

## Firmware Release History

**Model: FC4G to SAS/SATA-2 16 CHL. (PPC440e)(EP-3169S/3169D-F4S3)**

CTRL	Expander	Release Date (MM/DD/YYYY)	Notes
1.33	0410	08/03/2009	<b>Prerequisites firmware 1.21</b> 1. Fixed SAS discovery error. 2. Fixed PHY configuration error. 3. Enhanced switch detect. EP901045: 1.33 / EP901060: 0410 / EP95601: 1.23 / EP96601: 1.19 / proRAIDManager P1.5.37.
1.31	0407	03/20/2009	<b>Prerequisites firmware 1.21</b> 4. Reset counters button to FC Port Statistics screen. 5. Node name same / diff dropdown to Port Setup screen. 6. Ability to use '!'s in LV names. 7. Fixed RAID ownership screen displays N/A if invalid preferred owner is specified. 8. Fixed preventing some causes of broken pipe errors. 9. Fixed memory leak in web GUI code. 10. Fixed cache issue for random reads. 11. Fixed valid product names for upgrading expander firmware. 12. Flash writing improvements to prevent board resets caused by configuration changes. 13. Fixed browser timeouts in some web GUI. 14. Improve SATA flow control behaviors, those externs functions were inline and speed optimization. EP901045: 1.31 / EP901060: 0407 / EP95601(EP96601): 1.19 / proRAIDManager P1.5.37.
1.30	0389	11/28/2008	<b>Prerequisites firmware 1.21</b> 1. Web based RAID Manager support.

			<ol style="list-style-type: none"> <li>2. Display IP address on LCD (proSES-II only).</li> <li>3. Display member on multiple rows.</li> <li>4. RAID ownership can be modifying.</li> <li>5. Fixed VMware ESX format issue.</li> <li>6. Fixed create over 5 raids issue.</li> <li>7. MAID level was saved even for unsupported disk types.</li> </ol> <p>EP901045: 1.30 / EP901060: 0389 / EP95601: 1.18 / proRAIDManager P1.5.35.</p>
1.20	0388	08/22/2008	<ol style="list-style-type: none"> <li>1. MAID support (Level 0, 1, 2, 3).</li> <li>2. Addition of new Port mapping function.</li> <li>3. Fixed write buffer in media server.</li> <li>4. Fixed for failover.</li> <li>5. Fixed ownership changes.</li> <li>6. Fixed expander upgrade reset issue.</li> <li>7. Fixed error on multi row initialization.</li> <li>8. Fixed to port stats display on GUI.</li> <li>9. Fixed Node Name / Port Name behavior.</li> <li>10. Fixed small Random Read versus sequential read.</li> <li>11. Changed online upgrade issue.</li> <li>12. Increased max volume size to 128TB.</li> <li>13. Improvements to read-ahead.</li> </ol> <p>EP901045: 1.20 / EP901060: 0388 / EP95601(EP96601): 1.16 / proRAIDManager P1.5.34.</p>
1.11	0379	05/23/2008	<ol style="list-style-type: none"> <li>1. Fixed SMTP setting issue.</li> <li>2. Increased size of max RAID in front cache.</li> </ol>
1.10	0379	02/25/2008	<ol style="list-style-type: none"> <li>1. Added RAID Level 6 support.</li> <li>2. Added BBM support.</li> <li>3. Added support 2129 and 4429.</li> <li>4. Added new user 'netadmin' who can change the network parameters only.</li> <li>5. Fixed Multi-LUNs and Multiplexing in Solaris.</li> </ol>
1.09	0368	10/19/2007	<ol style="list-style-type: none"> <li>1. Support SATA with dongle boards.</li> <li>2. Fixed disk recognition.</li> <li>3. Fixed expander discovery status.</li> <li>4. Fixed fault LED.</li> <li>5. Fixed delete RAID under expansion.</li> </ol>

			6. Fixed regarding proper handling of missing disks (disk pull & RAID degrade). 7. Fixed in RAID expansion handler. 8. Fixed disk manager and check for duplicate SAS addresses.
1.07	0354		1. Initial release.