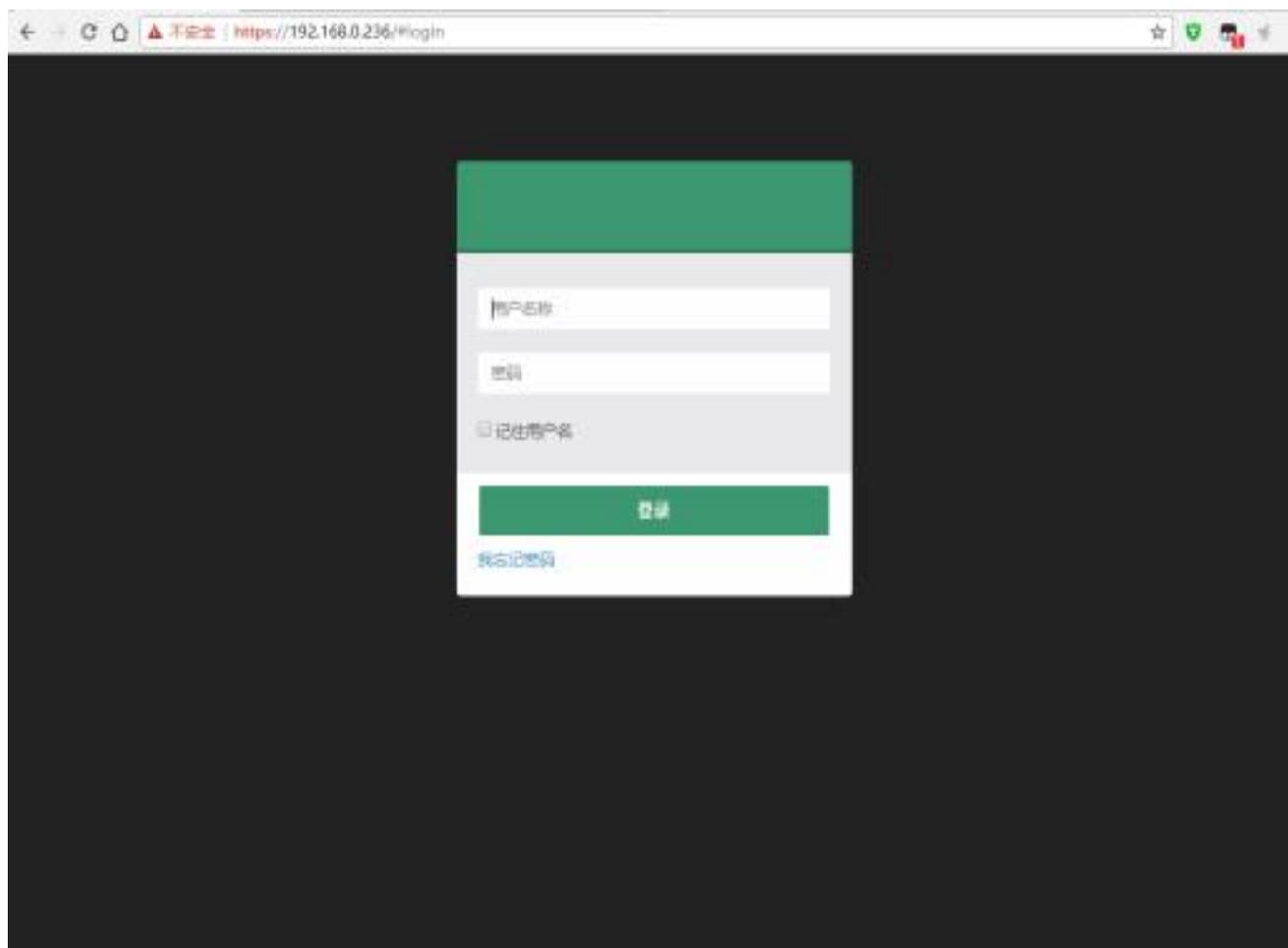


Figure 7-9 IPMI management login interface

1.2.2 Default username and password

Factory default username: admin

Factory default password: admin

When you log in with this user name , you will have full administrator rights. It is recommended that you change your password after logging in.

1.2.3 Contents of IPMI management system

After you log in to the IPMI management system correctly, you can see the page shown in Figure 7-10 .

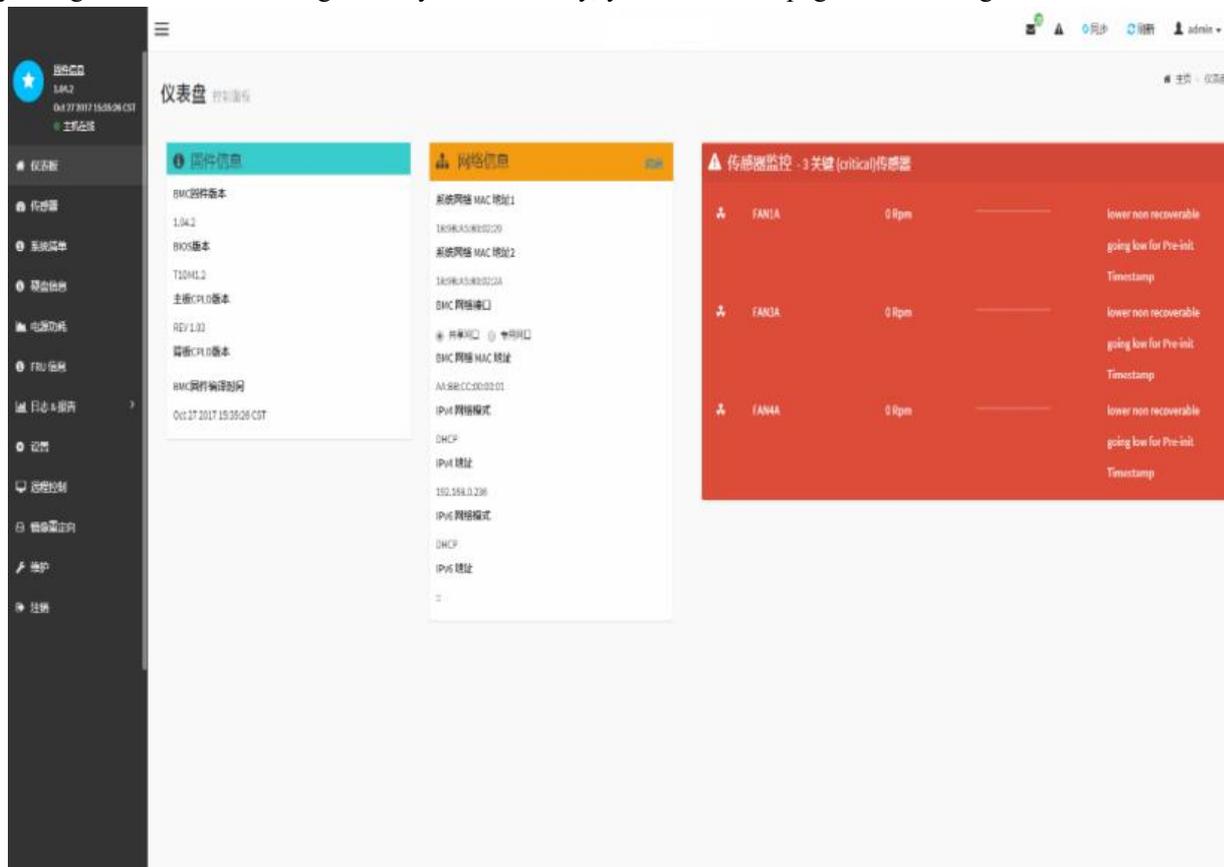


Figure 7-10 IPMI management system home page

IPMI management interface menu description

(1) Dashboard

On this page, users can view the basic information of the IPMI management system. Including firmware information, network information, and sensor monitoring information.

Firmware information includes BMC firmware version information, BIOS version information, motherboard CPLD version information, backplane CPLD version information, and BMC firmware compilation time information.

Network information includes the MAC address of the system network and BMC network information. You can choose to view the shared network port or dedicated network port of the BMC. The BMC network information includes BMC network MAC address information, IPV4 network mode information, IPV4 address information, IPV6 network mode information and IPV6 address information.

The sensor monitoring information will display the current alarm sensor information in real time, including sensor name, sensor reading value, real-time curve change of sensor reading value and alarm status.

(2) sensor

This page displays the status of all sensors. When there is a sensor alarm, the sensor will be displayed in the key sensor column, and when the alarm is released, the sensor will be automatically removed from the key sensor column.

(3) System list

On this page, you can view server CPU and memory information. In the block diagram, click the CPU block to view the CPU information. The memory block is displayed in green to indicate the existence of the memory. Click the memory block to view the memory information.

(4) hard drive information

For a backplane with an Expander, a green square indicates that the hard drive is in place, otherwise it indicates that the hard drive is not in place. You can view the status of the hard drive on the right or under the hard drive square. Left click on the green square to view the details of the drive, and right click to locate the drive.

(5) Power consumption

Under this menu, you can set the power consumption of the power supply for capping, and you can also view the recent power consumption of the power supply.

(6) FRU information

Select this menu to view the basic information of the FRU.

(7) Log & Report

Under this menu, you can view IPMI time logs, audit logs, and video logs.

(8) Settings

You can configure some BMC under this menu. Including BSOD, date & time, network, etc ...

(9) Remote control

On this page, KVM and SOL can be started, and power control and UID (server logo light) control can also be performed.

(10) Mirror redirection

On this page, you can get the latest image file on the remote storage device.

(11) Maintenance

You can perform basic maintenance operations on the server, such as BMC firmware update and BIOS firmware update.

(12) Logout

Click to log out the current user.

1.2.4 Introduction to KVM remote management

Start KVM remote management

As shown in Figure 7-11 , under the remote control > KVM & Java SOL remote control menu, you can start KVM.

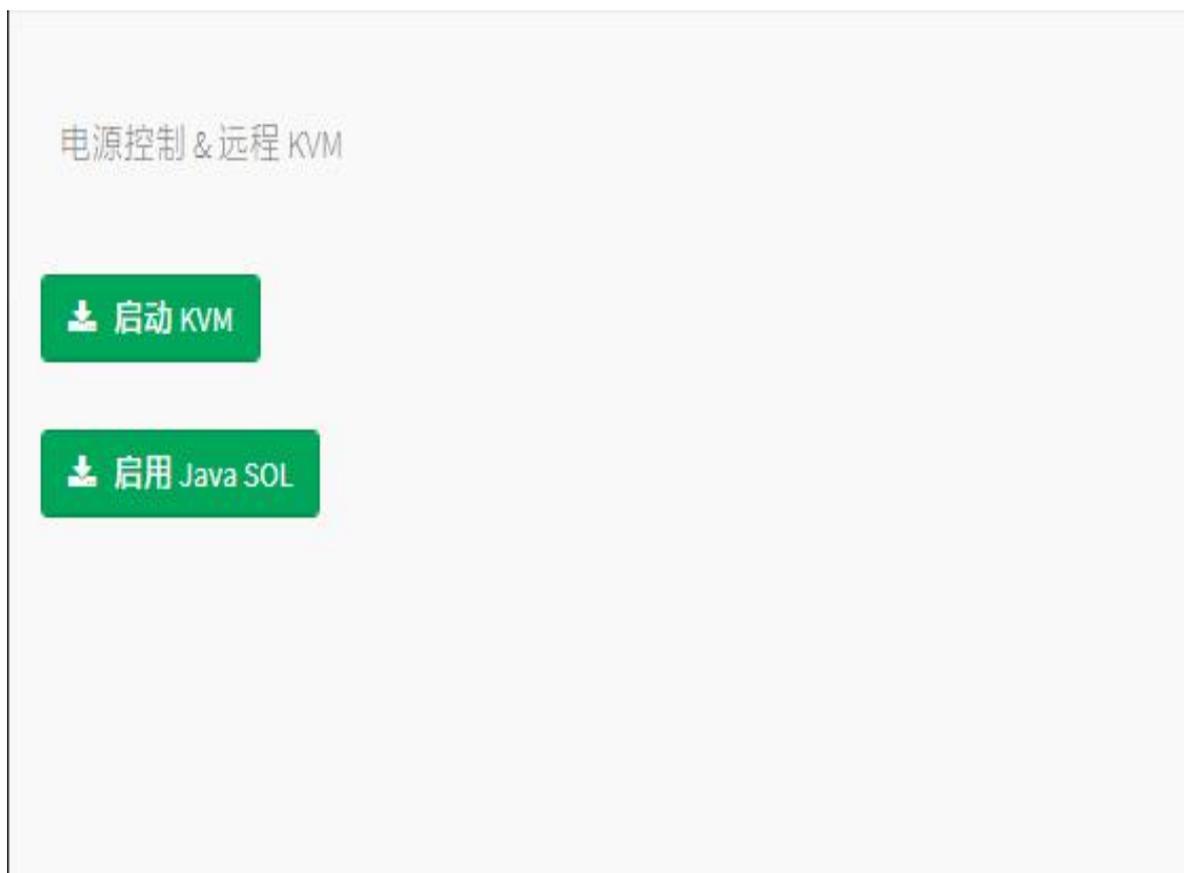


Figure 7-11 Start KVM

1.2.5 KVM page introduction

As shown in Figure 7-12 , it is the KVM interface after starting KVM.

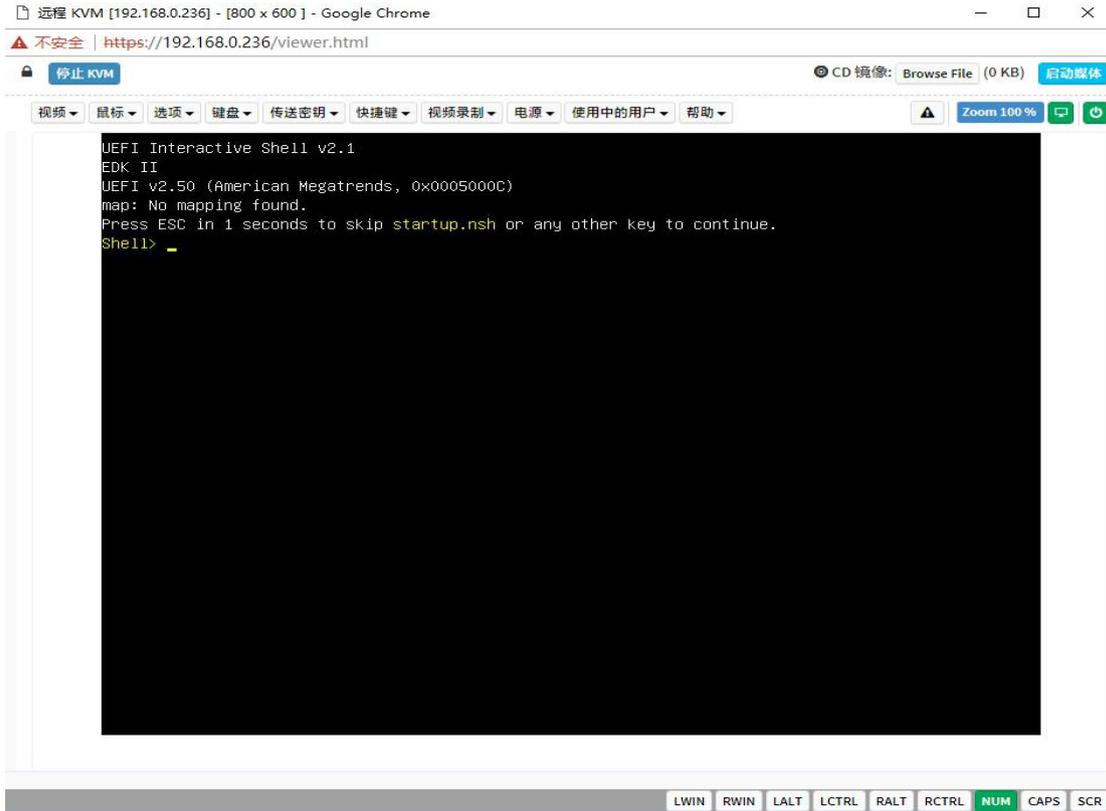


Figure 7-12 KVM interface

As shown in Figure 7-13 , the KVM interface includes two parts: one part is the menu and shortcut buttons, and the other part is the remote desktop window, which is the server desktop information sent back remotely.

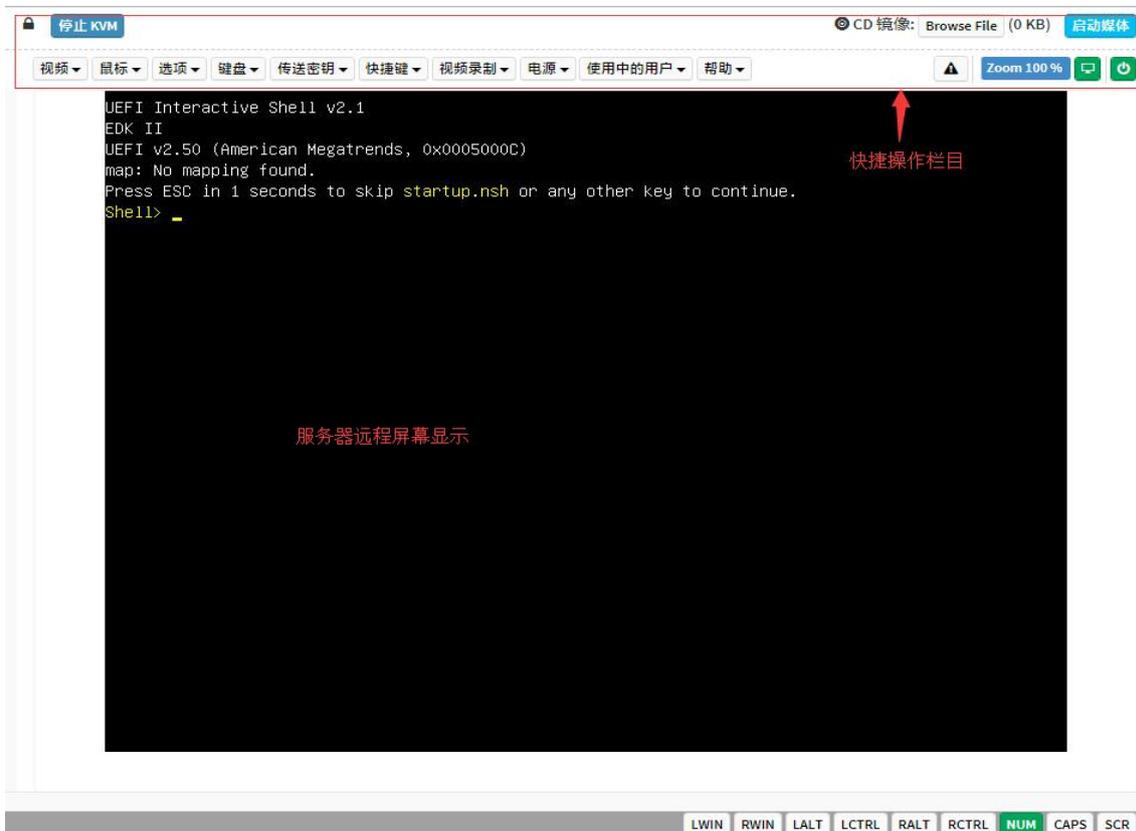


Figure 7-13 KVM interface composition

1.2.6 Remote control quick operation

 停止 KVM	stop KVM
 CD 镜像: <input type="text" value="Browse File"/> (0 KB) 启动媒体	Hanging on the CD image, generally used for remote installation of the operating system
 Zoom 100 %  	The host display is unlocked, and the server is switched on and off

Table 1-41

1.2.7 Introduction to SOL

Click Activate Java SOL on the page shown in Figure 7-14 to open the interface shown in Figure 3-7 below.

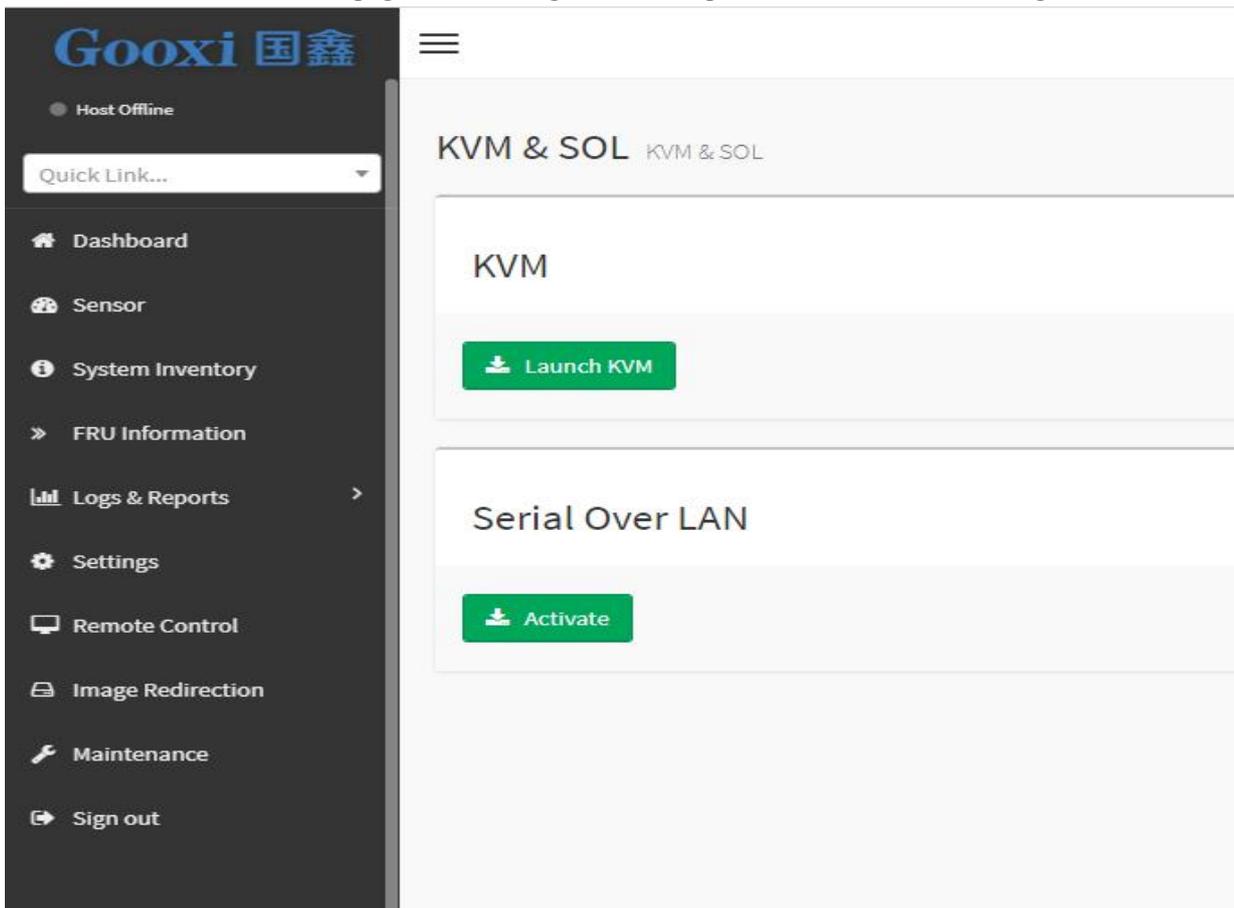


Figure 7-14 Enabling Java SOL

1. After clicking Activate, the SOL interface shown in Figure 7-15 will appear first .
2. Press Enter to activate the screen .

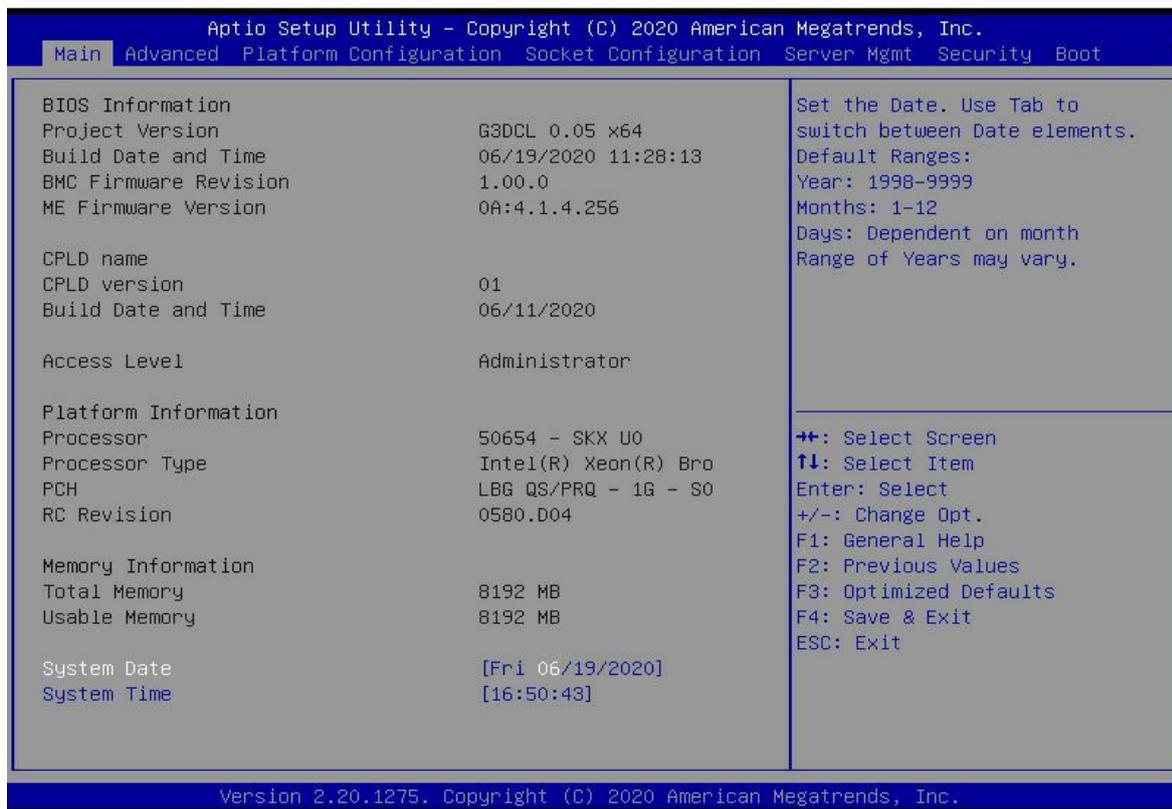


Figure 7-15 SOL operation interface

Remarks: The SOL interface operation function has only been tested for BIOS screen synchronization, and the other interfaces have not been tested. Since this is an operation demonstration, no specific description will be given..

1.3 Other ways to connect to IPMI

The AST2500 firmware conforms to the IPMI 2.0 specification, so users can use the standard IPMI driver assigned by the operating system.

1.3.1 IPMI driver

The AST2500 supports the driver referenced by Intel, available at : <https://www.intel.com/content/www/us/en/servers/ipmi/ipmi-technical-resources.html> With Windows Server 2003 R2, Microsoft also provides the IPMI driver package, you can also use the Open IPMI driver in the system.

AST2500 supports the Open IPMI driver of the Linux kernel. Use the following commands to load the IPMI driver: "modprobe ipmi_devintf" "modprobe ipmi_si" If you are using an old version of the Linux kernel, you need to replace the "ipmi_si" component with "ipmi_kcs".

1.3.2 IPMI tools and other open source software

AST2500 supports open source IPMI tools, and you can also use other software, such as: Open IPMI , IPMI Utility, etc.

The above documents are designed to help you quickly understand and deploy the IPMI functions of the system. For the detailed function operation manual of IPMI, we will provide other help documents.

management	Onboard iBMC management module, supporting IPMI, SOL, KVM Over IP , virtual media and other management features
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operating system	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Ubuntu
virtualization support	Citrix Xen Server, Vmware ESXi, Linux KVM, Windows Hyper-V