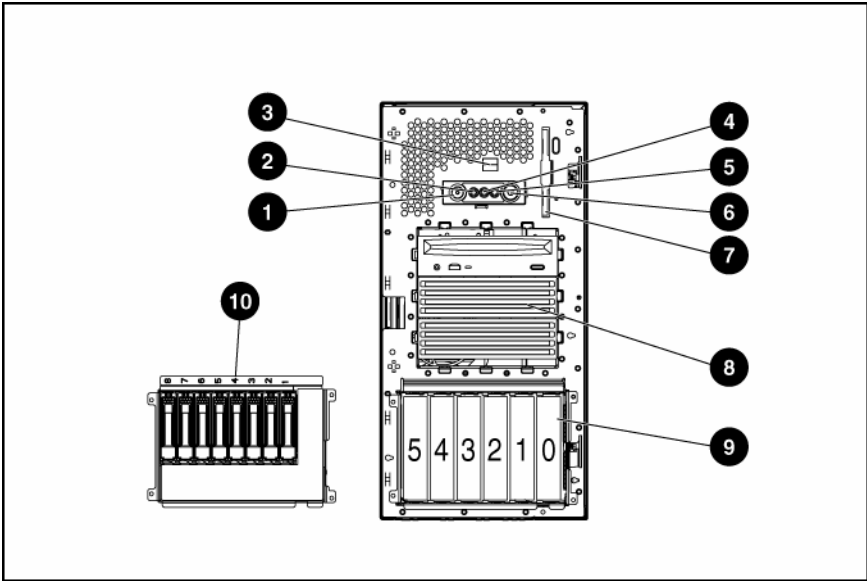


# Server component identification

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## Front panel components

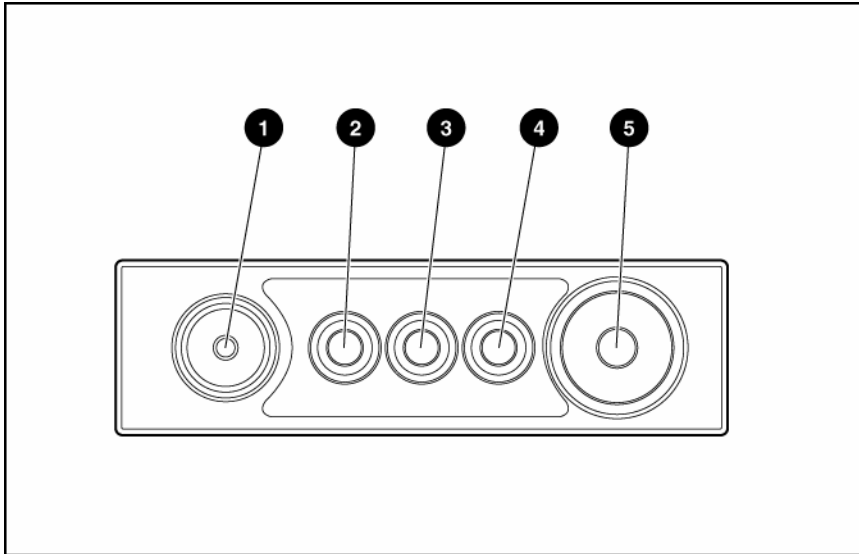


Item	Description
1	UID switch and LED
2	Internal system health LED
3	Front panel USB port
4	External system health LED
5	NIC link/activity LED
6	Power on/Standby button/LED assembly
7	Diskette drive*

Item	Description
8	Removable media bays
9	Hot-plug SCSI hard drive bays (SCSI IDs 0 through 5)
10	Optional SAS-SATA hard drive bays (1 through 8)

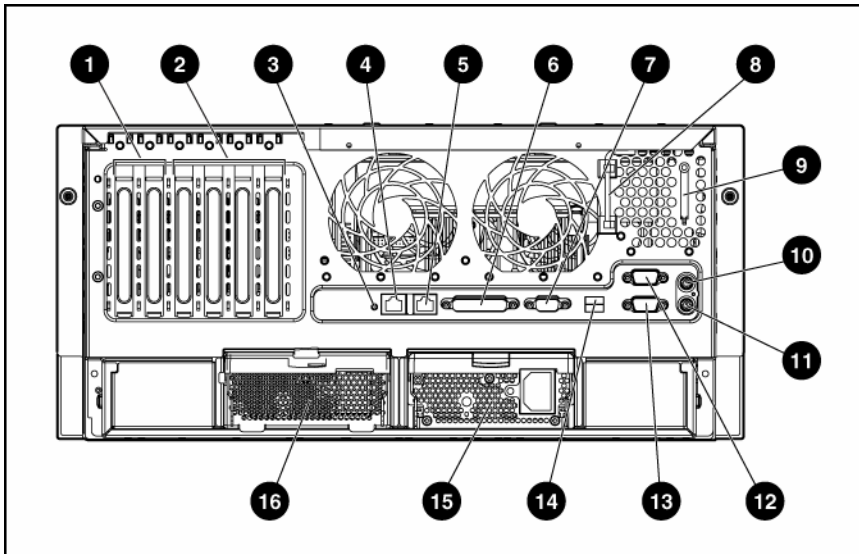
\* Open the media door on the rack server to access the diskette drive.

## Front panel LEDs and buttons



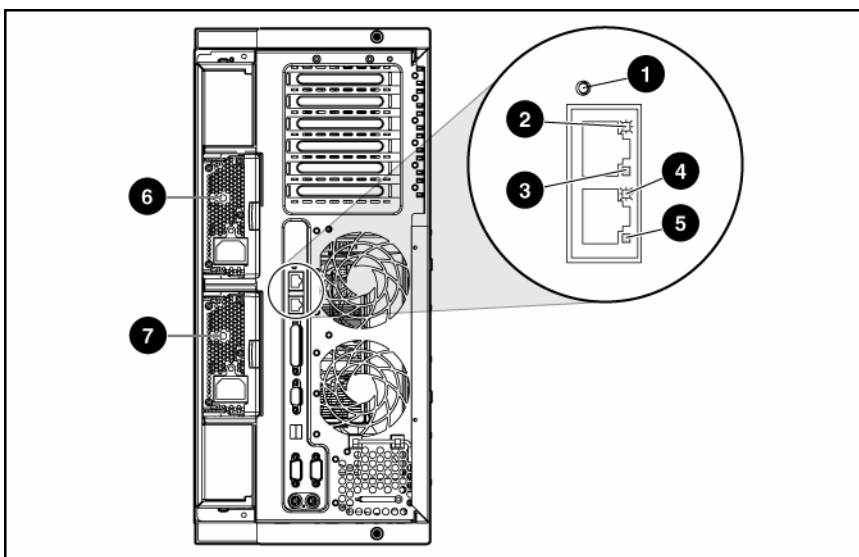
Item	Description	Status
1	UID switch and LED	Blue = Activated Flashing blue = System being managed remotely Off = Deactivated
2	Internal system health LED	Green = Normal (system on) Amber = System health is degraded Red = System health is critical Off = Normal (system off)
3	External system health (power supply) LED	Green = Normal (system on) Amber = Redundant power supply failure Red = Power supply failure. No operational power supplies. Off = Normal (system off)
4	NIC link/activity LED (embedded NIC only)	Green = Linked to network Flashing green = Linked with activity on the network Off = No network connection
5	Power on/Standby button and LED	Amber = System has AC power and is in standby mode Green = System has AC power and is turned on Off = System has no AC power

## Rear panel components



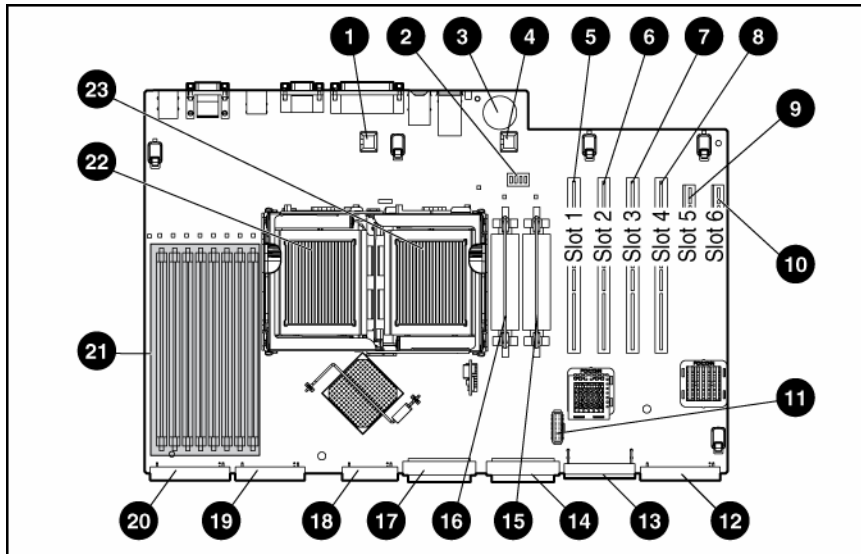
Item	Description	Item	Description
1	x4 PCI Express expansion slots	9	Auxiliary VHDCI SCSI blank
2	100-MHz PCI-X expansion slots	10	Mouse connector
3	Unit ID LED	11	Keyboard connector
4	Ethernet 10/100/1000 port	12	Serial connector B
5	iLO management port	13	Serial connector A
6	Parallel connector	14	USB connectors
7	Video connector	15	Primary hot-plug power supply
8	T-15 Torx screwdriver	16	Redundant hot-plug power supply

## Rear panel LEDs and buttons



Item	Description	LED color	Status
1	Unit ID LED	Blue	On = Activated Flashing = System remotely managed Off = Deactivated
2	NIC activity LED (Integrated NC7781)	Green	On or flashing = Linked to network Off = Not linked to network
3	NIC link LED (Integrated NC7781)	Green	On = Network activity Off = No network activity
4	iLO NIC activity LED	Green	On or flashing = Network activity Off = No network activity
5	iLO NIC Link LED	Green	On = Linked to network Off = Not linked to network
6	Power supply LED (redundant)	Green	On = Power turned on and power supply functioning properly Off = One or more of the following conditions exists: <ul style="list-style-type: none"> <li>• AC power unavailable</li> <li>• Power supply failed</li> <li>• Power supply in standby mode</li> <li>• Power supply exceeded current limit</li> </ul>
7	Power supply LED (primary)	Green	On = Power turned on and power supply functioning properly Off = One or more of the following conditions exists: <ul style="list-style-type: none"> <li>• AC power unavailable</li> <li>• Power supply failed</li> <li>• Power supply in standby mode</li> <li>• Power supply exceeded current limit</li> </ul>

# System board components



Item	Description	Item	Description
1	Redundant fan 2 connector	13	Power supply connector
2	System maintenance switch	14	SCSI port 1
3	System battery	15	PPM socket 2
4	Redundant fan 4 connector	16	PPM socket 1 (populated)
5	64-bit/100-MHz PCI-X slot, bus 3	17	SCSI port 2
6	64-bit/100-MHz PCI-X slot, bus 3	18	Fan cable connector
7	64-bit/100-MHz PCI-X slot, bus 7	19	Diskette drive connector
8	64-bit/100-MHz PCI-X slot, bus 7	20	IDE connector
9	PCI Express x4 slot, bus 11 *	21	DIMM slots
10	PCI Express x4 slot, bus 14 *	22	Processor 1
11	RILOE II connector (install adapter into slot 1) **	23	Processor 2
12	Power supply signal connector		

\* x8 PCI Express cards are supported, but will run at x4 speeds.

\*\* The server comes with iLO remote management capability embedded on the system board. The 30-pin remote management connector for the RILOE II board is provided if the server environment requires an upgrade for improved Remote Console performance.

## System maintenance switch

The system maintenance switch (SW1) is a six-position switch that is used for system configuration. The default position for all six positions is Off.

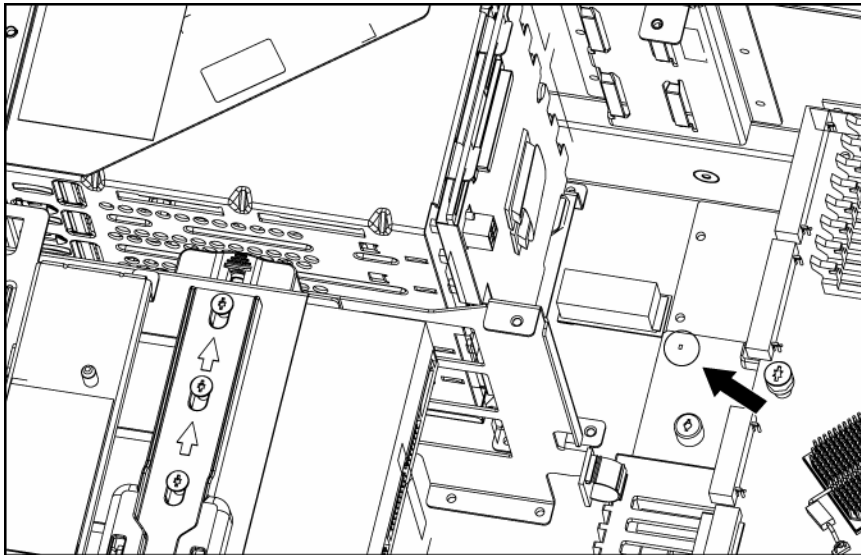
Position	Description	Function
S1	iLO security	Off = iLO security is enabled On = iLO security is disabled
S2	Configuration lock	Off = System configuration can be changed On = System configuration is locked
S3	Reserved	Reserved
S4	Reserved	Reserved
S5	Password protection override	Off = No function On = Clears power-on password and administrator password
S6	Invalidate configuration	Off = Normal On = ROM treats system configuration as invalid

When the system maintenance switch position 6 is set to the On position, the system is prepared to erase all system configuration settings from both CMOS and NVRAM.

**⚠ CAUTION:** Clearing CMOS and/or NVRAM deletes configuration information. Be sure to properly configure the server or data loss could occur.

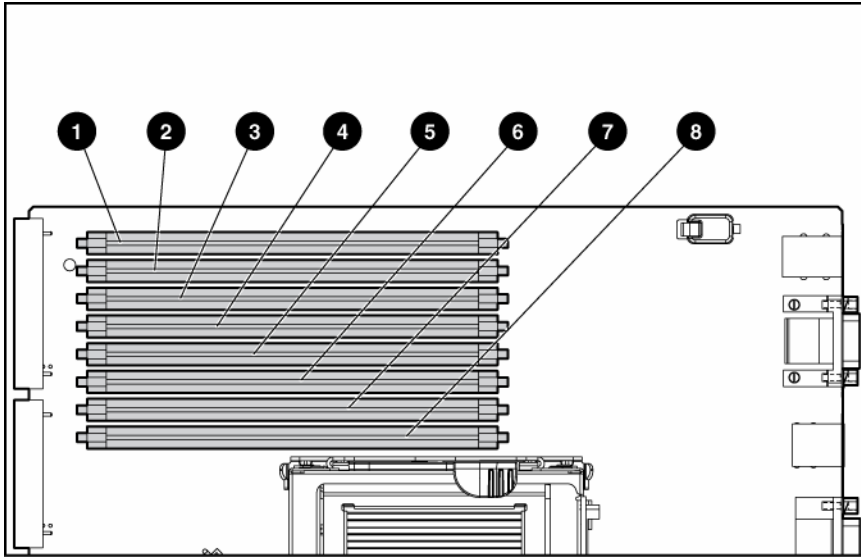
## Power supply backplane LED

If the power supply backplane LED is illuminated, then the power supply backplane must be replaced.



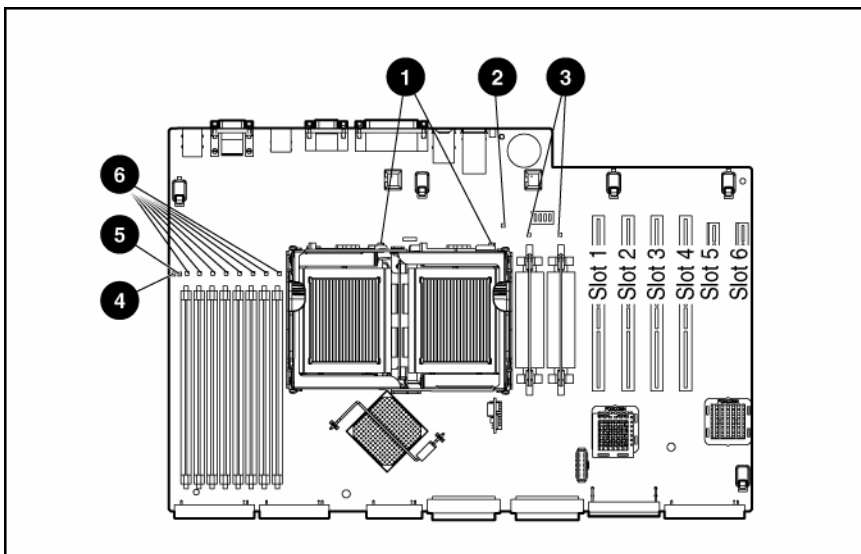
## DIMM slots

DIMM slots are numbered sequentially (1 through 8) and the paired banks are identified by the letters A, B, C, and D.



Item	Description
1	DIMM slot 1A
2	DIMM slot 2A
3	DIMM slot 3B
4	DIMM slot 4B
5	DIMM slot 5C
6	DIMM slot 6C
7	DIMM slot 7D
8	DIMM slot 8D

## System board LEDs



Item	LED description	Status
1	Processor error	Off = Normal Amber = Processor failed or missing
2	System temperature alert	Off = Normal Amber = System temperature has exceeded OS cautionary level
3	PPM error	Off = Normal Amber = PPM failed or missing
4	Memory mode LED	Off = Normal Green = System is in online spare memory mode
5	Online spare memory failover LED	Off = Normal Amber = Online spare memory is in use due to memory failover
6	Memory status	Off = Normal Amber = Memory failed or configuration problem

## System LEDs and internal health LED combinations

When the internal health LED on the front panel illuminates either amber or red, the server is experiencing a health event. Combinations of illuminated system LEDs and the internal health LED indicate system status.



**NOTE:** The system management driver must be installed for the internal system health LED to provide pre-failure and warranty conditions.

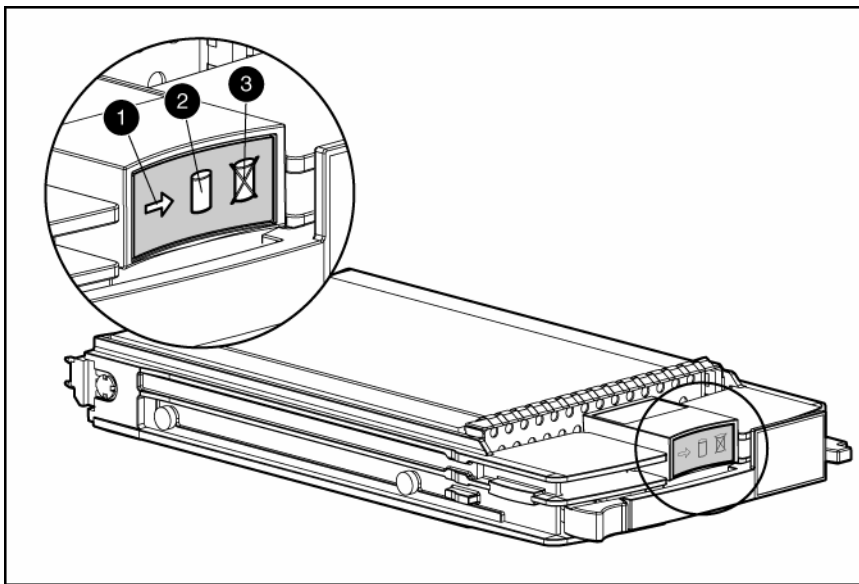
The front panel health LEDs indicate only the current hardware status. In some situations, HP SIM may report server status differently than the health LEDs because the software tracks more system attributes.

System LED and color	Internal health LED color	Status
Processor failure, socket X (amber)	Red	One or more of the following conditions may exist: <ul style="list-style-type: none"> <li>Processor in socket X has failed.</li> <li>Processor X is not installed in the socket.</li> <li>ROM detected a failed processor during POST.</li> </ul>
	Amber	Processor in socket X is in a pre-failure condition.
PPM failure, slot X (amber)	Red	<ul style="list-style-type: none"> <li>PPM in slot X has failed.</li> <li>PPM is not installed in slot X, but the corresponding processor is installed.</li> </ul>
DIMM failure, slot X (amber)	Red	<ul style="list-style-type: none"> <li>DIMM in slot X has failed.</li> <li>DIMM has experienced a multi-bit error.</li> </ul>
	Amber	<ul style="list-style-type: none"> <li>DIMM in slot X has reached single-bit correctable error threshold.</li> <li>DIMM in slot X is in a pre-failure condition.</li> </ul>
DIMM bank error (all slots in one bank, amber)	Red	The bank is not populated entirely or DIMMs do not all match within the bank.



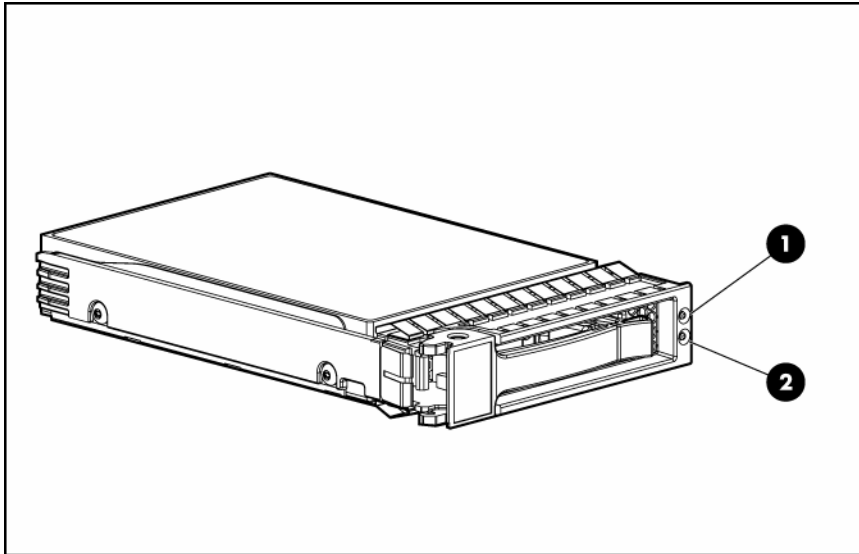
System LED and color	Internal health LED color	Status
DIMM failure (all slots, amber)	Red	<ul style="list-style-type: none"> <li>No valid or usable memory is installed in the system.</li> <li>The banks are not populated in the correct order.</li> </ul>
System temperature alert (amber)	Red	System temperature has exceeded OS cautionary level or critical hardware level.
Fan (amber)	Red	A required fan has failed.
	Amber	A redundant fan has failed.
Power supply backplane failure (amber)	Red	The power supply backplane has failed.

## Hot-plug SCSI hard drive LEDs



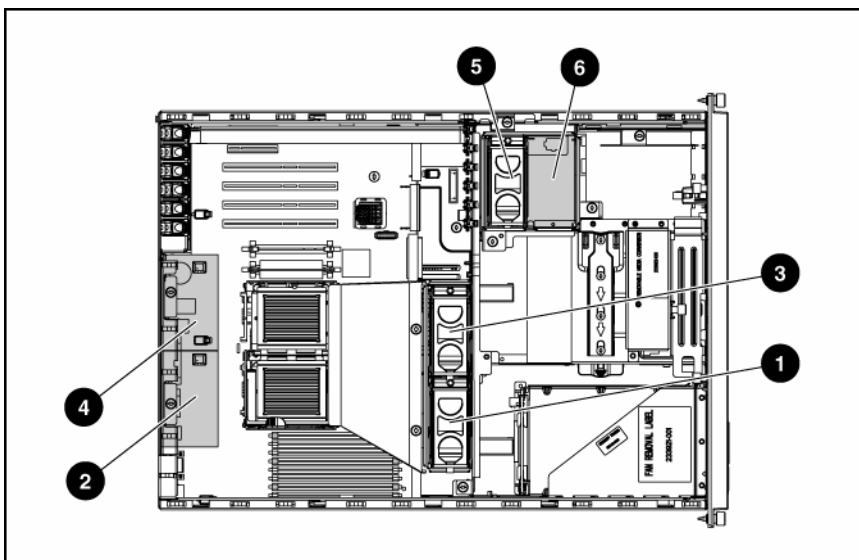
Item	LED description	Status
1	Activity status	On = Drive activity Flashing = High activity on the drive or drive is being configured as part of an array. Off = No drive activity
2	Online status	On = Drive is part of an array and is currently working. Flashing = Drive is actively online. Off = Drive is offline.
3	Fault status	On = Drive failure Flashing = Fault-process activity Off = No fault-process activity


## SATA or SAS hard drive LEDs



Item	LED description	Status
1	Fault/UID status	Amber = Drive failure Flashing amber = Fault-process activity Blue = Unit identification is active Off = No fault-process activity
2	Online/Activity status	Green = Drive activity Flashing green = High activity on the drive or drive is being configured as part of an array Off = No drive activity

## Identifying redundant hot-plug fans

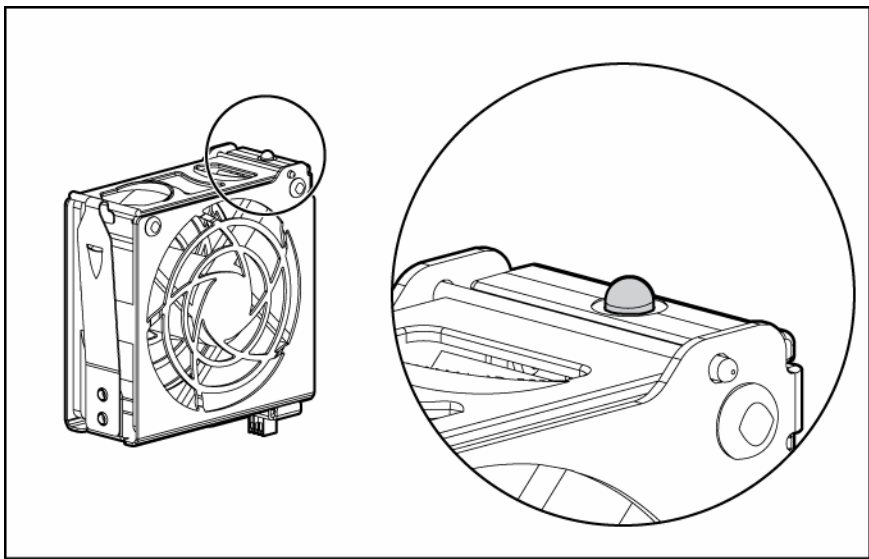


 **NOTE:** Fan locations are located in the chassis.

Item	Description	Configuration
1	Fan 1	Primary
2	Fan 2	Redundant
3	Fan 3	Primary
4	Fan 4	Redundant
5	Fan 5	Primary
6	Fan 6	Redundant

Fan failures are indicated by amber LEDs located on each hot-plug fan and by the front panel internal health LED. When a fan failure occurs, the internal health LED illuminates red in non-redundant mode and amber in redundant mode.

## Hot-plug fan LEDs



Status
Green = Operating normally
Amber = Failed
Off = No power