CARLO GAVAZZI

CARLO GAVAZZI SPACE SpA

AMS02-PDS

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Titolo : *Title :*	PDS VERIFICATION CONTROL DOCUMENT				

	Nome & Funzione *Name & Function*	Firma *Signature*	Data *Date*
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REGISTRAZIONE DELLE MODIFICHE / *CHANGE RECORD*

EDIZIONE *ISSUE*	DATA *DATE*	AUTORIZZAZIONE *CHANGE AUTHORITY*	OGGETTO DELLA MODIFICA E SEZIONI AFFETTE *REASON FOR CHANGE AND AFFECTED SECTIONS*
1	31/03/2008		First issue
2	21/10/2009		Second issue: update after the final test before delivery

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1. SCOPE

The document corresponds to contract deliverable Del-087

The scope of this document is to provide a Design Verification and Compliance Matrix (DVCM) with reference to the technical requirements applicable to the Power Distribution System (PDS) which is part of the AMS-02 System.

2. DOCUMENTS

Documents here below identified are applicable and/or reference for the activities described in the present document and are considered part of it to the extent specified herein.

2.1 APPLICABLE DOCUMENTS

AD	Doc. Number	Issue	Rev	Title / Applicability
1	AMS-RQ-CGS-002	1		PDS Specification
2	PDS-TN-CGS-009	1		PDS FM Design Report
3	PDS-IC-CGS-001	2		PDS FM electrical/functional, mechanical ICD
4	PDS-PR-CGS-004	3		Power Board 2 Electrical / Functional Test Procedure
5	PDS-PR-CGS-001	1		ESEM 3-A Board Electrical / Functional Test Procedure
6	PDS-PR-CGS-002	1		ESEM 3-B Board Test Electrical / Functional Procedure
7	PDS-PR-CGS-003	2		ESEM 1-A Board Electrical / Functional Test Procedure
8	PDS-PR-CGS-007	2		Can Bus I/F Main Board Test Procedure
9	PDS-PR-CGS-005	1		Input Stage Board Test Procedure
10	JSC28792	–	D	AMS-02 Structural Verification Plan for the Space Transportation System and the International Space Station
11	AMSCD-PL-CGS-001	1		AMS02 PA Plan
12	PDS-PL-CGS-002	1		PDS AIV Plan
13	PDS-TN-CGS-0011	1		PDS FM Thermal Analysis Report
14	AMSCD-SP-CGS-001	1		AMS 02 TV TB TEST SPECIFICATION
15	PDS-SP-CGS-001	1		PDS integration requirement specification (verification criteria)
16	PDS-PR-CGS-006	2		AMS02-PDS PFM FULL FUNCTIONAL AND REDUCED TEST PROCEDURE
17	PDS-PR-CGS-012	2		PDS-PFM THERMAL VACUUM TEST PROCEDURE
18	PDS-PR-CGS-016	2		PDS PFM EMC PRECOMPLIANCE AND REDUCED TEST PROCEDURE
19	PDS-LI-CGS-006	2		AMS02 Power Distribution System PFM Declared materials list
20	PDS-PR-CGS-019	2		AMS02-PDS PFM FULL FUNCTIONAL AND REDUCED TEST PROCEDURE
21	PDS-LI-CGS-001	2		AMS02 Power Distribution System PFM Declared materials list
22	PDS-LI-CGS-002	2		AMS02 Power Distribution System PFM Declared mechanical parts list
23	PDS-LI-CGS-003	2		AMS02 Power Distribution System PFM Declared processes list
24	PDS-LI-CGS-004	4		Declared components list
25	PDS-TN-CGS-010	1		PDS FM Structural analysis

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2.2 REFERENCE DOCUMENTS

RD	Doc. Number	Issue / Date	Rev	Title / Applicability
1	*ECSS-E-10-03*		*A*	*Testing*
2	*ECSS-E-10-02*		*A*	*Verification*
3	*PDS-RP-CGS-072*	*2*		*AMS02-PDS PFM FULL FUNCTIONAL TEST REPORT*
4	*PDS-RP-CGS-121*	*1*		*PDS FULL FUNCTIONAL TEST REPORT DURING THERMAL VACUUM CYCLING IN HOT CASE*
5	*PDS-RP-CGS-122*	*1*		*PDS FULL FUNCTIONAL TEST REPORT DURING THERMAL VACUUM CYCLING IN COLD CASE*
6	*PDS-RP-CGS-127*	*1*		*AMS-02 PDS-PFM FINAL FULL FUNCTIONAL TEST REPORT*
7	*PDS-RP-CGS-126*	*1*		*AMS-02 PDS-PFM REDUCED EMC TEST REPORT*
8	*PDS-RP-CGS-123*	*1*		*AMS02-PDS PFM Mass Measurement Test Report*
9	*PDS-RP-CGS-047*	*1*		*ESEM 3-B p/n: 11-AMS02PDS-400.00 s/n: 01 electrical Test Report*
10	*PDS-RP-CGS-048*	*1*		*ESEM 3-B p/n: 11-AMS02PDS-400.00 s/n: 02 electrical Test Report*
11	*PDS-RP-CGS-093*	*1*		*ESEM 3-B S/N 01 SHIELDED BOARD TEST ELECTRICAL/FUNCTIONAL REPORT*
12	*PDS-RP-CGS-094*	*1*		*ESEM 3-B S/N 02 SHIELDED BOARD TEST ELECTRICAL/FUNCTIONAL REPORT*
13	*PDS-RP-CGS-022*	*1*		*ESEM 3-A P/N: 11-AMS02PDS-300.00 S/N: 01 electrical test report*
14	*PDS-RP-CGS-023*	*1*		*ESEM 3-A P/N: 11-AMS02PDS-300.00 S/N: 02 electrical test report*
15	*PDS-RP-CGS-024*	*1*		*ESEM 3-A P/N: 11-AMS02PDS-300.00 S/N: 03 electrical test report*
16	*PDS-RP-CGS-025*	*1*		*ESEM 3-A P/N: 11-AMS02PDS-300.00 S/N: 04 electrical test report*
17	*PDS-RP-CGS-026*	*1*		*ESEM 3-A P/N: 11-AMS02PDS-300.00 S/N: 05 electrical test report*
18	*PDS-RP-CGS-027*	*1*		*ESEM 3-A P/N: 11-AMS02PDS-300.00 S/N: 06 electrical test report*
19	*PDS-RP-CGS-028*	*1*		*ESEM 3-A P/N: 11-AMS02PDS-300.00 S/N: 07 electrical test report*
20	*PDS-RP-CGS-029*	*1*		*ESEM 3-A P/N: 11-AMS02PDS-300.00 S/N: 08 electrical test report*
21	*PDS-RP-CGS-095*	*1*		*ESEM 3-A S/N 01 SHIELDED BOARD ELECTRICAL/FUNCTIONAL TEST REPORT*
22	*PDS-RP-CGS-096*	*1*		*ESEM 3-A S/N 02 SHIELDED BOARD ELECTRICAL/FUNCTIONAL TEST REPORT*
23	*PDS-RP-CGS-097*	*1*		*ESEM 3-A S/N 03 SHIELDED BOARD ELECTRICAL/FUNCTIONAL TEST REPORT*
24	*PDS-RP-CGS-098*	*1*		*ESEM 3-A S/N 04 SHIELDED BOARD ELECTRICAL/FUNCTIONAL TEST REPORT*
25	*PDS-RP-CGS-099*	*1*		*ESEM 3-A S/N 05 SHIELDED BOARD ELECTRICAL/FUNCTIONAL TEST REPORT*
26	*PDS-RP-CGS-100*	*1*		*ESEM 3-A S/N 06 SHIELDED BOARD ELECTRICAL/FUNCTIONAL TEST REPORT*

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27	PDS-RP-CGS-101	1		ESEM 3-A S/N 07 SHIELDED BOARD ELECTRICAL/FUNCTIONAL TEST REPORT
28	PDS-RP-CGS-102	1		ESEM 3-A S/N 08 SHIELDED BOARD ELECTRICAL/FUNCTIONAL TEST REPORT
29	PDS-RP-CGS-062	1		ESEM 1-A BOARD P/N: 11-AMS02PDS-600.00 S/N: 01 ELECTRICAL TEST REPORT
30	PDS-RP-CGS-063	1		ESEM 1-A BOARD P/N: 11-AMS02PDS-600.00 S/N: 02 ELECTRICAL TEST REPORT
31	PDS-RP-CGS-111	1		ESEM 1-A S/N 01 SHIELDED BOARD ELECTRICAL/FUNCTIONAL TEST REPORT
32	PDS-RP-CGS-112	1		ESEM 1-A S/N 02 SHIELDED BOARD ELECTRICAL/FUNCTIONAL TEST REPORT
33	PDS-RP-CGS-020	1		Power Board 2 p/n: 11-AMS02PDS-700.00 s/n: 05 Electrical Test Report
34	PDS-RP-CGS-021	1		Power Board 2 p/n: 11-AMS02PDS-700.00 s/n: 02 Electrical Test Report
35	PDS-RP-CGS-033	1		Power Board 2 p/n: 11-AMS02PDS-700.00 s/n: 01 Electrical Test Report
36	PDS-RP-CGS-038	1		Power Board 2 p/n: 11-AMS02PDS-700.00 s/n: 03 Electrical Test Report
37	PDS-RP-CGS-041	1		Power Board 2 p/n: 11-AMS02PDS-700.00 s/n: 04 Electrical Test Report
38	PDS-RP-CGS-051	1		Power Board 2 p/n: 11-AMS02PDS-700.00 s/n: 06 Electrical Test Report
39	PDS-RP-CGS-052	1		Power Board 2 p/n: 11-AMS02PDS-700.00 s/n: 07 Electrical Test Report
40	PDS-RP-CGS-053	1		Power Board 2 p/n: 11-AMS02PDS-700.00 s/n: 08 Electrical Test Report
41	PDS-RP-CGS-103	1		POWER BOARD 2 S/N 01 SHIELDED ELECTRICAL/FUNCTIONAL TEST REPORT
42	PDS-RP-CGS-104	1		POWER BOARD 2 S/N 02 SHIELDED ELECTRICAL/FUNCTIONAL TEST REPORT
43	PDS-RP-CGS-105	1		POWER BOARD 2 S/N 03 SHIELDED ELECTRICAL/FUNCTIONAL TEST REPORT
44	PDS-RP-CGS-106	1		POWER BOARD 2 S/N 04 SHIELDED ELECTRICAL/FUNCTIONAL TEST REPORT
45	PDS-RP-CGS-107	1		POWER BOARD 2 S/N 05 SHIELDED ELECTRICAL/FUNCTIONAL TEST REPORT
46	PDS-RP-CGS-108	1		POWER BOARD 2 S/N 06 SHIELDED ELECTRICAL/FUNCTIONAL TEST REPORT
47	PDS-RP-CGS-109	1		POWER BOARD 2 S/N 07 SHIELDED ELECTRICAL/FUNCTIONAL TEST REPORT
48	PDS-RP-CGS-110	1		POWER BOARD 2 S/N 08 SHIELDED ELECTRICAL/FUNCTIONAL TEST REPORT
49	PDS-RP-CGS-049	1		Input Stage Board p/n: 11-AMS02PDS-200.00 s/n: 01 Electrical/functional Test Report
50	PDS-RP-CGS-050	1		Input Stage Board p/n: 11-AMS02PDS-200.00 s/n: 02 Electrical/functional Test Report
51	PDS-RP-CGS-120	1		PDS-PFM THERMAL VACUUM TEST REPORT
52	PDS-WV-CGS-001	1		ESEM 3-A over current protection limitation time out of specification
53	PDS-WV-CGS-002	1		PDS input current telemetry
54	PDS-WV-CGS-003	1		PDS mass out of specified value
55	PDS-WV-CGS-004	1		PDS radiated E-Field emission out of specified limits
56	PDS-WV-CGS-005	1		PDS Operating temperature limits

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57	*NCR-PDS-CGS-C-132*	*1*		*PDS input current telemetry p/n: 10-AMS02PDS-000.00 s/n: FM01*
58	*NCR-PDS-CGS-C-139*	*1*		*Unwanted SIDE A PB2-3 switch OFF during HOT temperature TV cycling p/n: 11-AMS02PDS-700.00 s/n: 04*
59	*NCR-PDS-CGS-C-140*	*1*		*Side A Esem 3-A-3 trip out of tolerance during HOT temperature TV cycling p/n: 11-AMS02PDS-300.00 s/n: 04*
60	*NCR-PDS-CGS-C-141*	*1*		*PDS mass out of specified value p/n: 10-AMS02PDS-000.00 s/n: FM01*
61	*NCR-PDS-CGS-C-142*	*1*		*PDS radiated E-field emission out of specified limits p/n: 10-AMS02PDS-000.00 s/n: FM01*
62	MITM080716-09	*NA*	*NA*	*AMS02 – crates installation on the WAKE radiator jig*

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3. ACRONYMS

C.I.	Configuration Item. Also called Part Number (P/N)
CGS	Carlo Gavazzi Space
EMC	Electro-Magnetic Compatibility
ESD	Electro-Static Discharge
ESEM	Exchangeable Standard Electrical Mdule
FM	Flight Model
HW	Hardware
IDD	Interface Data Document
I/F	Interface
NA	Not Applicable
P/N	Part Number. Also called Configuration Item C.I.
PA	Product Assurance
PDS	Power Distribution system
PVS	Procedure Variation Sheet
QA	Quality Assurance
RID	Review Item Disposition
R/W	Read/Write
RPDA	Remote Power Distribution Assembly
S/N	Serial Number
TBC	To Be Confirmed
TBD	To Be Designed
TE	Test Equipment
UUT	Unit Under Test
VCD	Verification Control Document

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4. DEMONSTRATION OF COMPLIANCE WITH REQUIREMENTS

The "Design Verification and Compliance Matrix " will be maintained in order to show for each and every requirement of the equipment specification, the applied verification method by which compliance will be (or has been) proven. The DVCM is a dynamic document in the sense that as the program evolves, its contents are updated to reflect the results or further analysis and the test reports as they are produced. In its final form , at the Delivery Review Board, the DVCM is the prime document which informs the Buyer Board of compliance with the subsystem (or equipment) specification and provides the necessary information to be able to trace the supporting evidence to substantiate the claimed compliance. It also provides traceability on the verification process events and documentation and gives evidence of the verification status and closeout.
The DVCM is used to monitor and control the verification process and to demonstrate to the customer, at the end of the relevant stages (In this case the Protoqualification) , that verification has been completed.

The DVCM takes each and every requirement of the equipment specification and provide the initial key to the rest of document and from there to all the supporting compliance material.
For every paragraph of the applicable specification, the method and the level of verification of the parameter subject of the paragraph will be identified. For each requirement, reference shall be given to the document in which all the top-level analyses or tests supporting compliance are planned to be performed (column "Document Number Reference").
In case the compliance with the specification requirements currently shows not to be achievable, the method used to remove the no-compliance will be identified.
In case the non-compliance is proven not to be recoverable, reference will be given to the Request for a Waiver that the CGS will submit to the Buyer for approval.
In case the non-compliance is the unpredictable result of the test activity, reference will be given to the Request for Deviation submitted for the approval of the Buyer

The DVCM is filled indicating for each specification requirement:

- the verification method at the applicable level;
- the applicable execution document (specification, procedure, standard, etc.);
- the verification reporting document (Test Report, Analysis Report, Review of Design Report, Inspection Report);

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4.1 DESIGN VERIFICATION CONTROL MATRIX

In the next section the Design Verification Control Matrix is reported; the Reference Report will be completed at the completion of test phases.

The method symbology is as follows:

NA = Not Applicable, information only;

R = Review of Design.

A = Analysis;

T = Test;

I = Inspection

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
	3.1 Operational Requirements													Title
	3.1.1 Mission Profile and Life Limits													Title
3.1.1.1	Mission Phases					X				X				
3.1.1.2	On-Orbit Lifetime		X				X	X		X		PDS-TN-CGS-009 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-003 PDS-LI-CGS-004		
3.1.1.3	Storage		X				X	X		X		PDS-TN-CGS-009 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-003 PDS-LI-CGS-004		
	3.2 Functional and Physical Characteristics													Title
	3.2.1 PDS Functionality and Performance													Title
3.2.1.1	Operational Conditions		X				X	X		X		PDS-TN-CGS-009		See 4.1
3.2.1.2	Stay-alive in NSTS Cargo Bay	X	X				X	X		X		PDS-TN-CGS-009 PDS-TN-CGS-011		See 4.1 See 6
3.2.1.3	Transfer from ISS SSRMS Arm to Its location on ISS Truss S3	X	X				X	X		X		PDS-TN-CGS-009 PDS-TN-CGS-011		See 4.1 See 6
3.2.1.4	On-orbit Nominal Operative mode	X	X				X	X		X		PDS-TN-CGS-009 PDS-TN-CGS-011		See 4.1 See 6.1

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
3.2.1.5	Power provided to PDS A-SECTION		X				X	X		X		PDS-TN-CGS-009		See 4.1
3.2.1.6	Power provided to PDS B-section		X				X	X		X		PDS-TN-CGS-009		See 4.1
3.2.1.7	PDS dissipated Power Budget		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 8.2 See 10.3.1.8 (side A) 10.3.2.8(side B)
3.2.1.8	Power-Up		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.3.1.1 See 10.3.1.2,10.3.1.3 and 10.3.1.4 (side A) 10.3.2.2,10.3.2.3 and 10.3.2.4 (side B)
3.2.1.9	PDS Redundancy		X	X			X	X		X		PDS-PR-CGS-006 PDS-TN-CGS-009	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 10.3.1,10.3.2 and 10.3.3 See 4.7.4
3.2.1.10	PDS Electrical Redundancy Performance		X	X			X	X		X		PDS-PR-CGS-006 PDS-TN-CGS-009	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 10.3.3 See 4.7.4

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
3.2.1.11	Power Conversion and Distribution		X				X	X		X		PDS-PR-CGS-006 PDS-TN-CGS-009	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B) See 3, 4.4 and 4.5
3.2.1.11.1	120VDC to CCS/CAB		X	X			X	X		X		PDS-PR-CGS-006 PDS-TN-CGS-009	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B) See 3
3.2.1.11.2	120VDC to CCS/CAB characteristics		X				X	X		X		PDS-PR-CGS-006 PDS-TN-CGS-009	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B) See 3
3.2.1.11.3	120Vdc to CCS/CAB galvanic isolation		X				X	X		X		PDS-PR-CGS-006 PDS-TN-CGS-009	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B) See 3
	3.2.1.12 Power Boards Commanding and Acquisition													Title
3.2.1.12.1	Command/Monitor interface		X				X	X		X		PDS-TN-CGS-009		See 4.7

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
												PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 10.3.1.5 (side A) 10.3.2.5 (side B)
												PDS-PR-CGS-001	PDS-RP-CGS-022 PDS-RP-CGS-023 PDS-RP-CGS-024 PDS-RP-CGS-025 PDS-RP-CGS-026 PDS-RP-CGS-027 PDS-RP-CGS-028 PDS-RP-CGS-029 PDS-RP-CGS-095 PDS-RP-CGS-096 PDS-RP-CGS-097 PDS-RP-CGS-098 PDS-RP-CGS-099 PDS-RP-CGS-100 PDS-RP-CGS-101 PDS-RP-CGS-102	See 11
3.2.1.13	PDS signal and power interfaces		X	X			X	X	X	X		PDS-PR-CGS-003	PDS-RP-CGS-062 PDS-RP-CGS-063	See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
													PDS-RP-CGS-111 PDS-RP-CGS-112	
	3.2.1.14 Protections on Power Supply Lines													Title
3.2.1.14.1	General		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.4.7 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8, 10.3.1.5.10 and 10.3.1.5.11(side A) 10.3.2.5.4,10.3.2.5.6,10.3.2.5.8,10.3.2.5.10 and 10.3.2.5.11 (side B)
3.2.1.14.2	Trip Coordination		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.4.7 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8, 10.3.1.5.10 and 10.3.1.5.11(side A) 10.3.2.5.4,10.3.2.5.6,10.3.2.5.8,10.3.2.5.10 and 10.3.2.5.11 (side B)
3.2.1.14.3	Over-Temperature Protection		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-003	PDS-RP-CGS-062 PDS-RP-CGS-063 PDS-RP-CGS-111 PDS-RP-CGS-112	See 4.4.7 See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
3.2.1.14.4	ON Board Measurements		X	X			X		X	X		PDS-TN-CGS-009		See 4.4.7
												PDS-PR-CGS-004	PDS-RP-CGS-020 PDS-RP-CGS-021 PDS-RP-CGS-033 PDS-RP-CGS-038 PDS-RP-CGS-041 PDS-RP-CGS-051 PDS-RP-CGS-052 PDS-RP-CGS-053 PDS-RP-CGS-103 PDS-RP-CGS-104 PDS-RP-CGS-105 PDS-RP-CGS-106 PDS-RP-CGS-107 PDS-RP-CGS-108 PDS-RP-CGS-109 PDS-RP-CGS-110	See 11
												PDS-PR-CGS-003	PDS-RP-CGS-062 PDS-RP-CGS-063 PDS-RP-CGS-111 PDS-RP-CGS-112	See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
3.2..2	PDS Input Stage		X				X	X		X		PDS-TN-CGS-009		See 4.2
3.2.2.1	PDS Thermal Interlock		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-012	PDS-RP-CGS-120	See 4.2.2 See 13 (Annex2_to_PDS-RP-CGS-120_iss1(step_by_step))
3.2.2.2	PDS EMI Filter Input Impedance		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-016	PDS-RP-CGS-126	See 4.2.3 See 10.4.2 (side A) 10.5.2 (side B)
3.2.2.2.1	PDS EMI Filter Input Inrush Current		X	X			X		X			PDS-TN-CGS-009 PDS-PR-CGS-005	PDS-RP-CGS-049 PDS-RP-CGS-050	See 4.2.3 See 11
3.2.2.3	PDS Input Telemetry Section		X				X	X	X	X		PDS-PR-CGS-005	PDS-RP-CGS-049 PDS-RP-CGS-050	See 11
3.2.2.3.1	PDS Current Monitor Accuracy		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-005	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-049 PDS-RP-CGS-050	See 4.2.4.2 See 10.3.1.6.2 (side A) 10.3.2.6.2(side B) See PDS-WV-CGS-002 (NCR-PDS-CGS-C-132) See 11
3.2.2.3.2							X			X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121	See 4.2.4.1 See 10.3.1.6.3 (side A) 10.3.2.6.3(side B)

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Traces	Requirement	Method A	Method R	Method T	Method I	Method NA	Model PFM	Level Eq.	Level Board	SOC Yes	SOC No	Ref Doc	Ref RPT	Remarks
	PDS Voltage Monitor Accuracy		X	X				X	X			PDS-PR-CGS-005	PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-049 PDS-RP-CGS-050	See 11
	3.2.3 PDS 28V OUTPUT													Title
3.2.3.1	General		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.5 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8, 10.3.1.5.10 and 10.3.1.5.11 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8, 10.3.2.5.10 and 10.3.2.5.11 (side B)
3.2.3.2	PDS 28V Output Characteristics PDS		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-004	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-020 PDS-RP-CGS-021 PDS-RP-CGS-033 PDS-RP-CGS-038 PDS-RP-CGS-041 PDS-RP-CGS-051 PDS-RP-CGS-052 PDS-RP-CGS-053 PDS-RP-CGS-103 PDS-RP-CGS-104 PDS-RP-CGS-105 PDS-RP-CGS-106	See 4.5.3 See 10.3.1.5.3, 10.3.1.5.4, 10.3.1.5.5, 10.3.1.5.6, 10.3.1.5.7, 10.3.1.5.8 and 10.3.1.5.9 (side A) 10.3.2.5.3, 10.3.2.5.4, 10.3.2.5.5, 10.3.2.5.6, 10.3.2.5.7, 10.3.2.5.8 and 10.3.2.5.9 (side B) See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
													PDS-RP-CGS-107 PDS-RP-CGS-108 PDS-RP-CGS-109 PDS-RP-CGS-110	
3.2.3.3	DC/DC Converter primary to secondary isolation		X				X	X		X		PDS-TN-CGS-009		See 9.1.1
3.2.3.4	PDS 28VDC outlets voltage monitor		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-004	See 4.2.4.2 PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-020 PDS-RP-CGS-021 PDS-RP-CGS-033 PDS-RP-CGS-038 PDS-RP-CGS-041 PDS-RP-CGS-051 PDS-RP-CGS-052 PDS-RP-CGS-053 PDS-RP-CGS-103 PDS-RP-CGS-104 PDS-RP-CGS-105 PDS-RP-CGS-106 PDS-RP-CGS-107 PDS-RP-CGS-108 PDS-RP-CGS-109 PDS-RP-CGS-110	See 10.3.1.5.3, 10.3.1.5.4, 10.3.1.5.5, 10.3.1.5.6, 10.3.1.5.7, 10.3.1.5.8 and 10.3.1.5.9 (side A) 10.3.2.5.3, 10.3.2.5.4, 10.3.2.5.5, 10.3.2.5.6, 10.3.2.5.7, 10.3.2.5.8 and 10.3.2.5.9 (side B) See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
3.2.3.5	PDS 28VDC outlets over-voltage protection		X	X			X		X	X		PDS-TN-CGS-009 PDS-PR-CGS-004	PDS-RP-CGS-020 PDS-RP-CGS-021 PDS-RP-CGS-033 PDS-RP-CGS-038 PDS-RP-CGS-041 PDS-RP-CGS-051 PDS-RP-CGS-052 PDS-RP-CGS-053 PDS-RP-CGS-103 PDS-RP-CGS-104 PDS-RP-CGS-105 PDS-RP-CGS-106 PDS-RP-CGS-107 PDS-RP-CGS-108 PDS-RP-CGS-109 PDS-RP-CGS-110	See 4.4.7 See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
3.2.3.6	PDS 28V Outlet Current Rating		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.4.3 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8, 10.3.1.5.10 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8, 10.3.2.5.10 (side B)
3.2.3.7	PDS 28V Outlet Current Monitor		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.4.3 See 10.3.1.6 (side A) 10.3.2.6 (side B)
3.2.3.8	PDS 28V outlet over current protections 3.2.4 PDS 120V OUTPUT		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.4.3 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8 and 10.3.1.5.10 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8 and 10.3.2.5.10 (side B) See PDS-WV-CGS-001 (NCR-PDS-CGS-C-133 and NCR-PDS-CGS-C-140) Title
3.2.4.1	General		X				X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.6 See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B)
3.2.4.2	PDS 120V Outlet Output Voltage		X	X			X		X	X		PDS-TN-CGS-009 PDS-PR-CGS-002	PDS-RP-CGS-047 PDS-RP-CGS-048 PDS-RP-CGS-093 PDS-RP-CGS-094	See 4.6 See 10

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
3.2.4.3	PDS 120V outlet output galvanic isolation		X				X	X		X		PDS-TN-CGS-009		See 4.6.1
3.2.4.4	PDS 120V outlet current monitor		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	 PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.6 See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B)
3.2.4.5	PDS 120V outlet output protection		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-002	 PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-047 PDS-RP-CGS-048 PDS-RP-CGS-093 PDS-RP-CGS-094	See 4.6 See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B) See 10
3.2.4.6	CCEB OUTLET current limiter and over-current protection		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-002	 PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-047 PDS-RP-CGS-048 PDS-RP-CGS-093 PDS-RP-CGS-094	See 4.6 See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B) See 10

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
3.2.4.7	PDS CCEB OUTLET current monitor		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-002	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-047 PDS-RP-CGS-048 PDS-RP-CGS-093 PDS-RP-CGS-094	See 4.6 See 10.3.1.6 (side A) 10.3.2.6 (side B) See 10
	3.2.5 PDS Interface with AMS (can bus interface)													Title
3.2.5.1	General		X				X	X		X		PDS-TN-CGS-009		See 4.7
3.2.5.2	CAN BUS interface software		X				X	X		X		PDS-TN-CGS-009		See 4.7.3.1
3.2.5.3	CAN BUS interface HW/SW compatibility		X				X	X		X		PDS-TN-CGS-009		See 4.7.3
3.2.5.4	Analog Input		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.7.2.3 See 10.3.1.6 (side A) 10.3.2.6 (side B)
3.2.5.5	Redundancy		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122	See 4.7.4 See 10.3.1 (side A) 10.3.2 (side B)

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
													PDS-RP-CGS-127	
3.2.6	PDS control logic		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.3.4, 4.4.6, 4.5.4 and 4.6.3 See 10.3.1.2.3, 10.3.1.2.4, 10.3.1.2.5, 10.3.1.5.3, 10.3.1.5.5, 10.3.1.5.7 and 10.3.1.5.9 (side A) 10.3.2.2.3, 10.3.2.2.4, 10.3.2.2.5, 10.3.2.5.3, 10.3.2.5.5, 10.3.2.5.7 and 10.3.2.5.9 (side B)
3.2.6.1	global switch off capability		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.3.4, 4.4.6, 4.5.4 and 4.6.3 See 10.3.1.5.2.3 (side A) 10.3.2.5.2.3 (side B)
	3.2.7 Thermal Control													Title
3.2.7.1	Thermal Control General Concept		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009 PDS-TN-CGS-011		See 6 See 6 See 6.3
3.2.7.2	Heat Dissipation		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009		See 6 See 6
3.2.7.2.1	Architecture		X				X	X		X		PDS-IC-CGS-001		See 6

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
												PDS-TN-CGS-009		See 6
												PDS-IC-CGS-001		See 6
3.2.7.2.2	Circuit Protections		X				X	X		X		PDS-TN-CGS-009 PDS-IC-CGS-001		See 6 See 6
3.2.7.2.3	Thermal interlock thermostats		X				X	X		X		PDS-TN-CGS-009		See 6 and 4.2.2
												PDS-TN-CGS-009		See 4.3.1.10 and 4.7.2.4
3.2.7.3	Temperature Sensors Acquired Internally of PDS		X	X			X	X		X		PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 10.3.1.5 (side A) 10.3.2.5 (side B)
												PDS-TN-CGS-009		See 8.2
3.2.7.4	Thermal interface constraints	X	X	X			X	X		X		PDS-PR-CGS-006 PDS-TN-CGS-011	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 10.3.1.8 (side A) 10.3.2.8 (side B) See 6.1 and 6.2
	4 Interface Requirements													Title
	4.1 Electrical Interface Requirements													Title
	4.1.1 Definition													Title
	4.1.2 ON-Board External Interface Definition													Title

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
4.1.2.1	STS Interfaces		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009		See 5.2.1.4.3 See 4.1.3
4.1.2.2	SSRMS Interfaces		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009		See 5.2.1.4.2 See 4.1.2
4.1.2.3	ISS Interfaces		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009		See 5.2.1.4.1 See 4.1.1
	4.1.3 ON-Board Internal Interface Definition						X	X		X				Title
4.1.3.1	AMS02 Subsystem/Instruments Interfaces		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009		See 5.2 See 4.4.5, 4.6, 4.6.3 and 4.7.1
	4.1.4 Input Power Interface Reqirements													Title
4.1.4.1	Steady State Voltage Range (Nominal Operations)		X	X			X	X	X	X		PDS-IC-CGS-001 PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-004	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-020 PDS-RP-CGS-021 PDS-RP-CGS-033 PDS-RP-CGS-038 PDS-RP-CGS-041 PDS-RP-CGS-051 PDS-RP-CGS-052 PDS-RP-CGS-053 PDS-RP-CGS-103	See 5.2.1.1 See 4.4.3.4 See 10.3.1.8 (side A) 10.3.2.8 (side B) See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
													PDS-RP-CGS-104 PDS-RP-CGS-105 PDS-RP-CGS-106 PDS-RP-CGS-107 PDS-RP-CGS-108 PDS-RP-CGS-109 PDS-RP-CGS-110	5 139
												PDS-IC-CGS-001		See 5.2.1.4
4.1.4.2	Peak Surge Current		X	X			X	X		X		PDS-TN-CGS-009		See 4.1.1 and 4.4.2.2
4.1.4.3	Ripple Voltage and Noise		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-004	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-020 PDS-RP-CGS-021 PDS-RP-CGS-033 PDS-RP-CGS-038 PDS-RP-CGS-041 PDS-RP-CGS-051 PDS-RP-CGS-052 PDS-RP-CGS-053 PDS-RP-CGS-103 PDS-RP-CGS-104 PDS-RP-CGS-105 PDS-RP-CGS-106 PDS-RP-CGS-107	See 4.5.1, 4.4.3.3 and 4.4.3.4 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8 and 10.3.1.5.10 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8 and 10.3.2.5.10 (side B) See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
													PDS-RP-CGS-108 PDS-RP-CGS-109 PDS-RP-CGS-110	
4.1.4.4	Transient Voltages		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.5.3 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8 and 10.3.1.5.10 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8 and 10.3.2.5.10 (side B)
4.1.4.5	Abnormal Voltage Conditions		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-003 PDS-PR-CGS-016	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-062 PDS-RP-CGS-063 PDS-RP-CGS-111 PDS-RP-CGS-112 PDS-RP-CGS-126	See 4.3.1.5, 4.3.1.6 and 4.2.4.2 See 10.3.1.5.2.1 and 10.3.1.5.2.2 (side A) 10.3.2.5.2.1 and 10.3.2.5.2.2 (side B), 10.3.2.8.2 and 10.3.2.8.3 See 11 See 10.4.5 (side A) 10.5.5 (side B)
4.1.4.6	Unscheduled Loss of Power		X	X			X		X	X		PDS-PR-CGS-006 PDS-PR-CGS-003	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-062	See 10.4.3 and 10.5.3 See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
4.1.4.7	PDS Power Input Impedance		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-016	PDS-RP-CGS-063 PDS-RP-CGS-111 PDS-RP-CGS-112 PDS-RP-CGS-126	See 4.2.3.2 See 10.4.2 and 10.5.2
4.1.4.8	Large Signal Stability		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-016	PDS-RP-CGS-126	See 4.5.3 See 10.4.6 (side A) 10.5.6 (side B)
4.1.5	Characteristics of Electrical 28Vdc Power Supply to AMS02 subsystems and Instruments					X								Definition
4.1.5.1	28-VDC Steady-State Voltage Range		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.4.3.4 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8 and 10.3.1.5.10 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8 and 10.3.2.5.10 (side B)
4.1.5.2	28-VDC Output Power		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 8.2 See 10.3.1.8 (side A) 10.3.2.8 (side B)

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
4.1.5.3	Source Voltage Ripple		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.5.1, 4.4.3.3 and 4.4.3.4 See 10.3.1.5.3, 10.3.1.5.5, 10.3.1.5.7 and 10.3.1.5.9 (side A) 10.3.2.5.3, 10.3.2.5.5, 10.3.2.5.7 and 10.3.2.5.9 (side B)
4.1.5.4	Normal Transient Voltage Characteristics		X	X								PDS-PR-CGS-016	PDS-RP-CGS-126	See 10.4.4 (side A) 10.5.4 (side B)
4.1.5.5	Transients Output Voltages on Outlets Switching		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.5.3 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8 and 10.3.1.5.10 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8 and 10.3.2.5.10 (side B)
4.1.5.6	Transients Output Voltages on Outlets Protection Tripping		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.5.3 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8 and 10.3.1.5.10 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8 and 10.3.2.5.10 (side B)
4.1.5.7	28 -VDC Over-Voltage Protection		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-004	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-020 PDS-RP-CGS-021 PDS-RP-CGS-033 PDS-RP-CGS-038 PDS-RP-CGS-041 PDS-RP-CGS-051	See 4.4.7 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8 and 10.3.1.5.10 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8 and 10.3.2.5.10 (side B) See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
													PDS-RP-CGS-052 PDS-RP-CGS-053 PDS-RP-CGS-103 PDS-RP-CGS-104 PDS-RP-CGS-105 PDS-RP-CGS-106 PDS-RP-CGS-107 PDS-RP-CGS-108 PDS-RP-CGS-109 PDS-RP-CGS-110	
	28 -VDC Over-Voltage											PDS-TN-CGS-009 PDS-PR-CGS-004	PDS-RP-CGS-020 PDS-RP-CGS-021 PDS-RP-CGS-033 PDS-RP-CGS-038 PDS-RP-CGS-041 PDS-RP-CGS-051 PDS-RP-CGS-052 PDS-RP-CGS-053 PDS-RP-CGS-103 PDS-RP-CGS-104 PDS-RP-CGS-105 PDS-RP-CGS-106 PDS-RP-CGS-107 PDS-RP-CGS-108 PDS-RP-CGS-109	See 4.2.4.2, 4.3.1.5 and 4.3.1.6 See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
4.1.5.8	Transient		X	X			X		X	X			PDS-RP-CGS-110	
4.1.5.9	28 -VDC Voltage Transient for abnormal operation		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.2.4.2, 4.3.1.5 and 4.3.1.6 See 10.3.1.5.2.1 and 10.3.1.5.2.2 (side A) 10.3.2.5.2.1 and 10.3.2.5.2.2 (side B), 10.3.2.8.2 and 10.3.2.8.3
												PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-001	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-022 PDS-RP-CGS-023 PDS-RP-CGS-024 PDS-RP-CGS-025 PDS-RP-CGS-026 PDS-RP-CGS-027 PDS-RP-CGS-028 PDS-RP-CGS-029	See 4.6.3 See 10.3.1.5.3, 10.3.1.5.5, 10.3.1.5.7 and 10.3.1.5.9 (side A) 10.3.2.5.3, 10.3.2.5.5, 10.3.2.5.7 and 10.3.2.5.9 (side B) See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
4.1.5.10	Power output protection status monitoring		X	X			X	X	X	X			PDS-RP-CGS-095 PDS-RP-CGS-096 PDS-RP-CGS-097 PDS-RP-CGS-098 PDS-RP-CGS-099 PDS-RP-CGS-100 PDS-RP-CGS-101 PDS-RP-CGS-102	
4.1.5.11	Power output switching commanding		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.6.3 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8 and 10.3.1.5.10 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8 and 10.3.2.5.10 (side B)
4.1.5.12	Power output switching status monitoring		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.6.3 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8 and 10.3.1.5.10 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8 and 10.3.2.5.10 (side B)
4.1.5.13	Power output reset		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-001	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-022 PDS-RP-CGS-023 PDS-RP-CGS-024 PDS-RP-CGS-025	See 4.7 See 10.3.1.5.4, 10.3.1.5.6, 10.3.1.5.8 and 10.3.1.5.10 (side A) 10.3.2.5.4, 10.3.2.5.6, 10.3.2.5.8 and 10.3.2.5.10 (side B) See 11

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
													PDS-RP-CGS-026 PDS-RP-CGS-027 PDS-RP-CGS-028 PDS-RP-CGS-029 PDS-RP-CGS-095 PDS-RP-CGS-096 PDS-RP-CGS-097 PDS-RP-CGS-098 PDS-RP-CGS-099 PDS-RP-CGS-100 PDS-RP-CGS-101 PDS-RP-CGS-102	
4.1.6	Characteristics of Electrical 120Vdc Power Supply to AMS02 S/S and Instruments					X								Definition
4.1.6.1	120-VDC Output Power		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-002	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-047 PDS-RP-CGS-048 PDS-RP-CGS-093 PDS-RP-CGS-094	See 8.2 See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B) See 10

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
4.1.6.2	120-Vdc Output Current Rating		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-002	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-047 PDS-RP-CGS-048 PDS-RP-CGS-093 PDS-RP-CGS-094	See 4.6.1 See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B) See 10
4.1.6.3	Power output protection status monitoring		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-002	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-047 PDS-RP-CGS-048 PDS-RP-CGS-093 PDS-RP-CGS-094	See 4.6.1 See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B) See 10
4.1.6.4	Power output switching commanding		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.6.1 See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B)

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
												PDS-PR-CGS-002	PDS-RP-CGS-047 PDS-RP-CGS-048 PDS-RP-CGS-093 PDS-RP-CGS-094	See 10
4.1.6.5	Power output switching status monitoring		X	X			X	X	X	X		PDS-TN-CGS-009 PDS-PR-CGS-006 PDS-PR-CGS-002	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127 PDS-RP-CGS-047 PDS-RP-CGS-048 PDS-RP-CGS-093 PDS-RP-CGS-094	See 4.6.1 See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B) See 10
4.1.6.6	CCEB Power output reset		X	X			X			X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 4.7 See 10.3.1.5.11 (side A) 10.3.2.5.11 (side B)
	4.2 Mechanical Interface Requirements													Title
4.2.1	Mechanical Interface		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009		See 4 See 7
4.2.1.1	Venting Hole		X				X	X		X		PDS-IC-CGS-001		See 4
4.2.1.2	Co-Ordinate System		X		X		X	X		X		AMSPDS-IC-CGS-001 PDS-TN-CGS-009	PDS-RP-CGS-128	See 4 See 7

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
4.2.1.3	Envelope		X	X			X	X		X		PDS-IC-CGS-001	MITM080716-09	See 4 and Annex A Fit check performed during PDS installation
4.2.1.4	Mass		X	X			X	X		X		PDS-IC-CGS-001	PDS-RP-CGS-123	Annex A See 8 See PDS-WV-CGS-003 (NCR-PDS-CGS-C-141)
4.2.1.5	Connector accommodation		X		X		X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009	PDS-RP-CGS-128	See 4 See 7
4.2.1.6	Bonding Stud		X		X		X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009	PDS-RP-CGS-128	See 5.4 See 9.1.2
4.2.2	Structural Interfaces		X	X			X	X		X		PDS-TN-CGS-010 JSC28792	PDS-RP-CGS-118	See 7.1
4.2.2.1	Notching Criteria		X	X			X	X		X		PDS-TN-CGS-010 JSC28792	PDS-RP-CGS-118	See 7.1
4.2.2.2	PDS Structural FEM	X	X				X	X		X		PDS-TN-CGS-010 JSC28792		See 6.5
	4.3 Thermal Interface Requirements													Title
	4.3.1 Thermal Requirements													Title
4.3.1.1	Thermal Control Concept	X	X				X	X		X		PDS-TN-CGS-009 PDS-TN-CGS-011		See 6 . See 6.4
	4.3.1.2 Temperature Limits													Title
4.3.1.2.1	Flight Operating Temperature Limits					X								Definition

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
4.3.1.2.2	Qualification Temperature Limits					X								Definition
4.3.1.2.3	Non Operating Temperature Limits					X								Definition
4.3.1.2.4	Start Up Temperature					X								Definition
4.3.1.2.5	Ground Storage Temperature					X								Definition
4.3.1.2.6	Components Temperature Limits	X					X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-006 PDS-TN-CGS-011		See 6.3
4.3.1.3	Temperature Reference Point		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009 PDS-TN-CGS-011		See 6 See 4.7.2.4 See 6.1
	4.3.1.4 Thermal Properties													Title
4.3.1.4.1	General		X				X	X		X		PDS-TN-CGS-009 PDS-TN-CGS-011		See 6 See 6
4.3.1.4.2	Ageing/Radiation		X				X	X		X		PDS-PR-CGS-019	PDS-RP-CGS-068 PDS-RP-CGS-113	See 8
4.3.2	PDS to AMS02 Thermal Interfaces	X	X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009 PDS-TN-CGS-011		See 6 See 4.2.2, 4.3.1.10 and 4.7.2.4 See 6.4

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
4.3.3	Operating Temperature Range	X	X	X			X	X		X		PDS-TN-CGS-009 PDS-TN-CGS-011 AMSCD-SP-CGS-001		See 5 See 6 See PDS-WV-CGS-005 (NCR-PDS-CGS-C-139)
4.3.4	Non- Operating Temperature Range	X	X	X			X	X		X		PDS-TN-CGS-009 PDS-TN-CGS-011 AMSCD-SP-CGS-001		See 5 See 6
	4.4 Connector Requirements													Title
	4.4.1 Connector Characteristics													Title
4.1.1.1	Allocation Optimisation		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009		See 4 See 7
4.4.1.2	Circular Connector Orientation		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009		See 4 See 7
4.4.1.3	Connector Fixation		X		X		X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009	PDS-RP-CGS-128	See 4 See 7
4.4.1.4	Connector Pin Assignment		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009		See 4 See 7
4.4.1.5	Twisted Wires		X				X	X		X		PDS-IC-CGS-001		See 4

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
												PDS-TN-CGS-009		See 7
4.4.1.6	Flying unmated connector		X		X		X	X		X		PDS-SP-CGS-001 PDS-PL-CGS-001	PDS-RP-CGS-128	
4.4.1.7	Dust Caps		X		X		X	X		X		PDS-SP-CGS-001 PDS-PL-CGS-001	PDS-RP-CGS-128	
4.4.1.8	Functional Interface Drawings		X				X	X		X		PDS-IC-CGS-001		See 4
4.4.1.9	Interface Tables		X				X	X		X		PDS-IC-CGS-001		See 4
	5. ENVIRONMENTAL REQUIREMENTS													Title
	5.1 Cleanliness and Contamination Control													Title
	5.1.1 Equipment Surface Cleanliness													Title
5.1.1.1	Design for cleanliness		X				X	X		X		PDS-TN-CGS-009 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-003		
5.1.1.2	Cleanliness level				X		X	X		X		PDS-IC-CGS-001	PDS-RP-CGS-128	
5.1.1.3	External Contamination		X				X	X		X		PDS-LI-CGS-001		

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
5.1.1.4	Molecular Deposition From Materials Outgassing and Venting		X				X	X		X		PDS-IC-CGS-001 PDS-TN-CGS-009 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-003		
5.2	Radiation Environment	X	X				X	X		X		PDS-TN-CGS-009 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-003		
5.3	Mechanical Environment					X								Definition
5.4	Thermal Environment	X	X	X			X	X		X		PDS-TN-CGS-009 PDS-TN-CGS-011 AMSCD-SP-CGS-001		
5.5	EMC REQUIREMENTS		X	X								PDS-TN-CGS-009 PDS-PR-CGS-016	 PDS-RP-CGS-126	See 9 See 6.4
5.5.1	Self-compatibility		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-016	 PDS-RP-CGS-126	See 9

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
	5.5.2 Grounding and Isolation Requirements													Title
	5.5.2.1 Power Interfaces													Title
5.5.2.1.1	Primary Power Isolation		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 9.1.1 See 10.2
5.5.2.1.2	Primary power to secondary isolation		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 9.1.1 See 10.2
5.5.2.1.3	Secondary power grounding		X	X								PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 9.1.1 See 10.2
	5.5.2.2 Electrical Bonding													Title
5.5.2.2.1	Bonding Requirements		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 9.1.2 See 10.2
5.5.2.2.2	Shielding		X				X	X		X		PDS-TN-CGS-009		See 9.1.2

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
	Requirements													
	5.5.2.3 Electromagnetic Interference													Title
5.5.2.3.1	Conducted Emissions		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-016	PDS-RP-CGS-126	See 9.2.1 See 10.2 (side A) and 10.3 (side B) See PDS-WV-CGS-004 (NCR-PDS-CGS-C-142)Reported to SSP-30237 §3.2.3.1.2.1
5.5.2.3.2	Conducted Susceptibility		X	X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-016	PDS-RP-CGS-126	See 9.2.1 See 10.4 (side A) and 10.5 (side B) See NCR-PDS-CGS-C-142
5.5.2.4	Electrostatic Discharge			X			X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-016	PDS-RP-CGS-126	See 9 See 10.7
	6. Product Assurance Requirements													Title
	6.1 Safety and Reliability requirements													Title
6.1.1	Failure Tolerance Design	X	X				X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 10.3.3
6.1.2	Failure propagation	X	X				X	X		X		PDS-TN-CGS-009 PDS-PR-CGS-006	PDS-RP-CGS-072 PDS-RP-CGS-121 PDS-RP-CGS-122 PDS-RP-CGS-127	See 10.3.3

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
	6.1.3 Mechanical Requirements													Title
6.1.3.1	Materials Design Allowables		X				X	X		X		PDS-LI-CGS-001		
6.1.3.2	Venting Provision		X				X	X		X		PDS-IC-CGS-001 PDS-LI-CGS-003		
	6.2 Electrical, Electronic, Electromechanical (EEE) parts													Title
6.2.1	EEE component engineering	X	X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-003 PDS-LI-CGS-004 PDS-LI-CGS-006		
6.2.1.1	Component Materials	X	X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-004 PDS-LI-CGS-006		

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
6.2.1.2	Prohibited components		X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-003 PDS-LI-CGS-006		
	6.2.1.3 Radiation Requirements													Title
6.2.1.3.1	Total Dose		X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-004 PDS-LI-CGS-006		
	6.2.1.4 EEE Component Selection													Title
													PDS-RP-CGS-002 PDS-RP-CGS-003 PDS-RP-CGS-004 PDS-RP-CGS-005 PDS-RP-CGS-006 PDS-RP-CGS-007 PDS-RP-CGS-008 PDS-RP-CGS-009 PDS-RP-CGS-010 PDS-RP-CGS-011 PDS-RP-CGS-012 PDS-RP-CGS-013 PDS-RP-CGS-014 PDS-RP-CGS-015 PDS-RP-CGS-016	

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
6.2.1.4.1	Preferred Components		X		X		X	X		X		PDS-LI-CGS-004 PDS-LI-CGS-006	PDS-RP-CGS-017 PDS-RP-CGS-018 PDS-RP-CGS-019 PDS-RP-CGS-030 PDS-RP-CGS-031 PDS-RP-CGS-032 PDS-RP-CGS-034 PDS-RP-CGS-035 PDS-RP-CGS-036 PDS-RP-CGS-037 PDS-RP-CGS-039 PDS-RP-CGS-040 PDS-RP-CGS-042 PDS-RP-CGS-043 PDS-RP-CGS-044 PDS-RP-CGS-045 PDS-RP-CGS-046 PDS-RP-CGS-054 PDS-RP-CGS-055 PDS-RP-CGS-056 PDS-RP-CGS-057 PDS-RP-CGS-058 PDS-RP-CGS-059 PDS-RP-CGS-060 PDS-RP-CGS-061 PDS-RP-CGS-066 PDS-RP-CGS-067 PDS-RP-CGS-069 PDS-RP-CGS-070 PDS-RP-CGS-128	

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
													PDS-RP-CGS-002 PDS-RP-CGS-003 PDS-RP-CGS-004 PDS-RP-CGS-005 PDS-RP-CGS-006 PDS-RP-CGS-007 PDS-RP-CGS-008 PDS-RP-CGS-009 PDS-RP-CGS-010 PDS-RP-CGS-011 PDS-RP-CGS-012 PDS-RP-CGS-013 PDS-RP-CGS-014 PDS-RP-CGS-015 PDS-RP-CGS-016 PDS-RP-CGS-017 PDS-RP-CGS-018 PDS-RP-CGS-019 PDS-RP-CGS-030 PDS-RP-CGS-031 PDS-RP-CGS-032 PDS-RP-CGS-034 PDS-RP-CGS-035 PDS-RP-CGS-036 PDS-RP-CGS-037 PDS-RP-CGS-039 PDS-RP-CGS-040 PDS-RP-CGS-042 PDS-RP-CGS-043 PDS-RP-CGS-044 PDS-RP-CGS-045 PDS-RP-CGS-046	

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
6.2.1.4.2	Off-the shelf Components		X		X			X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-004	PDS-RP-CGS-054 PDS-RP-CGS-055 PDS-RP-CGS-056 PDS-RP-CGS-057 PDS-RP-CGS-058 PDS-RP-CGS-059 PDS-RP-CGS-060 PDS-RP-CGS-061 PDS-RP-CGS-066 PDS-RP-CGS-067 PDS-RP-CGS-069 PDS-RP-CGS-070 PDS-RP-CGS-128	
	6.2.1.4.3 Procurement Requirements													Title
6.2.1.4.3.1	Procurement specification		X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-004 PDS-LI-CGS-006		
6.2.1.4.3.2	Printed Circuit Board quality level		X				X	X		X		AMSCD-PL-CGS-001		
	6.3 Material, Mechanical Parts and Processes (PMP)													Title
6.3.1	Selection and Approval		X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001 PDS-LI-CGS-006		
6.3.1.1	Selection of Material and Mechanical Part on basis of previous use		X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001		

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
												PDS-LI-CGS-002		
6.3.1.1.1.1	Stress Corrosion		X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-004		
6.3.1.1.1.2	Flammability		X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-004		
6.3.1.1.1.3	Outgassing		X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-004		
6.3.1.1.1.4	Thermal Cycling		X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-004 AMSCD-SP-CGS-001		
6.3.1.1.1.5	Radiation	X	X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-004		

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
6.3.1.1.1.6	Atomic Oxygen	X	X				X	X		X		AMSCD-PL-CGS-001 PDS-LI-CGS-001 PDS-LI-CGS-002 PDS-LI-CGS-004		
	7. Verification Requirement													Title
7.1	General					X								Definition
7.1.1	Test					X								Definition
7.1.2	Analysis					X								Definition
7.1.3	Review of Design					X								Definition
7.1.4	Inspection					X								Definition
7.2	Verification Control Document					X								Definition
7.3	Verification Level					X								Definition
	8. Preparation for Delivery													Title
	8.1 PDS Transport Container													Title
8.1.1	Characteristics		X				X	X		X		AMSCD-PL-CGS-001		
	8.2 Flight Hardware Identification Marking													Title
8.2.1	Nameplates and Product Marking		X				X	X		X		AMSCD-PL-CGS-001 PDS-IC-CGS-001		
8.2.1.1	Product Marking		X		X		X	X		X		AMSCD-PL-CGS-001 PDS-IC-CGS-001	PDS-RP-CGS-128	

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Traces	Requirement	Method					Model	Level		SOC		Ref Doc	Ref RPT	Remarks
		A	R	T	I	NA	PFM	Eq.	Board	Yes	No			
8.2.1.2	Configuration item identification		X		X		X	X		X		AMSCD-PL-CGS-001 PDS-IC-CGS-001	PDS-RP-CGS-128	
8.2.1.3	Location		X		X		X	X		X		AMSCD-PL-CGS-001 PDS-IC-CGS-001	PDS-RP-CGS-128	
8.2.1.4	Marking techniques		X				X	X		X		AMSCD-PL-CGS-001 PDS-IC-CGS-001		
8.2.1.5	Labelling		X		X		X	X		X		AMSCD-PL-CGS-001 PDS-IC-CGS-001	PDS-RP-CGS-128	
	8.3 Packaging and Handling													Title
8.3.1	General		X		X		X	X		X		AMSCD-PL-CGS-001	PDS-RP-CGS-128	
8.3.2	Sealing		X		X		X	X		X		AMSCD-PL-CGS-001	PDS-RP-CGS-128	
8.3.2.1	Containers Labelling and Marking Data		X		X		X	X		X		AMSCD-PL-CGS-001	PDS-RP-CGS-128	
	8.4 Handling, Transportation and Storage													Title
8.4.1	Procedures/Instructions					X								Definition
8.4.2	Transportation Mode		X				X	X		X		AMSCD-PL-CGS-001		
8.4.3	Protection of Hardware				X		X	X		X		AMSCD-PL-CGS-001	PDS-RP-CGS-128	

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