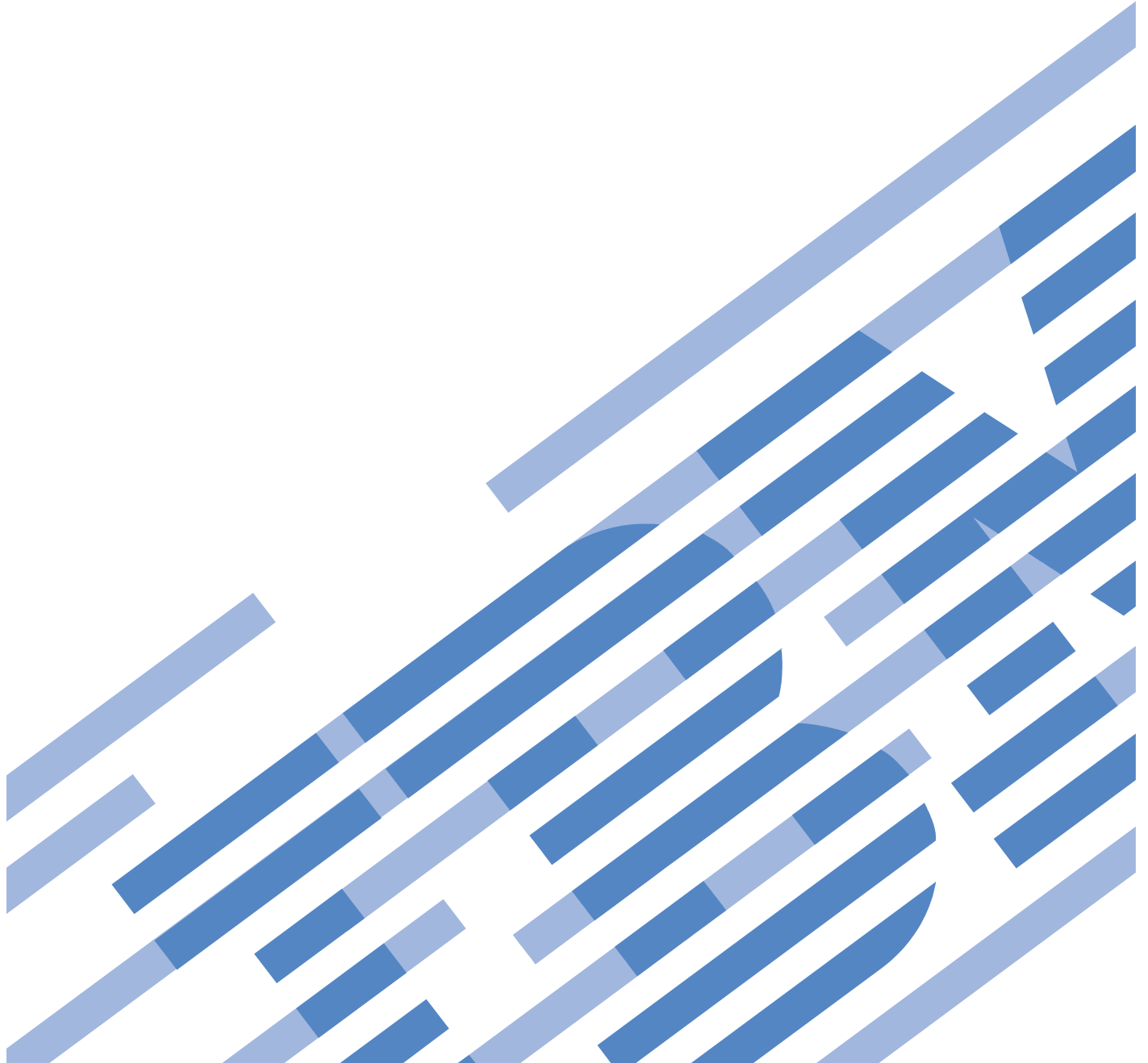


Power775

Unit Emergency Power Off (UEPO) Panel Service Procedure

Last Modified 9/29/2011



Power775 UEPO Panel Service Procedure
PN: 41U8501, EC N44172

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1 GENERAL

1.1 Release / Revision History

File Name	Date	Description
"p775_uepo_panel.pdf"	9/30/2011	Initial Release

Table 1 Release / Revision History

- Do not make any unauthorized alterations to the document.
- Report any deviations from this procedure through the appropriate Product Engineering channels.
- Destroy entire document when no longer needed, recalled, or obsolete.

1.2 Required Documents

Document	PN	Location
Safety Notices http://publib.boulder.ibm.com/infocenter/powersys/v3r1m5/topic/p7hdx/G229-9054.pdf	Document #G229-9054	InfoCenter *

Table 2 Required Documents

*InfoCenter Website: <http://publib.boulder.ibm.com/infocenter/powersys/v3r1m5/topic/p7ee2/p7ee2kickoff.htm>

1.3 Related Documents

Document	PN	Location
Power775 BPC FSP Command Line Procedure		Appendix A

Table 3 Related Documents

*InfoCenter Website: <http://publib.boulder.ibm.com/infocenter/powersys/v3r1m5/topic/p7ee2/p7ee2kickoff.htm>

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1.4 Acronyms / Abbreviations

Acronym/Abbreviation	Definition	Details
BPA	Bulk Power Assembly	BPE populated with BPCH, BPD, BPRs, & BPFs
BPCH	Bulk Power Controller Hub	Referred to as BPC on the HMC
BPD	Bulk Power Distributor	
BPE	Bulk Power Enclosure	
BPF	Bulk Power Fan	
CB	Circuit Breaker	Branch circuit wall CB or PDU CB is part of customer's facilities power infrastructure
CEC	Central Electronics Complex	Also referred to as the NODE-P7IH on the Rating Labels
DCCA	Distributed Converter & Control Assembly	The Power Supply for CEC and DE are called the CEC DCCA and DE DCCA, respectively
DE	Disk Enclosure	
EDFI	Error Detection / Fault Isolation	Power/Thermal firmware diagnostic function
FRU	Field Replaceable Unit	
FSP	Flexible Service Processor	
GPFS	Global Parallel File System	IBM's disk file system utilizing software RAID
HDD	Hard Disk Drive	This also means hard drive
HMC	Hardware Maintenance Console	
HPC	High Performance Computing	
LED	Light Emitting Diode	
LIC	Licensed Internal Code	Specifically Power/Thermal firmware in this procedure's context
MTMS	Machine Type, Model, Serial #	
PCB	Printed Circuit Board	
RAID	Redundant Array of Inexpensive Disks	
SAS	Serial Attached SCSI	Protocol used for direct attached storage
SFP	Service Focal Point	Service application on the HMC
SSR	System Service Representative	IBM Field Service personnel
SSD	Solid State Drive	
UEPO	Unit Emergency Power Off	

Table 4 Acronyms / Abbreviations

2 OVERVIEW

This section is an overview only. Do not start the service procedure until Section 3 which contains the detailed steps.

2.1 Safety Notices

2.1.1 IMPORTANT

Read “Safety_Notices_G229-9054.pdf” available from InfoCenter – see Section 1.2. The following are some of the cautions that specifically pertain to this Power775 service procedure.

CAUTION:

Energy hazard present. Shorting might result in system outage and possible physical injury. Remove all metallic jewelry before servicing. (C001)

CAUTION:

The doors and covers to the product are to be closed at all times except for service by trained service personnel. All covers must be replaced and doors locked at the conclusion of the service operation. (C013)

CAUTION:

Servicing of this product or unit is to be performed by trained service personnel only. (C032)

2.1.2 IMPORTANT

Here is a danger that specifically pertains to this Power775 service procedure.

DANGER:

Hazardous voltage present. Voltages present constitute a shock hazard, which can cause severe injury or death. (L004)



Figure 1 Hazardous Voltage, Current, or Energy

2.2 Attention – File System Risk Statement

The Global Parallel File System (GPFS) implementation of software RAID stripes data across all the Disk Enclosures in the cluster. **If a single Disk Enclosure is powered off while GPFS is active, the file system will go into panic and become unavailable.**

2.3 UEPO Panel Description

Referring to the drawing in Figure 2 UEPO Panel Location below, the UEPO Panel is at location U-D1 (where U is the MTMS 9125 F2C Serial #) on the front of the rack.

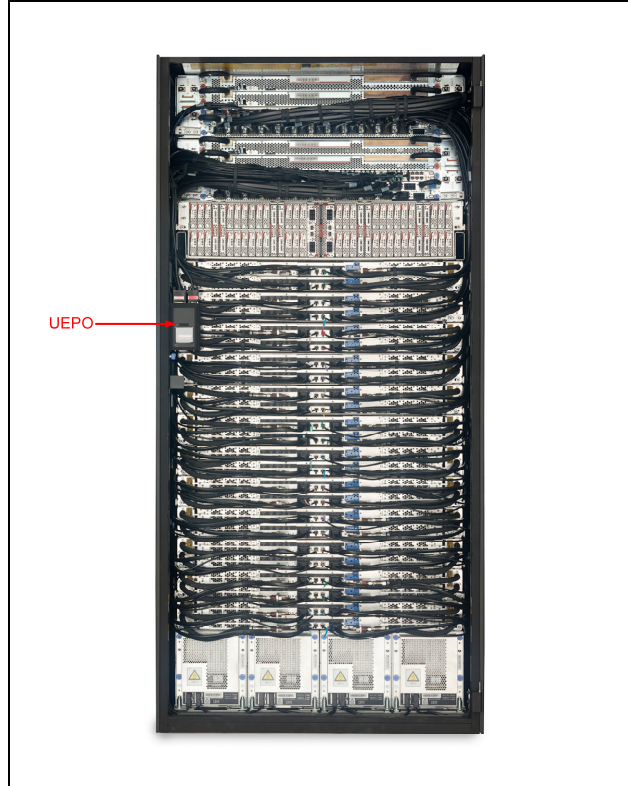


Figure 2 UEPO Panel Location

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Figure 3 UEPO Panel in OFF (down) position below is a drawing of the UEPO Panel on the front of the rack.

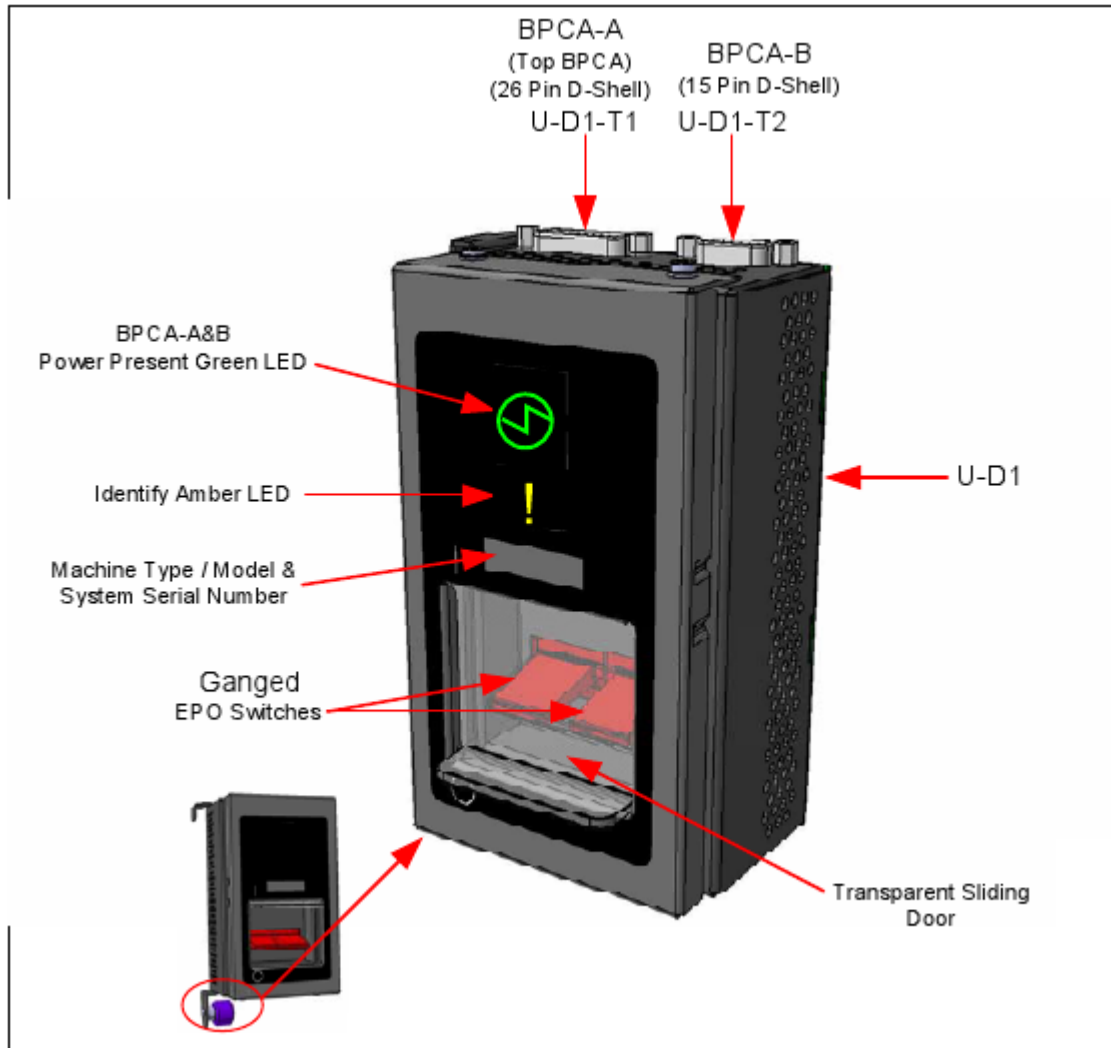


Figure 3 UEPO Panel in OFF (down) position

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The UEPO Cables (2X) plug into the top of the UEPO Panel and are keyed by different D-shell connector sizes (see Figure 4 UEPO Panel Cables Plugged below).



Figure 4 UEPO Panel Cables Plugged

2.4 Background

2.4.1 UEPO Circuit Operation

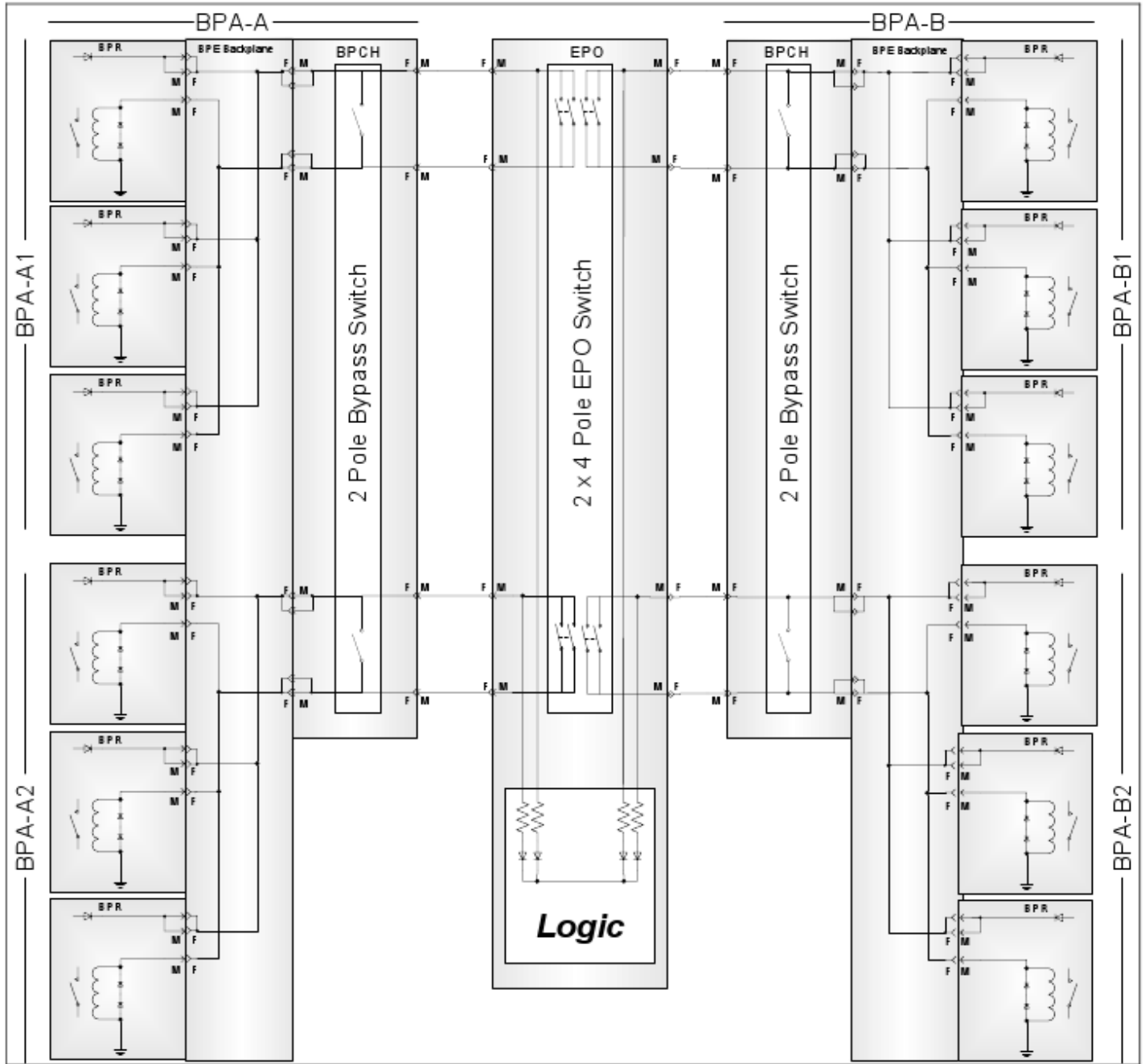


Figure 5 UEPO Circuit Block Diagram

Both of the UEPO bypass switches located on each BPCH will need to be placed in bypass during the UEPO Panel service procedure defined here. Referring to the drawing in Figure 5 UEPO Circuit Block Diagram above, the center block is the UEPO switch. The block on the left is BPA-A and the block on the right is BPA-B. Note one “2-pole Bypass Switch” is in the BPA-A BPCH and another is in the BPA-B BPCH. They are wired in parallel with the UEPO switch. During normal operation both the “2-pole Bypass Switches” are open so the UEPO Panel controls the system power state. Figure 6 below has one of the four UEPO loops highlighted in red. With the UEPO panel switch closed, the system is powered on and the green LED is lit on the UEPO Panel. Note that if the UEPO panel switch is opened

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(moved to down position) or the UEPO Panel is removed, the loop is broken and the system powers down as indicated by the UEPO Panel green LED going out.

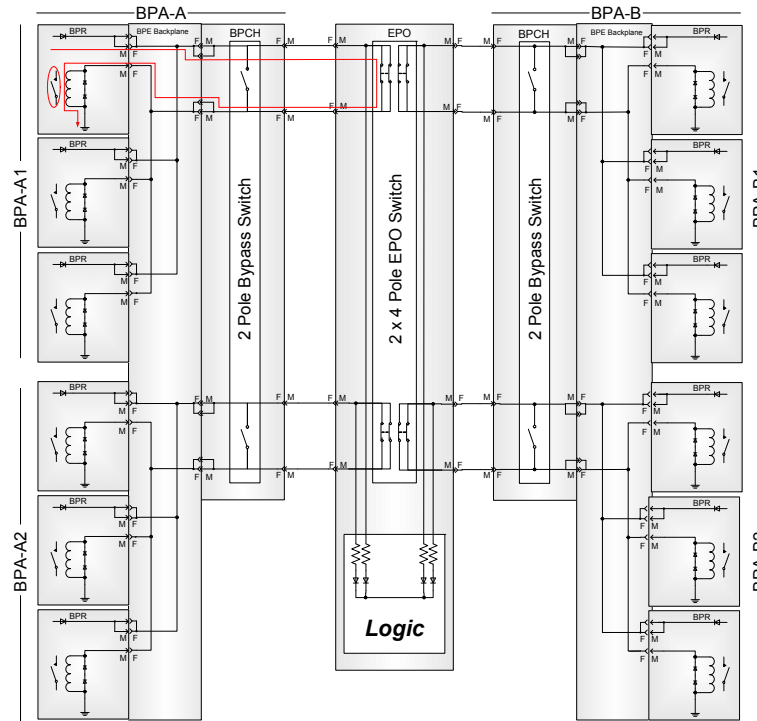


Figure 6 UEPO Normal Operation (One of 4 Loop Paths Highlighted)

Figure 7 UEPO Panel With BPA-A BPCH Bypass Switch in Bypass below highlights the UEPO loop path when the “2 Pole Bypass Switch” is closed. Note that the “2 Pole Bypass Switch” being closed acts as a short across the UEPO switch. It forces the UEPO loop to remain closed, the system to be kept running, and the UEPO Panel green LED to stay lit. This allows us to concurrently remove the UEPO Panel without opening the UEPO loop or causing a hard system power down. It is important to remember that once the new UEPO Panel is installed, we place both BPCH “2 Pole Bypass Switches” back in the Normal (or open) position to allow the UEPO Panel control to function as intended.

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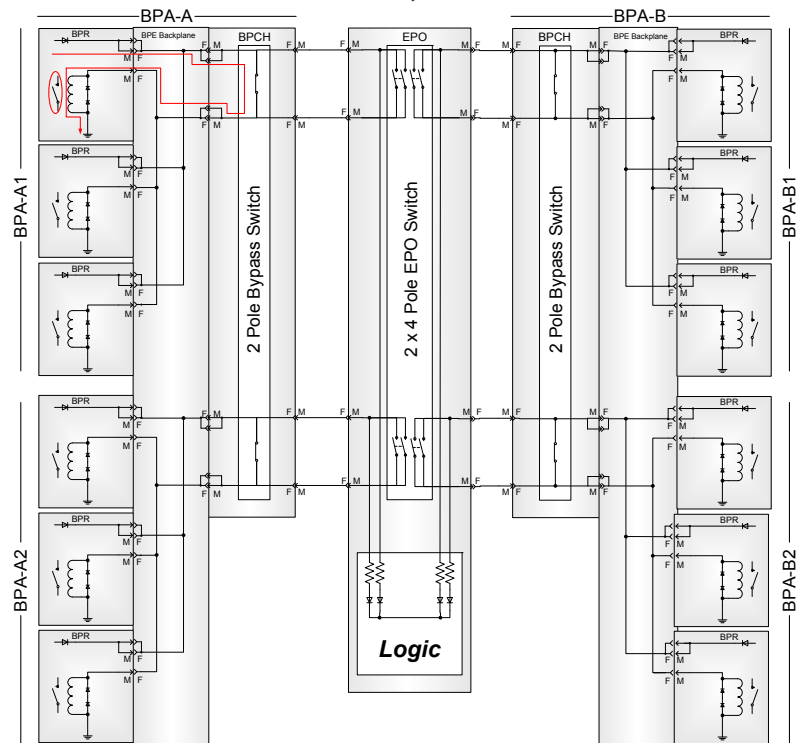


Figure 7 UEPO Panel With BPA-A BPCH Bypass Switch in Bypass

2.5 Concurrency

The UEPO Panel is concurrently maintainable. The UEPO bypass switches located on the BPCHs need to be placed in bypass as described in the following procedure.

2.6 UEPO Panel Weight

The UEPO Panel weighs approximately 589.7 grams / 1.3 lbs

2.7 Required SSRs and Roles

This service procedure requires one SSR.

2.8 Estimated Service Time

This procedure normally takes approximately 30 minutes.

2.9 P7IH Hand Tool Kit P/N 74Y0988 Required Tools

4mm Hex Driver (1.5-1.75 Nm torque setting) PN 41V1059

3 SERVICE PROCEDURE

STOP – Do not proceed unless you have read “Safety_Notices_G229-9054.pdf” which is available from InfoCenter; see Section 1.2

3.1 Customer System Administrator

The Customer System Administrator should be made aware of this service activity, but they don't normally have specific steps to perform.

3.2 Identify and Replace UEPO Panel ← SSR Task

1. You should have downloaded this procedure from the InfoCenter Website listed here to ensure you are using the latest version and ensure no pages are missing by verifying the last section is titled “End of Document”:

<http://publib.boulder.ibm.com/infocenter/powersys/v3r1m5/topic/p7ee2/p7ee2kickoff.htm>

2. If using printed copies of these procedures, then be sure to staple or paperclip the pages together to help keep them in the right page number sequence.
3. An HMC Service Focal Point SRC FRU Call or direction from a higher level of support should have directed you to perform this procedure. The HMC can be accessed via the keyboard/display that resides in the management rack.
4. Ensure the UEPO Panel switch is ON (double-red-switch in UP position -- reference Figure 8 UEPO Panel Location on Front Door below).
5. Locate rack that requires service.
6. If the rack could not be located in Step 5 above, then light the UEPO Service Identify LED by accessing the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to ‘Power775 BPC FSP Command Line Procedure’ in Appendix A of this PDF and select **SIDE_A** on the **Launch ASM Interface** window) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -c 28aa0001ff01
```

Expect 00aa00 returned which means the command executed properly and reported successful “UEPO Service Identify LED On” status.

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If something different is returned, then contact the next level of support. For reference, the returned “rrsdd” format hexadecimal characters can be translated as follows:

“rr” Return Code Definitions:

00 = Command executed properly
21 = Cage Not Present / Configured
22 = FRU Not Present / Configured.
27 = Location code error
4A = Error in sent command
4B = Invalid State
95 = BPCH LIC Detected Error
96 = Mail-boxing error

“ss” Sequence Number:

aa = Arbitrary and unimportant

“dd” Return Data Definitions

00 = UEPO Service Identify LED turned on successfully. It is OK to continue with the service procedure

7. The UEPO Panel Identify Amber LED should be blinking. Verify the rack and UEPO Panel MTMS (Machine Type Model Serial number) are as expected. The rack level MTMS is located on the face of the UEPO Panel (see Figure 8 UEPO Panel Location on Front Door below).

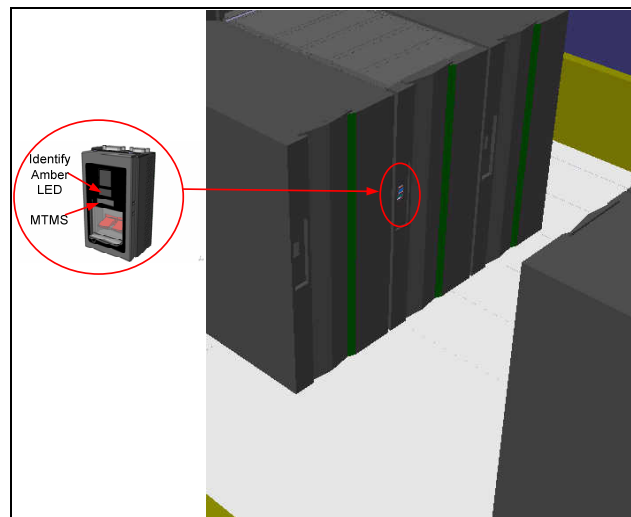


Figure 8 UEPO Panel Location on Front Door

8. Make sure the UEPO Panel status is redundant by sending a UEPO Panel redundancy command to the BPCH FSP. To do this access the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to ‘Power775 BPC FSP Command Line Procedure’ in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -c 9baa0000ffef
```

Expect 00aa00 returned which means the command executed properly and reported successful “Redundant UEPO Panel” status.

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If something different is returned, then contact the next level of support. For reference, the returned “rrsdd” format hexadecimal characters can be translated as follows:

“rr” Return Code Definitions:

00 = Command executed properly
21 = Cage Not Present / Configured
22 = FRU Not Present / Configured.
27 = Location code error
43 = Not valid for this FRU
96 = Mail-boxing error

“ss” Sequence Number:

aa = Arbitrary and unimportant

“dd” Return Data Definitions:

00 = Redundant status. It is OK to replace the UEPO Panel and continue with Step 9
01 = Non-redundant status. It is NOT OK to replace the UEPO Panel. Please contact next level of support

9. Open the front door as shown in Figure 9 Front Door Open below.

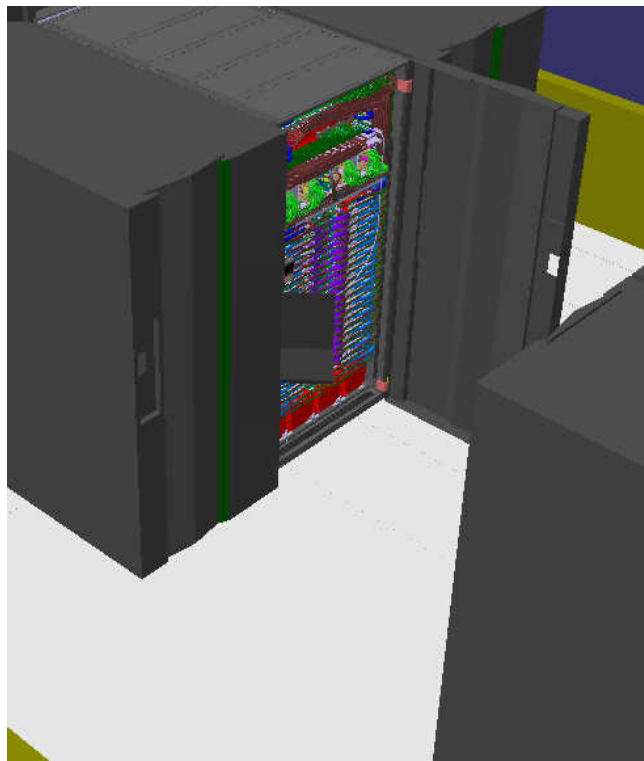


Figure 9 Front Door Open

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DANGER:

Hazardous voltage present. Voltages present constitute a shock hazard, which can cause severe injury or death. (L004)



Figure 10 Hazardous Voltage, Current, or Energy

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10. Locate both BPCHs (see Figure 11 Location of BPCHs in rack below)

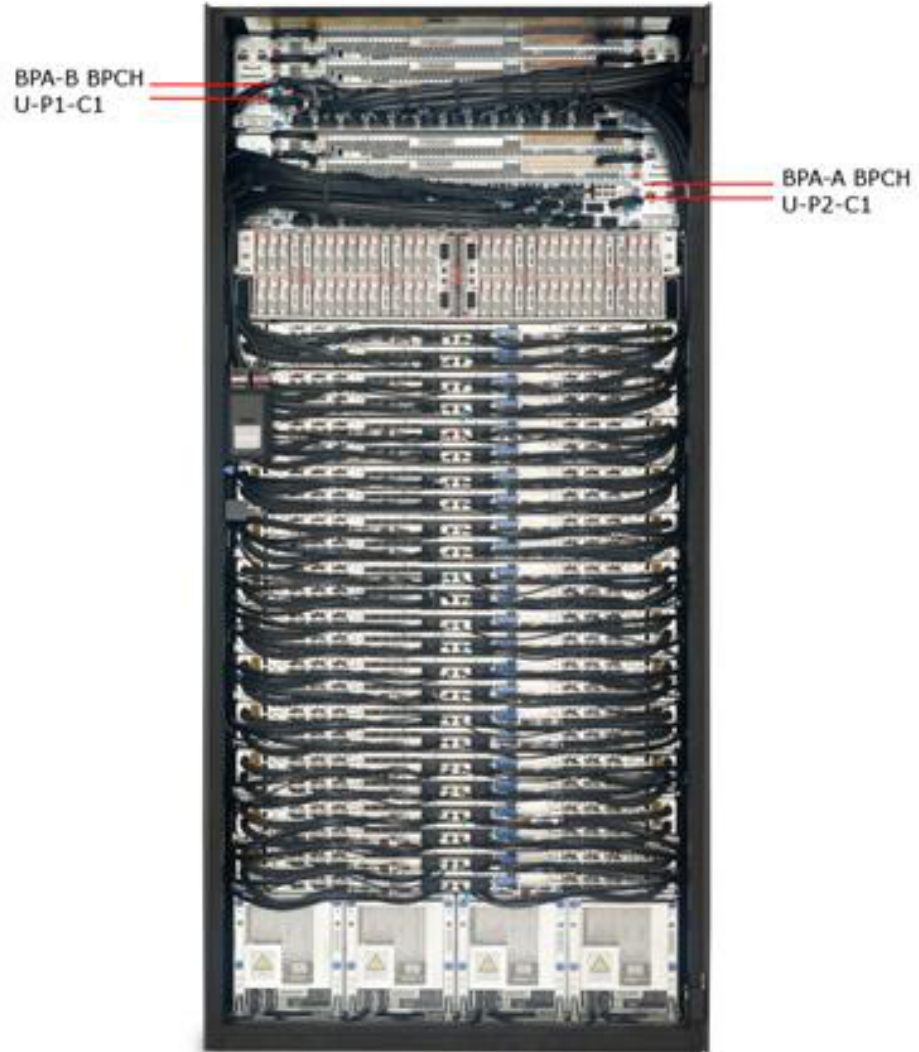


Figure 11 Location of BPCHs in rack

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11. Set the UEPO switches on **both** BPCs to the “BYPASS” position to the right before replacing the UEPO Panel (reference Figure 12 below).



Figure 12 BPC UEPO Bypass Switch shown in desired BYPASS position (moved to the right)

12. Check Bypass Switch State is correct by sending the UEPO Bypass Status Read command to the BPC FSP. To do this access the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to ‘Power775 BPC FSP Command Line Procedure’ in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -c 97aa0030
```

Expect 00aaddddd returned (where dddddd are any alphanumeric characters) which means the command executed properly and successful “UEPO Bypass” status has been confirmed.

If “95aa0f 0006 Failed: First token 3 bytes are payload, second token is netcStatus“ is returned, then double-check the UEPO switches on **both** BPCs are set to the “BYPASS” position (moved to the right as shown in Figure 12 above). Repeat this Step 12 if necessary.

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If different data is returned, then contact the next level of support. For reference, the returned “rrssddddddd” format hexadecimal characters can be translated as follows:

“rr” Return Code Definitions:

- 00 = Command executed properly
- 21 = Cage Not Present / Configured
- 4A = Error in Sent Command
- 95 = BPC LIC detected error/failed

“ss” Sequence Number:

aa = Arbitrary and unimportant

“ddddddd” Return Data Definitions:

dd Data	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
1 st & 3 rd dd Bytes	-CROSS PWR DCVP	Pull-Up	-EPO1 PWR COMPLETE	-EPO1 PWR GOOD	BPCH EPO1 BYPASSED	-BPD PLUG DETECT	-BPF4 PLUG DETECT	-BPF3 PLUG DETECT
2 nd & 4 th dd Bytes	<----- Pull-Up ----->		-EPO2 PWR COMPLETE	-EPO2 PWR GOOD	BPCH EPO2 BYPASSED	Pull-Up	-BPCH BIAS 2 DCVP	-BPCH BIAS 1 DCVP

Table 5 BPA / UEPO Status Registers

The Return Data needs each “dd” byte converted from hexadecimal to binary and plugged into the appropriate row of the above Table 5 for translation (Bytes 1 & 2 are BPCH-A status and bytes 3 & 4 are BPCH-B status). A typical value of “48CC48CC” has only the Pull-Up bits equal to 1 (i.e., forced high due to pull-up resistors), both bit 3’s equal to one (active high UEPO Bypassed), and all the other bits equal to 0 (i.e., active low as designated by the – sign prefix). This technical information is supplied strictly as a debug aid and is not expected to be easily understood. If you are not sure how to proceed, then please call the next level of support.

13. Issue a UEPO Panel deactivate command to the BPCH FSP. To do this access the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to ‘Power775 BPC FSP Command Line Procedure’ in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -c 10aa0000ffef
```

Expect 00aa00 returned which means the command executed properly and confirmed successful “Deactivated UEPO Panel” status.

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If something different is returned, then contact the next level of support. For reference, the returned “rrsdd” format hexadecimal characters can be translated as follows:

“rr” Return Code Definitions:

00 = Command executed properly
21 = Cage Not Present / Configured
22 = FRU Not Present / Configured.
27 = Location code error
4A = Error in sent command
4B = Invalid State
95 = BPCH LIC Detected Error
96 = Mail-boxing error

“ss” Sequence Number:

aa = Arbitrary and unimportant

“dd” Return Data Definitions:

00 = Deactivate successful. It is OK to replace the UEPO Panel and continue with the service procedure

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14. Disconnect the EPOS-T1 and EPOS-T2 UEPO cables from the suspect UEPO Panel assembly T1 & T2 positions by loosening the connector thumb screws and unplugging both as shown in Figure 13 below



Figure 13 UEPO Cable Removal

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15. Loosen the blue colored thumb screw located at the bottom of the UEPO Panel using the red handled Hex Driver torque tool P/N 41V1059 (4mm Hex Driver 1.5-1.75 Nm) provided in the tool kit (see Figure 14 Removal of UEPO Panel from Frame below).



Figure 14 Removal of UEPO Panel from Frame

16. Unhook the suspect defective UEPO Panel assembly from the rack by sliding it upward and then away from the rack.
17. Transfer the MTMS label from the old to the new replacement UEPO Panel. If this does not work, then label the new replacement UEPO Panel with the MTMS information similar to the suspect defective UEPO Panel just removed.

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18. Attach the new UEPO Panel assembly to the rack by aligning the UEPO Panel hook tab with the frame member slot as shown in Figure 15 below.



Figure 15 UEPO Panel Hook Tab & Frame Member Slot

19. Tighten the blue colored thumb screw located at the bottom of the UEPO Panel using the red handled Hex Driver torque tool P/N 41V1059 (4mm Hex Driver 1.5-1.75 Nm) provided in the tool kit (see Figure 15 above).
20. Connect the EPOS-T1 and EPOS-T2 UEPO cables to the U-D1 UEPO Panel assembly connector positions labeled T1 & T2 by plugging each cable connector and tightening the connector plug thumb screws as shown in Figure 4 above.
21. Ensure the UEPO Panel switch is set to ON (double-red-switch in UP position).

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22. Set the UEPO bypass switches on **both** BPCHs back to the "NORMAL" (left) positions as shown in Figure 16 below.



Figure 16 BPCH UEPO Bypass Switch shown in the desired NORMAL position (moved to the left)

23. Check Bypass Switch State is correct by sending the UEPO Bypass Status Read command to the BPCH FSP. To do this access the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -c 97aa0031
```

Expect 00aaddddd returned (where ddddddd are any alphanumeric characters) which means the command executed properly and successful "Normal UEPO" status has been confirmed.

If "95aa0f 0006 Failed: First token 3 bytes are payload, second token is netcStatus" is returned, then double-check the UEPO switches on **both** BPCHs are set to the "NORMAL" position (moved to the left as shown in Figure 16 above). Repeat this Step 23 if necessary.

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If something different is returned, then contact the next level of support. For reference, the returned “rrssddddddd” format hexadecimal characters can be translated as follows:

“rr” Return Code Definitions:

- 00 = Command executed properly
- 21 = Cage Not Present / Configured
- 4A = Error in Sent Command
- 95 = BPC LIC detected error/failed

“ss” Sequence Number:

aa = Arbitrary and unimportant

“ddddddd” Return Data Definitions:

dd Data	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
1 st & 3 rd dd Bytes	-CROSS PWR DCVP	Pull-Up	-EPO1 PWR COMPLETE	-EPO1 PWR GOOD	BPCH EPO1 BYPASSED	-BPD PLUG DETECT	-BPF4 PLUG DETECT	-BPF3 PLUG DETECT
2 nd & 4 th dd Bytes	<----- Pull-Up ----->		-EPO2 PWR COMPLETE	-EPO2 PWR GOOD	BPCH EPO2 BYPASSED	Pull-Up	-BPCH BIAS 2 DCVP	-BPCH BIAS 1 DCVP

Table 6 BPA / UEPO Status Registers

The Return Data needs each “dd” byte converted from hexadecimal to binary and plugged into the appropriate row of the above Table 6 for translation (Bytes 1 & 2 are BPCH-A status and bytes 3 & 4 are BPCH-B status). A typical value of “40C440C4” has only the Pull-Up bits equal to 1 (i.e., forced high due to pull-up resistors) and all the other bits equal to 0 (i.e., active low as designated by the – sign prefix). This technical information is supplied strictly as a debug aid and is not expected to be easily understood. If you are not sure how to proceed, then please call the next level of support.

24. Issue a UEPO Panel activate command to the BPCH-A FSP. To do this access the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to ‘Power775 BPC FSP Command Line Procedure’ in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -c 11aa0000ffef
```

Expect 00aa00 returned which means the command executed properly and reported successful “Activated UEPO Panel” status.

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If something different is returned, then contact the next level of support. For reference, the returned “rrsdd” format hexadecimal characters can be translated as follows:

“rr” Return Code Definitions:

00 = Command executed properly
21 = Cage Not Present / Configured
22 = FRU Not Present / Configured.
27 = Location code error
4A = Error in sent command
4B = Invalid State
95 = BPCH LIC Detected Error
96 = Mail-boxing error

“ss” Sequence Number:

aa = Arbitrary and unimportant

“dd” Return Data Definitions

00 = Activate successful and UEPO Panel EDFI is re-enabled. It is OK to continue the service action

25. Turn off the UEPO Service Identify LED by accessing the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to ‘Power775 BPC FSP Command Line Procedure’ in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) and enter the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -c 28aa0000ff01
```

Expect 00aa00 returned which means the command executed properly and reported successful “UEPO Service Identify LED Off” status.

If something different is returned, then contact the next level of support. For reference, the returned “rrsdd” format hexadecimal characters can be translated as follows:

“rr” Return Code Definitions:

00 = Command executed properly
21 = Cage Not Present / Configured
22 = FRU Not Present / Configured.
27 = Location code error
4A = Error in sent command
4B = Invalid State
95 = BPCH LIC Detected Error
96 = Mail-boxing error

“ss” Sequence Number:

aa = Arbitrary and unimportant

“dd” Return Data Definitions

00 = UEPO Service Identify LED turned off successfully. It is OK to continue with the service procedure

26. Confirm the UEPO Panel Service Identify LED is now off.

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27. Wait 5 minutes and then perform Steps 28 & 29 to verify the original SRC does NOT reoccur and to confirm the service procedure completed successfully.
28. Issue an BPCH-A real-time Power/Thermal SRC read-out command to the **HMC BPC-A ASM SIDE_A** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and ensure **ASM SIDE_A** is active per Step 12) by entering the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -m gi,3,s
```

Verify the original SRC problem is not listed in any of the `src.referenceCode` fields (there may be multiple fields to check).

29. Open a new **ASM SIDE_B** window and issue an BPCH-B real-time Power/Thermal SRC read-out command to the **HMC BPC-B ASM SIDE_B** Service Processor Command Line (Refer to 'Power775 BPC FSP Command Line Procedure' in Appendix A of this PDF and select **SIDE_B** on the **Launch ASM Interface** window) by entering the following at the command prompt (IMPORTANT: DOUBLE-CHECK THE COMMAND IS TYPED IN EXACTLY CORRECT BEFORE PRESSING ENTER BECAUSE EVEN A SINGLE INCORRECT CHARACTER COULD RESULT IN SEVERE UNINTENDED SYSTEM DISRUPTION!!):

```
bpccmd -m gi,3,s
```

Verify the original SRC problem is not listed in any of the `src.referenceCode` fields (there may be multiple fields to check).

30. If any of the `src.referenceCode` fields list the original SRC that led you to perform this service procedure, then continue with replacing the next item on the FRU call list or contact the next level of support.
31. If the original SRC error has not reoccurred and is now cleared, then close the front door of the rack and close out the HMC Service Focal Point problem as appropriate.

4 END OF POWER775 UEPO PANEL SERVICE PROCEDURE

5 APPENDIX A: POWER775 BPC FSP COMMAND LINE PROCEDURE

5.1 Procedure to Access the BPC FSP Command Line

1. The HMC can be accessed via the keyboard/display that resides in the network management rack.
2. Login to the HMC if not done already.
3. In the HMC navigation pane, expand 'Systems Management' + sign and then click 'Frames' (see Figure 17 HMC Frames)

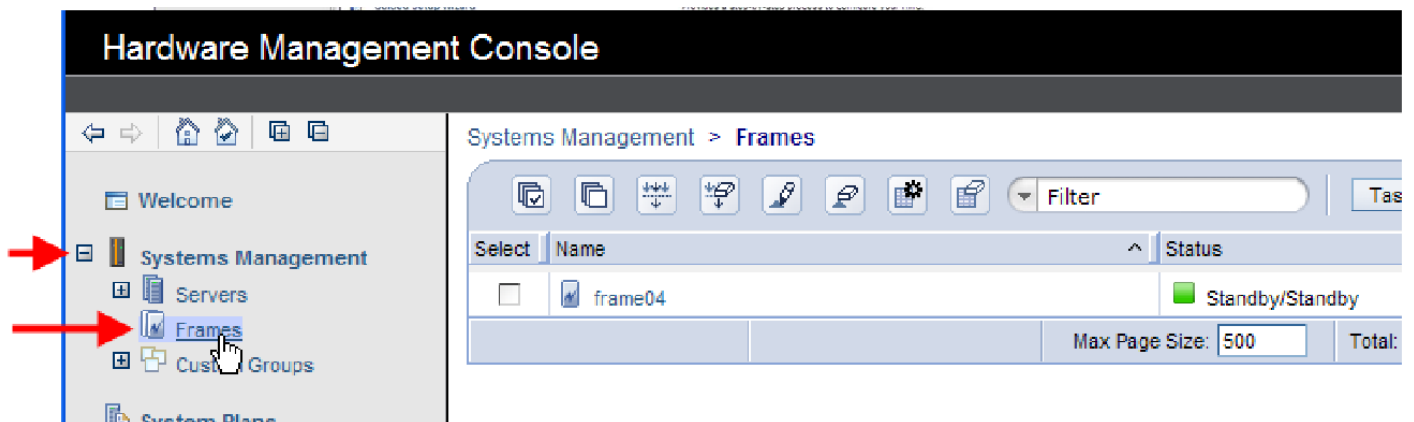


Figure 17 HMC Frames

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4. From the Tasks Menu right-arrow pull-down menu, click **Operations** → **Launch Frame Advanced Systems Management (ASM)** as shown in Figure 18

Systems Management > Frames

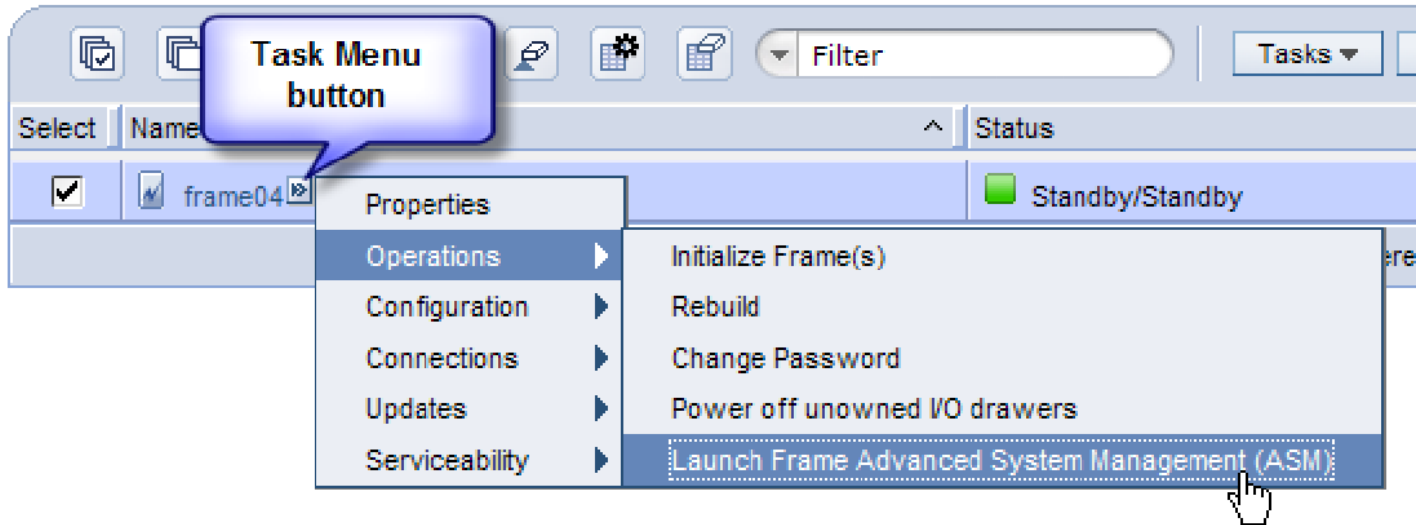


Figure 18 Launch Frame Advanced System Management (ASM)

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- From the Launch ASM Interface window, select **SIDE_A** or **SIDE_B** (whichever the instructions call for) from the 'Frame IP Address:' pull-down arrow menu, then click the **OK** button (see Figure 19 which shows the **SIDE_A** BPC FSP selected)

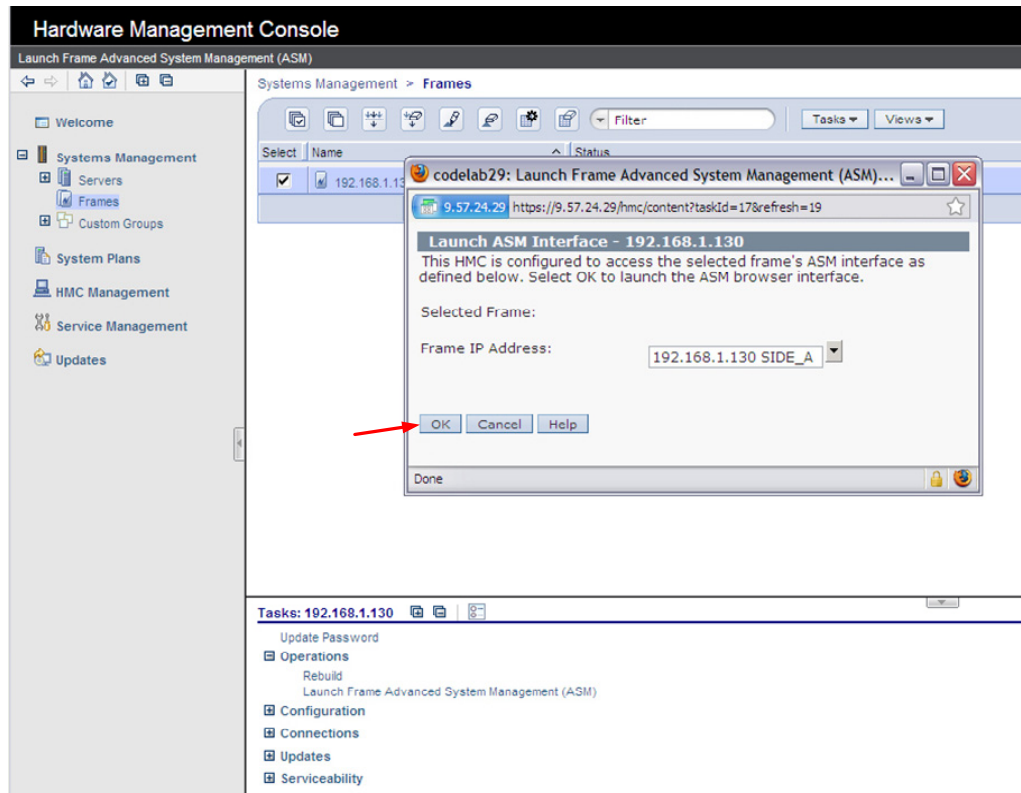


Figure 19 Select BPC FSP SIDE_A

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6. The ASM login window is presented. Acquire the necessary User ID and Password.
“celogin” requires Daily Password from the IBM Support Center.
“celogin1” might be enabled by the customer. If so, obtain the password from the customer.
7. Enter User ID
8. Enter Password
9. Click **Log in** button

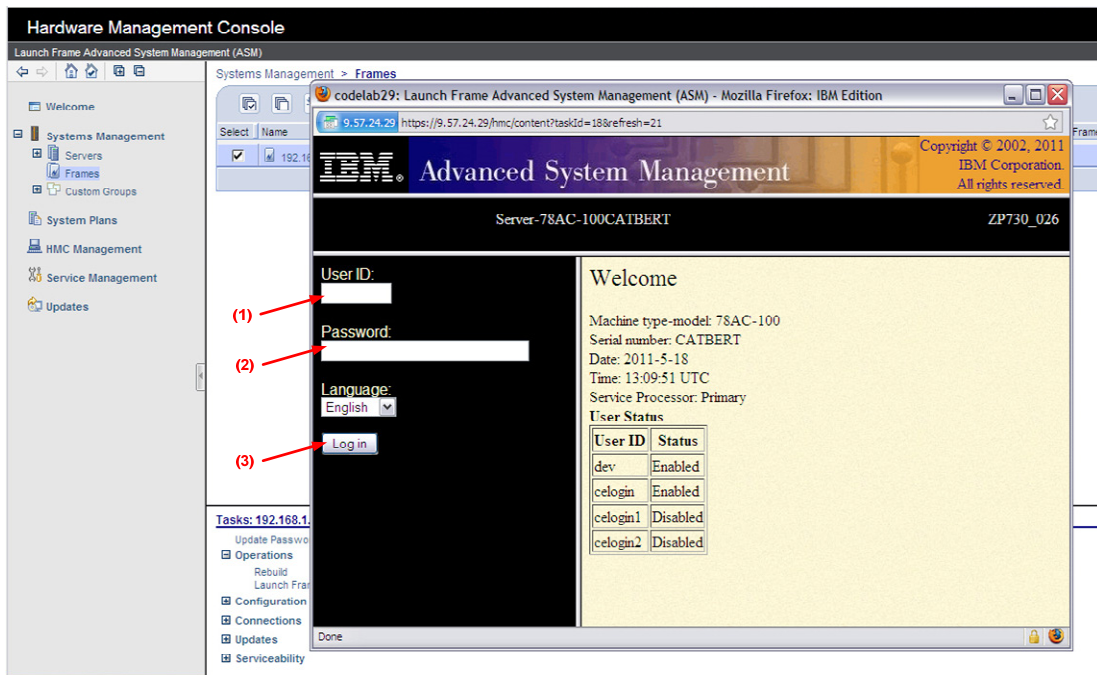


Figure 20 ASM Login

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10. Expand 'System Service Aids' + sign and Select 'Service Processor Command Line' to obtain Figure 21.

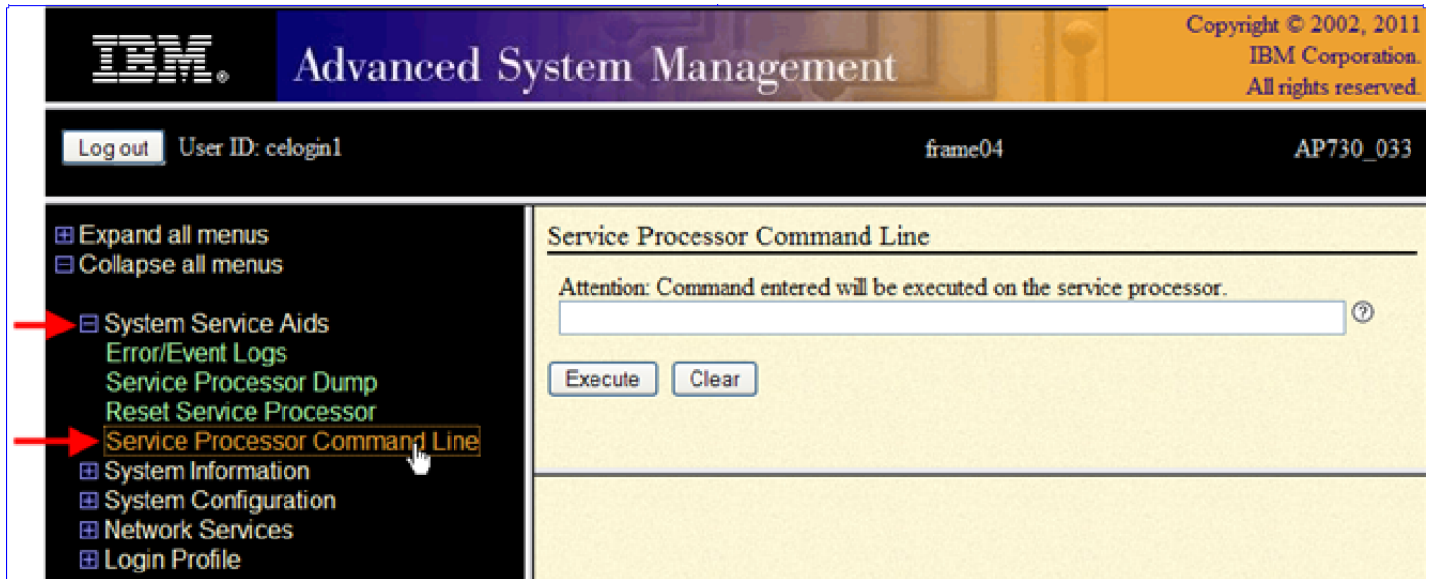


Figure 21 ASM Service Processor Command Line

11. The ASM BPC FSP Command line will be presented. Enter the commands defined in the paper service procedures at this command line and press the Enter key (or click the **Execute** button).
12. If you are not sure whether you are on the ASM **A_SIDE** or **B_SIDE** BPC FSP Command Line, then enter the command **bpccmd -m GET_SIDE** to query which BPC FSP is actively connected.
13. Return to the step of the paper service procedure that directed you to this Appendix A.

5.2 End of Appendix A: Power775 BPC FSP Command Line Procedure

6 END OF DOCUMENT