

USA Ground Operations CIL Sheet

Critical Item: FDDI Concentrator
NASA Part No: None
Mfg/Part No: Interphase / M800-10P-1AB-5F-110
System: Shuttle Data Center

Criticality Category: 1
Total Quantity: 24

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
51821A12	1	LCC	L72-6010	091.10	80K06003 / 3
51821A15	1	LCC	L72-6010	091.10	80K06003 / 3
51821A18	1	LCC	L72-6010	091.10	80K06003 / 3
51821A21	1	LCC	L72-6010	091.10	80K06003 / 3
51821A24	1	LCC	L72-6010	091.10	80K06003 / 7
51821A27	1	LCC	L72-6010	091.10	80K06003 / 6
51821A30	1	LCC	L72-6010	091.10	80K06003 / 6
51821A33	1	LCC	L72-6010	091.10	80K06003 / 6
51821A6	1	LCC	L72-6010	091.10	80K06003 / 3
51821A9	1	LCC	L72-6010	091.10	80K06003 / 4
51825A12	1	LCC	L72-6010	091.10	80K06003 / 4
51825A15	1	LCC	L72-6010	091.10	80K06003 / 4
51825A18	1	LCC	L72-6010	091.10	80K06003 / 4
51825A21	1	LCC	L72-6010	091.10	80K06003 / 7
51825A24	1	LCC	L72-6010	091.10	80K06003 / 6
51825A27	1	LCC	L72-6010	091.10	80K06003 / 6
51825A30	1	LCC	L72-6010	091.10	80K06003 / 4
51825A33	1	LCC	L72-6010	091.10	80K06003 / 4
51825A6	1	LCC	L72-6010	091.10	80K06003 / 4
51825A9	1	LCC	L72-6010	091.10	80K06003 / 8
5772A14	1	LCC	L72-6010	091.10	80K06003 / 8
5772A18	1	LCC	L72-6010	091.10	80K06003 / 8
5772A22	1	LCC	L72-6010	091.10	80K06003 / 8
5772A26	1	LCC	L72-6010	091.10	80K06003 / 8

Function:

Transmits tokens across dual ring network and maintains network continuity in the event of a failure of a FDDI Ring attached device.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09IT09-010.003 Corruption of data	Electrical failure / product defect / network congestion / software error Possible presentation of invalid data upon user retrieval. Making a critical decision based on invalid data could result in loss of life/vehicle.	None Seconds	1

ACCEPTANCE RATIONALE**Design:**

- The equipment is designed to industry standards.

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- FCC, EN, and IEC approved.
- Utilizes Dual Ring, Dual Homed network configuration for superior reliability and robustness, Token Passing for preventing data corruption due to data transmission collisions and multiple layers of error checking to detect corrupt data packets. Reference document number 84K06007, Shuttle Data Center (SDC) DCR White Paper, for additional SDC network communication attributes and features.

Test:

- Validation testing performed prior to operational use.

Inspection:

- There are no inspections performed.

Failure History:

- Current data on test failures, unexplained anomalies, and other failures experienced during ground processing activities can be found in the PRACA database. The PRACA database was researched and no data was found on this component in the critical failure mode.

Operational Use:

Correcting Action	Timeframe
There is no action which can be taken to mitigate the failure effect.	Since no correcting action is available, timeframe does not apply.