Problem determination and troubleshooting

How to perform problem determination actions on the SR850P

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Problem determination and troubleshooting overview

Perform the following actions to determine the cause of problems on the SR850P:
- Check system health on the XClarity Controller (XCC) interface
- Check the system event log in XCC, LXCA, or UEFI
- Collect service data using LXPM, XCC, LXCA, or OneCLI
- Check the LED status indicators on the front operator panel
- Access the front panel LCD display to check system status

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Front operator panel information

The LED indicators on the front of the SR850P provide information on the system status. Click each indicator in turn to see more information.

Power button/LED (green)
Press this button to manually turn the server on and off. The power LED states are as follows:
Off: No power supply has been installed, or the LED itself has failed.
Flashing rapidly (4 times per second): The server is turned off and is not ready to be turned on. The power-control button is disabled. This will last approximately five to ten seconds.
Flashing slowly (once per second): The server is turned off and is ready to be turned on. You can press the power-control button to turn on the server.
Lit: The server is turned on.

Front operator panel information

The LED indicators on the front of the SR850P provide information on the system status. Click each indicator in turn to see more information.

Network activity LED (green)
When this LED is lit, it indicates that the server is transmitting to or receiving signals from the Ethernet LAN.

Front operator panel information

The LED indicators on the front of the SR850P provide information on the system status. Click each indicator in turn to see more information.

Identification button/LED (blue)
Use this LED to visually locate a specific server. This LED is also used as a presence detection button. The LED can be lit remotely using Lenovo XClarity Administrator.

Front operator panel information

The LED indicators on the front of the SR850P provide information on the system status. Click each indicator in turn to see more information.

System error LED (yellow)
When this LED is lit, it indicates that a system error has occurred. This LED can be controlled with XCC. Information provided from the front operator panel LCD display could also help users identify an error.

Diagnostic LCD panel

The diagnostic LCD panel is used to get system status, firmware level, network information, and health information about the system. The panel includes the following components:
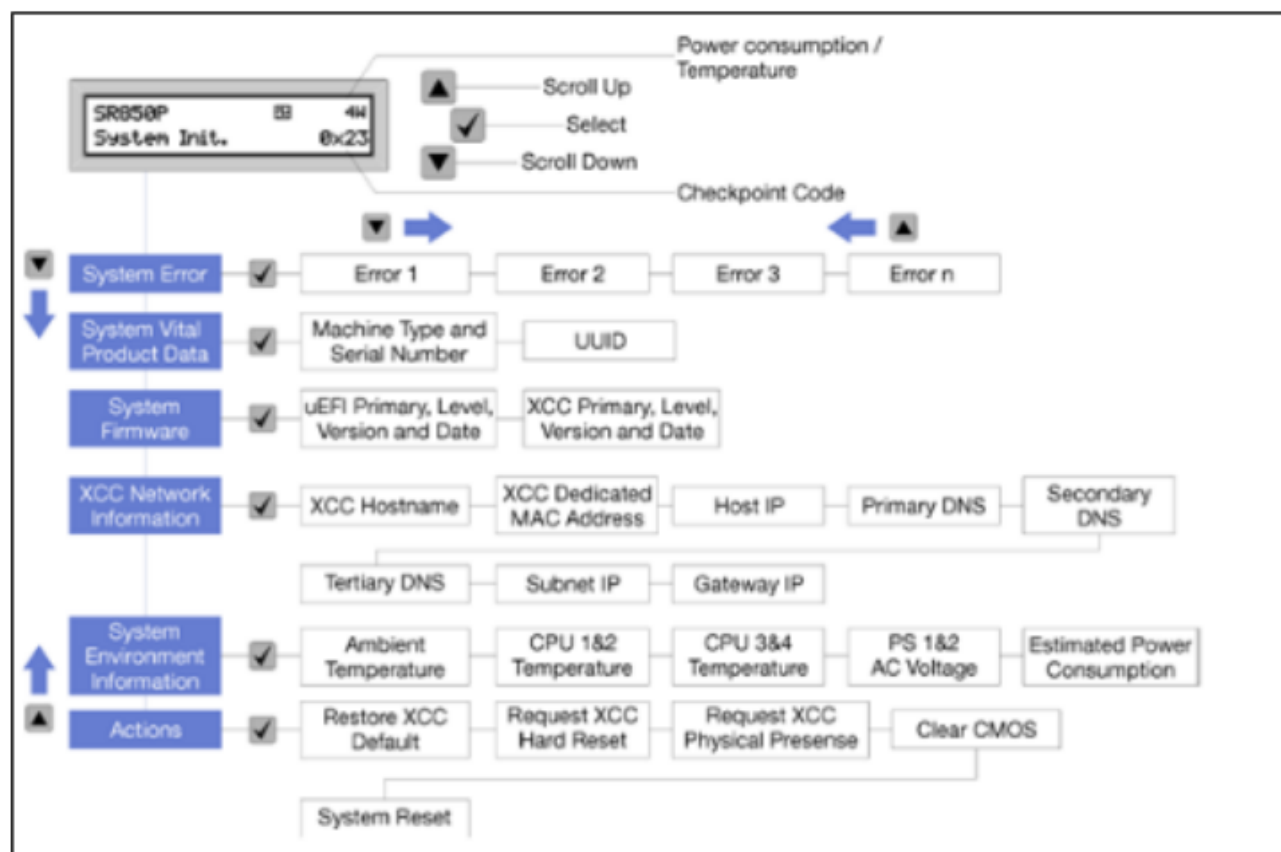- Power button/LED
- Location button/LED
- Error LED
- Network activity LED
- Up, down, and select buttons

Operating the diagnostic LCD panel

The LCD display and the function buttons give users access to the following:
- System error messages
- System Vital Product Data
- System firmware
- XCC network information
- Environmental data
- System reset actions
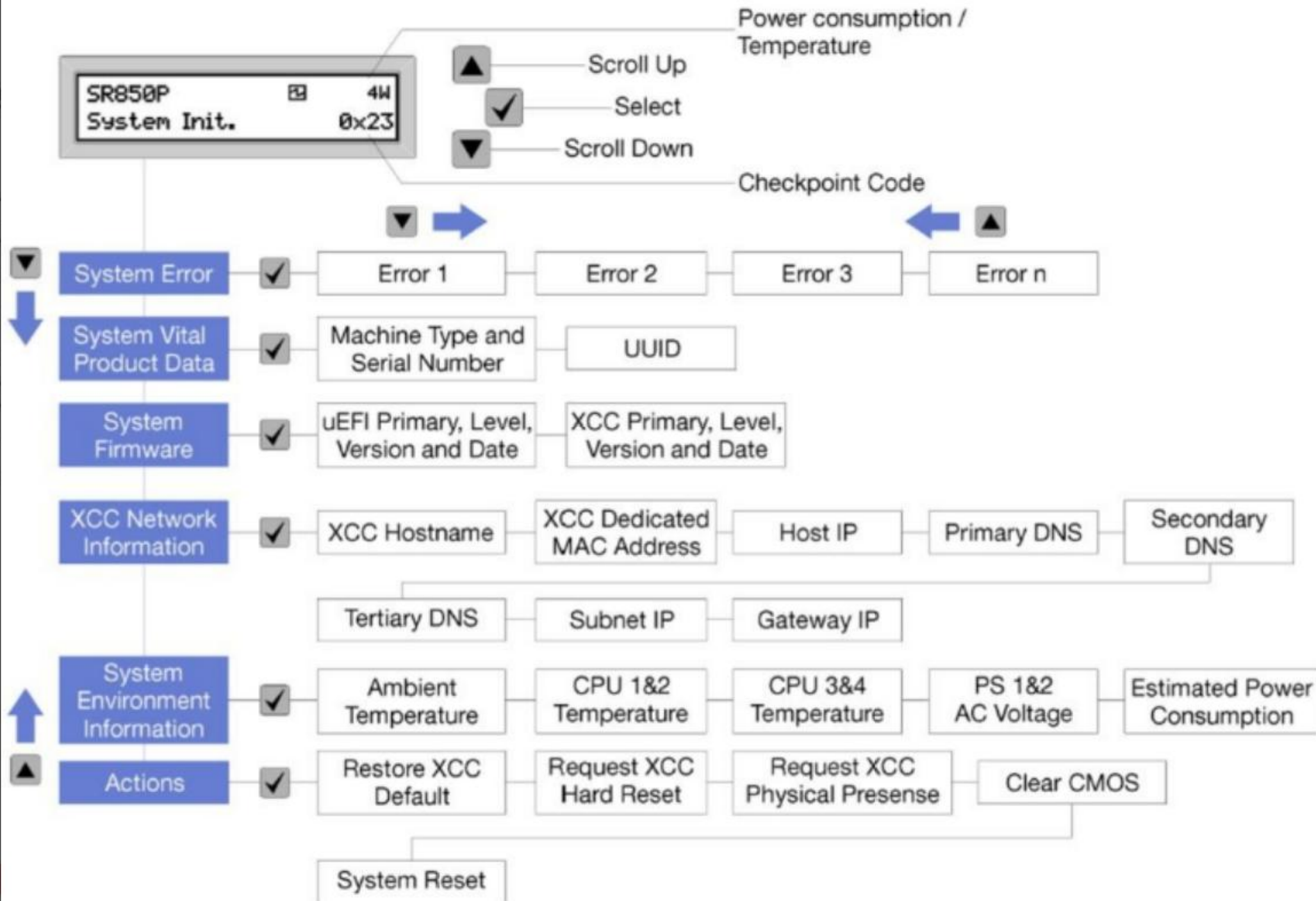

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give u
- Sys
- Sys
- Sys
- XCC
- Env
- Sys

SR850P   4W
System Init.   0x23

Power consumption / Temperature

▲ Scroll Up

✓ Select

▼ Scroll Down

Checkpoint Code

▼ ➡   ⬅ ▲

| System Error | ✓ | Error 1 | Error 2 | Error 3 | Error n |

| System Vital Product Data | ✓ | Machine Type and Serial Number | UUID |

| System Firmware | ✓ | uEFI Primary, Level, Version and Date | XCC Primary, Level, Version and Date |

| XCC Network Information | ✓ | XCC Hostname | XCC Dedicated MAC Address | Host IP | Primary DNS | Secondary DNS |

| Tertiary DNS | Subnet IP | Gateway IP |

| System Environment Information | ✓ | Ambient Temperature | CPU 1&2 Temperature | CPU 3&4 Temperature | PS 1&2 AC Voltage | Estimated Power Consumption |

| Actions | ✓ | Restore XCC Default | Request XCC Hard Reset | Request XCC Physical Presense | Clear CMOS |

System Reset

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System board LED descriptions

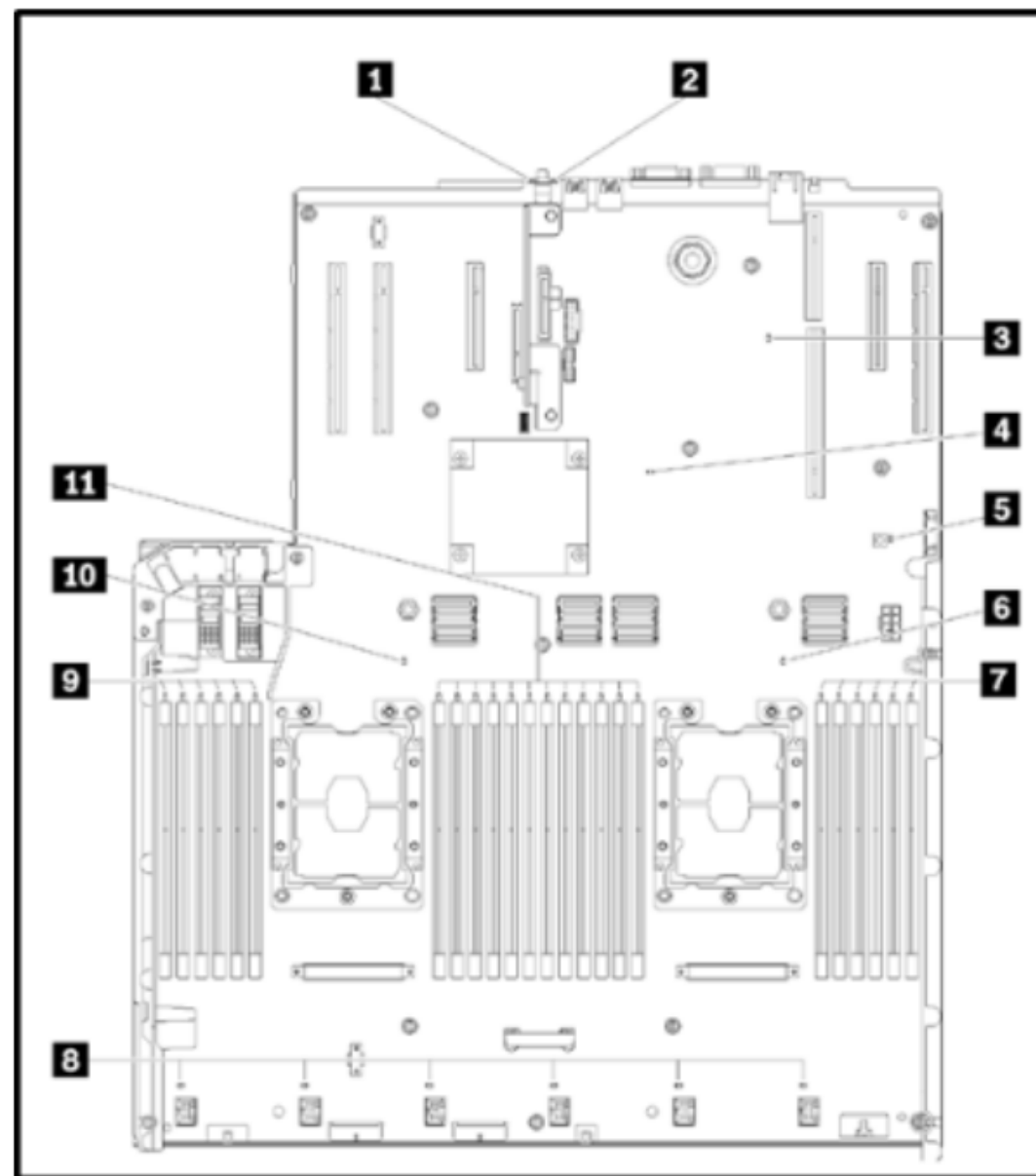| |
|---|
| 1. System error LED (Yellow) |
| 2. Identification LED (Blue) |
| 3. XCC heartbeat LED (Green) |
| 4. FPGA heartbeat LED (Green) |
| 5. Light path power LED |
| 6. Processor 2 LED |
| 7. DIMM 19-24 error LEDs |
| 8. Fan 1-6 error LED |
| 9. DIMM 1-6 error LEDs |
| 10. Processor 1 LED |
| 11. DIMM 7-18 LEDs |

Processor and memory expansion tray LED descriptions
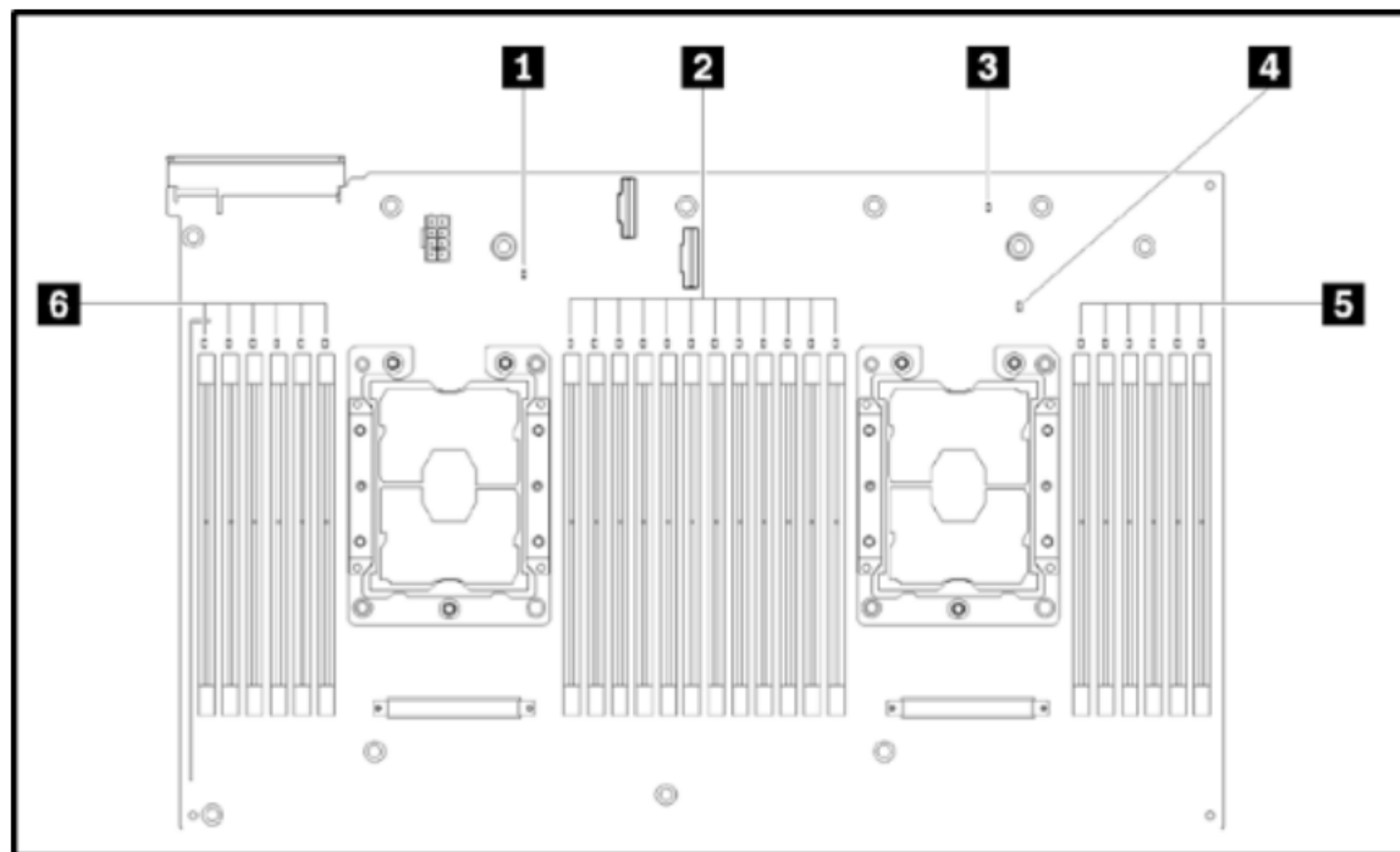
1. Processor 3 error LED
2. DIMM slot 31-42 error LEDs
3. Expansion board error LED
4. Processor 4 error LED
5. DIMM slot 43-48 error LEDs
6. DIMM slot 25-30 error LEDs

Summary

This course enabled you to:

- Describe the features of the Lenovo ThinkSystem SR850P
- Describe the specifications of the Lenovo ThinkSystem SR850P
- Describe the components of the Lenovo ThinkSystem SR850P
- Describe the configurations of the Lenovo ThinkSystem SR850P
- Describe the problem determination steps and explain how to troubleshoot issues with the Lenovo ThinkSystem SR850P

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