compaq proliant ml330 manual

File Name: compaq proliant ml330 manual.pdf
Size: 3495 KB
Type: PDF, ePub, eBook
Category: Book
Uploaded: 10 May 2019, 19:54 PM
Rating: 4.6/5 from 686 votes.

Status: AVAILABLE

Last checked: 14 Minutes ago!

In order to read or download compaq proliant ml330 manual ebook, you need to create a FREE account.

Download Now!

eBook includes PDF, ePub and Kindle version

Book Descriptions:

We have made it easy for you to find a PDF Ebooks without any digging. And by having access to our ebooks online or by storing it on your computer, you have convenient answers with compaq proliant ml330 manual . To get started finding compaq proliant ml330 manual , you are right to find our website which has a comprehensive collection of manuals listed.
Our library is the biggest of these that have literally hundreds of thousands of different products represented.

Book Descriptions:

compaq proliant ml330 manual

To ensure only valid configurations are ordered, HP recommends the use of an HP approved configurator. Please contact your local sales representative for additional information. Customer will receive a printed license entitlement certificate via physical shipment. For the complete range of StorageWorks RDX drives and media see. NonOperating 30,000 ft 9144m. Series Specs We delete comments that violate our policy, which we encourage you to read. Discussion threads can be closed at any time at our discretion. Refer to your ope rating syst em docum entation a nd to the SmartStart rel ease notes. Primary hard d rive controller ins tallation is incorrect. Run the s etup utility for your s erver and correct this problem. For the ProLiant ML330 s erver, press F10 to ru n the BIOS Set up utility. For the ProLiant ML330e s erver, press F9 to run the ROM Based Setup Utility RBSU Refer to Chapter 5 for comp lete ins tructions on the us e of the setu p utilities. Hard drive c ontroller order is incorr ect. Encoun tered problem after new hardware w as added to the sy stem. Refer to the docu mentat ion provid ed with th e hardware. Remov e the new har dware. Problem was encountered w ith hardware added to a new syst em or dered wi th a factoryins talled operating system where available. You mus t complete the factoryin stalled operating system software ins tallation BEFORE ad ding new hardware to th e syste m. Be sure that y ou are foll owing the instru ctions prov ided in the FactoryIn stall ed Operatin g Sys tem Software Installa tion Guide. Remove the n ew hard ware and c omplete the softw are installa tion. The HP ProLiant ML330 G6 is a new dual processor tower platform which built on the latest Intel Xeon processors with QPI technology to create a unique system architecture. This unique architecture enables you to scale your business as needed and allows you to improve the efficiency of how you spend your IT dollars.http://aksaxena.com/bpms/includes/fckeditor_uploads/userfiles/04-quest-repair-manual.xml

- **compaq proliant ml330 manual, compaq proliant ml330 manual download, compaq proliant ml330 manual pdf, compaq proliant ml330 manual free, compaq proliant ml330 manual downloads.**

ML330 G6 not only delivers excellent performance with the latest technology but it also incorporates the industrys most powerful embedded management technology with the HP Integrated LightsOut 2 iLO 2 for ProLiant controller, allowing you to manage servers anytime and anywhere. Please try a different number. Please consult the documentation for your specific system. You can not mix registered memory with unbuffered memory. 04.09.09 tathor HP Memory Configuration Tool can be found at If you have questions or would like further support, please contact our support department.No problem! The Crucial X8 and X6 offer incredible SSD performance through a convenient USB interface. No problem! The Crucial X8 and X6 offer incredible SSD performance through a convenient USB interface. Sign up today to receive your welcome offer. HP assumes you are quali fied in the servicing of comp uter equipment a nd trained in recogniz ing hazards in products wit h hazardous energy levels. Part Number 534305 003 March 2011 Edition 3 Nothing herein s hould be construed as constitutin g an additional warranty. HP shall not be liable for technical or editorial errors or omi ssions contained herein. Microsoft, Windows, and Window s Server are U.S. registered trad emarks of Microsoft Corpora tion. If power is off, vie w the LEDs on the RJ 45 con nector.http://www.fdlightech.com/luodan/images/userfiles/04-r6-service-manual-download.xml

Item Description 1 Hard drive bac kplane connec tors 2 2 Internal USB connector 3 Redundant power supply connecto r 4 Front panel con nector 5 Reserved 6 SATA connectors 1 4 har d drive 7

Hard drive LED conne ctor 8 System maintenance switch 9 SATA connectors 5 6 optical drive 10 Slot 3 PC Ie1 x8 1 11 SD card slot 12 Slot 4 PC Ie2 x16 16, 8, 4, 2, 1 13 Slot 5 PC Ie2 x8 4, 2, 1 14 Slot 6 PC Ie2 x8 4, 2, 1 15 Fan 6 conne ctor 16 Dedicate d iLO 2 module conn ector optional 17 Hard drive backpl ane connecto r 18 NMI jumper 19 Processor boa rd connectors 20 TPM conne ctor 21 Processor 1 D IMMs 1 9 22 USB connector Ma ny crashes freeze a sy stem, and the only av ailable action for administrators is to cycle the system power. Resetting the system erases any information that co uld support problem analysis, but the NMI feature preser ves that information by performing a memory dump befo re a hard reset.The front panel health LEDs indicate only the current hardware status. In some s ituations, HP SIM may report server statu s differently tha n the health LED s because the softw are tracks more system attribut es. Amber Processor is in a pre failure co ndition. DIMM failure, all slots in one channel amber Red No valid or usable memory is installed in the system. Overtemperature amber Amber The Health Driver has detected a cautionary temperature level. Red The server has detected a hardware c ritical temperature level. Fan module amber Red T he minimum fan requirements a re not being met in one or more of the fan mod ules. One or more fan s have failed or are missing. D IMM slots DIMM slots a re numbered s equentially 1 through 9 for each processor. The supported AM P modes use th e letter assignments for population guidelines. D IMM identifi cation IMPORTANT This ser ver does not support mixin g RDIMMs and UDIMMs. Att empting to mix these two types causes the server to halt dur ing BIOS initialization.

To determine DI MM characterist ics, use the l abel attached to t he DIMM and the foll owing illustration an d table.Portions of the power supply and some internal circuitry remain active until AC power is removed. IMPORTANT If installing a hot plug device, it is not necessary to power down the serve r. 1. Back up the server dat a. 2. Shut down the operating system as directed by the operating s ystem documentation. When the server activates Standby power mode, the system power LED c hanges to amber. IMPORTANT Pressing the UID button il luminates the blue UID LEDs on the front and rear panels. In a rack environment, this feature facilitates locating a server when moving between the front and rear of the rack. 4. Disconn ect th e power cords. The system is now without power. O pen or remove the tower bezel This server h as a removable bezel that must be unl ocked and opened before accessing t he front panel components. The bezel sh ould rema in closed during norm al server operations. CAUTION To avoid injury, HP recommends that only authorize d technicians keep the bezel key. CAUTION To avoid breaking t he bezel, remov e the bezel b efore placing th e server on it s side. To remove the component 1. Power down the serv er on page 20 . Extend the server from the ra ck NOTE If the optional cable manage ment arm option is ins talled, you can extend the server without powering d own the server or disconne cting peripheral cables a nd power cords. These steps are only neces sary with the standard cable management solution. 1. Power down the ser ver on page 20 . 2. Disconne ct all peripheral cables and power cords from the serv er rear panel. 3. Extend the tray. WARNING To reduce the risk of pers onal injury or e quipment damage, be s ure that the rac k is adequately stabili zed before extending a c omponent from the rac k. WARNING To reduce the risk of p ersonal injury, be careful when pres sing the server rail release latches and sliding t he server into the rack.

The sl iding rails could pinch your f ingers. 4. After performing the installation or maintenance procedure, slide the server back i nto the rack a. Press the server rail relea se latches and s lide the server fully into rack. b. Secure the server by tightening the thumbscrews. 5. Reconnect the periphe ral cables and power cords.CAUTION For proper cooling, d o not operate the server witho ut the access panel, baffles, expansion slot cove rs, hard drives, or blank s installed. I nstall the access p anel 1. Place the access pa nel on top of the serv er, allowing it t o extend past the rea r of the server approximatel y 1.5 cm 0.5 in. 2. Slide the access pane l forward until it c licks into place, and c lose the access pane l latch.If necessary, configure the air baffl e on page 22 . C onfigure t he air baffle This proced ure is necessary for 2P models only. 1. Power down the serv er on page 20 . 2. Do one of

the followin g P roper airfl ow can only be maintained whe n the bays are populated. Unpopulat ed drive bays can lead to improper cooling and thermal damage. 3. Remove the media bay blank.I nstall the processor b oard 1. Power down the serv er on page 20 . 2. Do one of the followin g Save the scr ews. 7. Using the wrench provided in the kit, install the seven mezz anine base stand offs. 8. Install the metal plate on the mezzanine base stand o ffs. A number o f service level options are availabl e to meet your n eeds. HP Care Pack Services offer upgraded serv ice levels to expand your s tandard product warr anty with easy to buy, easy to use support packag es that help you make the most o f your server inves tments. R ack planning res ources The rack resource kit ships with all HP br anded or Compaq branded 9000, 10000, a nd H9 series racks. For more information on the content of each resource, refer to the r ack resource kit documentation.

If you intend to d eploy and configure mult iple servers in a single ra ck, refer to the whit e paper on high density deployment at the HP website . Optimum environment When installing the server in a rack, select a location that meets the environmental standards described in this section.Therefore, the front and rear rac k doors must be ade quately ventilated to all ow ambient ro om air to enter the c abinet, and the rear door mus t be adequately ventilated t o allow the w arm air to escape from the cabinet. CAUTION To prevent improper coolin g and damage to the equipm ent, do not block the ventilation openings. When vertical space in the rack is not filled by a se rver or rack component, the gaps between the components ca use changes in airflow thr ough the rack and across the serv ers. Cover all gaps wit h blanking panels to maintain prope r airflow. CAUTION Always use blanking panels to fill em pty vertical spaces in the rack. This arra ngement ensures proper airflow. Usin g a rack without blan king panels results i n improper cooling tha t can lead to thermal damage. The 9000 and 10000 Ser ies Racks provide prop er server cooling from flow through perforations in the front and rear doors that pr ovide 64 percent open area for ventil ation. P ower require ments Installation of this eq uipment must comply wit h local and regional electri cal regulations governin g the installation of information technology equipment by licensed electricians. This equipment is designed to operate in insta llations covered by NFP A 70, 1999 Edition Nation al Electric Code and NFPA 75, 1992 WARNING To reduce the risk of perso nal injury, fire, or da mage to the equipment, do not overload the AC supp ly branch circuit that provides power to the rack. Cons ult the electrical authority havin g jurisdiction over wiring a nd installation requir ements of your facility.

CAUTION Protect the server f rom power fluctuations and temporary interruptions with a regulating uninterr uptible power supply UPS. T his device protec ts the hardware from damage caused by pow er surges and v oltage spikes and ke eps the sy stem in operation during a power failure. When installing more than one s erver, you may need to use additional power distribu tion devices to safely provide power to al l devices. E lectrical groun ding requirements The server must be grounded properly for proper operation and safety. In the United States, you must install the equ ipment in accordance w ith NFPA 70, 1999 Edition Na tional Electric Code, Article 250, as well a s any local and regional b uilding codes. In Cana da, you must install the equipm ent in accordance wit h Canadian Standards A ssociation, CSA C22.1, Canadi an Electr ical Code. In all ot her countries, you must install the equip ment in accordance with an y regional or national electr ical wiring codes, such as the International E lectrotechnical Commi ssion IEC Code 3 64, parts 1 through 7. Fu rthermore, you must b e sure th at all power distribution devic es used in the installation, such as branch wiring an d receptacles, are listed or certified ground ing type devices. Because of the high ground l eakage currents a ssociated wit h multiple servers con nected to the same po wer sour ce, HP recommends the u se of a PDU that is either permanently wired to the building’s branch circuit or includes a nondetac hable cord that is wi red to an industrial style plug. NEMA lo cking style plugs or those complying with IEC 60309 are considered suitab le for this purpose. Using c ommon

power outlet strip s for the server is n ot recommend ed. A rac k may become unstable if more than one component is extended for any reason. I dentifying t he server shippi ng carton conte nts Unpack the server shipping carton and locate the materials and documentation necessary for installing the server.

All the rack mounting hardware necessary for installi ng the server into the rack is included with the rack or the server. For options installa tion information, re fer to the option documenta tion. WARNING To reduce the risk of electric shock, fire, or damage to the equi pment, do not plug teleph one or t elecommunications c onnectors into RJ 45 connectors. 2. Connect the power cord to the rear of the server. 3. Connect the pow er cord to the AC power sour ce. I nstalling a server in a rack The procedure to install th e tray in the rack is similar to the procedures to install a server in a rack. For mor e information, see the 2U Quick Deploy Rail System Installation Instruct ions that shipped in the rail ki t. CAUTION To a void damag e to the equipment, be s ure that the rack rails are installed i n a predetermined location on the rack so tha t airflow clearance issues a re resolved. For airflow clearance information, refer to the documentation that ships wi th the server.CAUTION To preve nt damage to equipment, do not place the monit or on a r ack mounted server. The ra ck enabling kit supports only t he server. 5. Slide the tray fully into the rack, and then tighten the thumbscrews. I nstalling th e operating system To operate properly, the server mus t have a supported operating system. For the latest information on supported op erating system s, refer to the HP website portos . This process may requi re you to obtain additional drivers from the HP we bsite . Follow the on screen instructions to begin the installation process. For information on us ing these installation paths, refer to the SmartStart i nstallation poster in the HP ProLiant Essentials Foundation Pack, included with the server. R egistering the ser ver To register th e server, refer t o the HP Registrati on we bsite . WARNING To reduce the risk o f personal inj ury from hot surfa ces, allow the d rives and the internal system components to cool before touchi ng them.

CAUTION To preve nt damage to electric al components, properl y ground the server bef ore beginning any insta llation procedure. Im proper grounding can caus e electrostatic dischar ge. P rocessor option The server sup ports single and du al processor operatio n. With two proces sors installed, the serve r supports boot functions t hrough the processor installed in p rocessor socket 1. However, if pr ocessor 1 fails, the system automatically boot s from processor 2 and pro vides a processor failure message. WARNING To reduce the risk o f personal inj ury from hot surfa ces, allow the d rives and the internal system components to cool before touchi ng them. CAUTION To preve nt possible server malfunction and damage to the equipment, multipr ocessor configurations must contain processors with the same part number. CAUTION To prevent possible server o verheating, always pop ulate processor socket 2 with a processor and a heatsink or a processor s ocket cover and a heatsink blank. CAUTION The heatsink therm al interface m edia is not reusabl e and must be repl aced if the heatsink is r emoved from t he processor a fter it has been inst alled. CAUTION To preve nt possible server malfunction and damage to the equipment, multipr ocessor confi guratio ns must contain the same type of processors. IMPORTANT When installing the heats ink, align the guide pins on the processor retention bracket with the alignment holes in the heats ink. IMPORTANT Processor so cket 1 must always b e populated. If pro cessor socket 1 i s empty, the server doe s not power up. To install the component 1. Update t he system ROM. Locate and download th e latest ROM version fro m the HP website . Follow the instructions on the website to update the s ystem ROM. CAUTION Failure to completely open t he processor locking lever p revents the processor fr om seating during insta llation, leading to har dware damage. Open the pro cessor lockin g lever and the p rocessor socket reta ining bracket.

Do not remov e the processor sock et cover. IMPORTANT Be sure the processor rema ins inside the processor in stallation tool. 13. If the processor has separated from the installation tool, carefull y re insert the processor in the tool. Handle the processor by the edges only, and do not touch the bottom

of the processor, especially the contact area. Align the processor installation tool with the socke t, and then install the processor.Press the tabs on the processor install ation tool to separate it from the processor, and then remove the tool. 16. Close the pro cessor socket retaining bra cket and the proce ssor locking l ever. The pro cessor socket cover is automatically ejected. Remove the cov er. CAUTION Be sure to clos e the processor so cket retaining b racket before closi ng the processor locking lever. The l ever should close witho ut resistance. Forcing t he lever closed can damage the processor and socke t, requiring system board re placement. Remove the h eatsink prote ctive cover. 18. Install the heatsink.Power up the serv er on page 20 . M emory options IMPORTANT This ser ver does not support mixin g RDIMMs and UDIMMs. Att empting to mix these two types causes the server to halt d uring BIOS initializati on. The memory s ubsystem in this serv er can support RD IMMs or UDIMM s. Both types are refe rred to as DIMMs when the information applies to both types. When specified as RDIMM or UDIMM, the information applies to that type only. All memory installed in the server must be the same type. Each processo r supports three channels, and each channel suppor ts three DIMM slots, as shown in the followin g table. Channel Slot Slot nu mber 1 G D A 1 2 3 2 H E B 4 5 6 3 I F C 7 8 9 This multi channel archi tecture provides enhanced pe rformance in Advanced ECC mode. This architec ture also enables t he Mirrored Memo ry and Lockstep mem ory modes. This ser ver supports bot h Registered PC3 DIMMs RDIM Ms and Unbuffer ed DIMMs UDIM Ms.

DIMM slots in this server are id entified by numb er and by letter. Let ters identify t he slots to popula te for specific AMP modes. Sl ot numbers are report ed by ROM messages during bo ot and for error report ing. Single, dual , and quad rank DIMMs To understand and configure memory protection modes properly, an unde rstanding of single , dua l , and quad rank DIMMs is h elpful. Some DI MM configurati on requireme nts are based on these classificat ions. A single rank DIMM has one set of m emory chips th at is accessed w hile writing to or reading from t he memory. A dual rank DIMM is similar to having two single rank DIMMs on the same module, with only one rank accessible at a time. A qu ad rank DIMM is, ef fectively, two dual rank DIMMs on the s ame module. Onl y The server memory control subsy stem selects the proper rank within the DIMM when writing to o r reading from the DIMM. Dual and qua d rank DIMMs provi de the greatest capacity with the existing memory technology. For example, if current DRAM technology su pports 2 GB single rank DIMMs, a dual rank DIMM would be 4 GB, and a quad rank DIMM would be 8 GB. Th e server can continue to function if a single or multi bit memory failure within a single DRAM device occu rs. Advanced Memory Protec tion options are confi gured in RBSU. R DIMM maximum memory c onfi gurations The following ta ble lists the maximum mem ory configuration possib le with 8 GB RDIMMs. Rank Processor Single rank 72 GB Dual rank 72 GB Quad rank 48 GB U DIMM maximum memory configurat ions The ser ver supports a maximum of 24 G B using 4 GB dual rank UDIMMs. L ow voltage DIMMs Low Voltage DDR3 DIMMs operate at a l ower voltage 1.3 5V than standard voltag e DDR3 DIMMs 1.5V, and therefor e consume less power. To have DIM Ms operate at 1.35V, configure the Maximum M emory Bus Frequency option in the ROM Based Setup Utility to 1066 MHz.

Advanced ECC memory configuratio n Advanced ECC memor y is the default memory protec tion mode for this ser ver. Standard ECC can correct single bit memory errors and detec t multi bit memory errors. Whe n multi bit errors are detected usin g Standard ECC, the error is signaled to the ser ver and causes the server to halt. Advanced ECC protec ts the server against so me mul ti bit memory errors. Advanc ed ECC can correct bot h single bit memory errors and 4 bit memory errors if all failed bits are on the sam e DRAM device on th e DIMM. Advanced ECC provide s additional protec tion over Standard ECC bec ause it is possi ble to correc t certain memory erro rs that would ot herwise be uncor rected and result in a server failur e. The server p rovides notification that correctable error events have exceeded a pre defined threshold rate. M irrored memory configuration Mir roring provid es protection against uncorr ected memory errors th at would

otherwise result in server downtime. Mirroring is performed at the channel level. Channels 1 and 2 are us ed; channel 3 is not populated. Data is written to both memory channels. Data is read from one of the two memory channels. If an uncorrectable error is detected in the ac tive memory channel, data is retrieved from the mirror channel. This channel becomes the new active channel, and the system dis ables the channel with the failed DIMM. O nline Spare memory configuration Online spare m emory provides protection against degraded DIMM s by reducing the likelih ood of uncorrected memory errors. This protection is a vailable without an y operating system support. Online spare memory pro tection dedicates one rank of eac h memory channel for use as s pare memory. The remaining ranks ar e available for OS and applic ation use.

If c orrectable memory errors occu r at a rate higher than a specific threshold on any of the non spare ranks, the server automatically copi es the memory contents of the degraded rank to the online spare r ank. The server then deactivates the failing rank and automatically switches over to the online spare rank. Lockstep memory configuration Lockstep mode provide s protection against mu lti bit memory er rors that occur on the same DRAM device. Lockstep mod e can correct any single DRAM dev ice failure o n x4 and x8 DIMM ty pes. The DIMMs in ea ch channel must have identical HP part numbers. Lockste p mode uses channel 1 and channel 2. Channel 3 is not populated. Because channel 3 cannot be populated when usin g Lockstep mode, the maximum memor y capacity is lower than Advance d ECC mode. Memory perf ormance with Advanced ECC is al so slightly higher. G eneral DIMM slot popul ation guidelines Observe the follow ing guidelines for all AMP m odes Do not pop ulate DIMM slots G through I. Do not pop ulate DIMM slots G through I.R edundant ho t plug power supply option The server supports a se cond hot plug power supply to provide redundant power to the system if the primary power supply fa ils. Pay particular attention to the plug, e lectrical outlet, and the point where the cord extends from the equipment. WARNING To reduce the risk of perso nal injury from hot surface s, allow the power supply or power supply b lank to cool before touching it. CAUTION Always install either a hot plug power supply or a power su pply blank into eac h bay t o maintain proper a irflow and cooling in th e server. Improper airflow can lead to thermal damage. P ower supply configur ation CAUTION All power sup plies installed in the server m ust have the same output power capacity to operate in redu ndant mode. Verify that all power supplies have the same part numbe r and label color.

When the system detects mismat ched power supp lies, the system d isplays POST messages, does not power on th e new power supply, and remains in non redundant mode. Label color Output Orange 750 W I nstalling the redundant hot plug power supply option WARNING To reduce the ris k of personal injury or damage to the eq uipment, the installation of power supplies shoul d be performed only by indivi duals who are quali fied in servicing server equipment and trained t o deal with pro ducts capable of produci ng hazardous energy levels. WARNING To reduce the risk of persona l injury from h ot surfaces, ob serve the therm al labels on each power supply or module. WARNING To reduce the risk of injury from el ectric shock hazards, do not open power supplies. R e fer all maintenanc e, upgrades, and servic ing to qualified perso nnel. CAUTION Electrostatic discharge ESD can damage electronic components. Be sure that you are properly groun ded earthed before beginning any installation procedure. To install the component 1. Identify the redundant pow er supply bay. IMPORTANT Power supplies fo r the model sho wn are hot pluggable. When using the redundant power supply op tion, it is not necessary to power dow n the server before remov ing or installing a power supply. R edundant f an assembly option To install the component 1. Power down the serv er on page 20 . Install the air b affle. 12. Install the access panel on page 22 . 13. Do one of the followin g o Close or inst all the tower beze l, as needed.S AS or SATA h ard drive opt ion CAUTION For proper cooling, d o not operate the server with out the access pa nel, baffles, expansion slot cove rs, hard drives, or blank s installed. To install the component 1. Remove the hard drive blank. CAUTION To preve nt improper cooling and thermal damage, do not operate the server unless all bays are popul ated with either a co mponent or a blank. 6.

Using four of t he surplus T 15 screws locat ed on the non hot plug hard drive e xpansion cage, ins tall th e non hot plug hard drives. 7. Connect the power and data cables to the non hot plug hard drive. 8. Install the non hot plug hard drive e xpansion cage. H P has provided extr a guide screws, located behind t he side access pa nel. Depending on the opt ion, use 5.25 M3 metric screw s or HD 6 32 shipping s crews. The metric screw s supplied by HP are blac k. S ATA optical drive option For clarity, the follo wing illustrations in clude option cabling only. CAUTION To preve nt improper cooling and thermal damage, do not operate the server unless all bays are popul ated with either a co mponent or a blank.U SB tape drive option For clarity, the follo wing illustrations in clude option cabling only. CAUTION To preve nt improper cooling and thermal damage, do not operate the server unless all bays are popul ated with either a co mponent or a blank.Full height tape drive option For clarity, the follo wing illustrations in clude option cabling only.E xpansion boa rd options The server s upports PCI Ex press and PCI X expansion boards.CAUTION To preve nt improper cooling and thermal damage, do not operate the server unless all PCI slots have eith er an expansion slo t cover or an expansion board i nstalled.Connect the power extender cables, provided in the option kit, to the powe r cables in the server.Do one of the followin g o Close or inst all the tower beze l, as needed.S torage controller option IMPORTANT For additional installation and configuration informa tion, refer to the documentation that ships with the option.Battery backed wr ite cache batte ry pack option CAUTION To preve nt a server malfu nction or damage to the equipment, do no t add or remove the battery pack while an array capacity expansio n, RAID level migration, or str ipe size migration is in progress.