

Detailed Troubleshooting Recommendations:

1. Swap EMS CDU 1 with EMS CDU 2.
 - a. If the fault follows, return EMS CDUs to their original configuration and replace the EMS CDU 1.
 - b. If the fault remains, continue with next step.
2. Swap DCPC microprocessor cards.
 - a. If the fault follows, return DCPC microprocessor cards to their original configuration and replace the left microprocessor card.
 - b. If the fault remains, continue with next step.
3. Replace DCPC supervisor card.
 - a. If the fault remains, continue with next step.

EMI Filter/Wiring check

4. Disconnect EMS CDU 1 connector A94P2 and A94P1.
5. Disconnect SPDA 1 connector A13P5.
6. Disconnect SPDA 4 connector A16P5.
7. Remove both DCPC microprocessor cards.
8. Open junction box JB3 and remove PCB3.
9. Do a continuity check with the connections that follow:

From	To
A94P2-5	Ground
A94P2-6	Ground
A94P1-7	Ground
A94P1-8	Ground

- a. If there is no continuity, continue with step 10.
- b. If there is continuity, disconnect DCPC connector A63P1.
 - i. Do a continuity check with the connections that follow:

From	To
A94P2-5	Ground
A94P2-6	Ground
A94P1-7	Ground
A94P1-8	Ground

- ii. If there is continuity, repair defective wiring.
- iii. If there is no continuity, replace DCPC.

CAUTION

To prevent damage to the DCPC motherboard connectors, ensure that the wire jumper pin outside diameter (OD)/socket inside diameter (ID) does not exceed 0.025 inch.

10. Do a continuity check with the connections that follow:

From	To
A94P2-5	P2A-23
A94P2-6	P2B-23
A94P1-7	P2A-21
A94P1-8	P2B-21
A94P1-7	P3A-21
A94P1-8	P3B-21

- a. If there is no continuity, disconnect DCPC connector A63P1.
i. Do a continuity check with the connections that follow:

From	To
A63J1-V	P2A-23
A63J1-j	P2B-23
A63J1-h	P2A-21
A63J1-T	P2B-21
A63J1-h	P3A-21
A63J1-T	P3B-21

- ii. If there is no continuity, replace DCPC.
iii. If there is continuity, repair the wiring between DCPC and EMS
CDU 1 / SPDA 1 / SPDA 4 / JB3

DCPC Data Bus check

11. Make sure that the EXT AC cord is not connected to the aircraft.
12. Remove one of four DCPC SPDA Feeder cards.
13. Set BMS to ON.

Note

Monitor the fault via the DC Synoptic page or the Counters (EMS CDU Diagnostic Mode)

14. Verify if the fault is still present.
a. If not, replace the defective DCPC SPDA Feeder card.
b. If yes, repeat step 12 to 14 for the other DCPC SPDA Feeder cards until the fault is corrected.
15. Remove one of three PLC cards.
16. Set BMS to ON.
17. Verify if the fault is still present.
a. If not, replace the defective PLC.
b. If yes, repeat step 15 to 17 for the other PLC cards until the fault is corrected.
18. Remove one of two DCPQM cards.
19. Set BMS to ON.

20. Verify if the fault is still present.
 - a. If not, replace the defective DCPQM card.
 - b. If yes, repeat step 18 to 20 for the other DCPQM cards until the fault is corrected.
21. Remove Cabin DC Feeder card.
22. Set BMS to ON.
23. Verify if the fault is still present.
 - a. If not, replace the defective Cabin DC Feeder card.
 - b. If yes, continue with next step.
24. Remove BATT/RAT card.
25. Set BMS to ON.
26. Verify if the fault is still present.
 - a. If not, replace the defective BATT/RAT card.
 - b. If yes, replace DCPC