EPTEV02DEV01 Main Board S/N: A2430775

23/07/2024 12:23:12

23/07/2024 08:33:28 Mockup Main Board Checking (4 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Reference Voltage - Microcontroller	4090	4008	4172	PASS
AT MPP Manual Measurement	4098	4008	4172	PASS
Reference Voltage – Multiplexer 1	4090	4008	4172	PASS
Reference Voltage – Multiplexer 2	4089	4008	4172	PASS
Comms	OK	-	-	PASS

Initial equipment consumption check (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Current – Low side	469	0	521	PASS

Main microcontroller programming with PGM TEST (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Main microcontroller programming with PGM TEST	-	-	-	PASS

Program external EEPROM memory (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Programmed Memory	-	-	-	PASS

Sauron internal reference voltage calibration (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Sauron internal reference voltage calibration	-	-	-	PASS

Checking the 3V DCDC of the DUT board (2 tests).

Test Description	Reading	Lower Range	Upper Range	Result
3V – No load	2989	2687	3329	PASS
3V – Load	2987	2682	3325	PASS

Checking the 5V DCDC of the DUT board (31 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Enable DCDC 5V – No load	3159	2829	3483	PASS
Enable DCDC 5V – Load	3153	2819	3475	PASS
Vbat: 2900mV - 5V – No load	5056	4424	5602	PASS
Vbat: 2900mV - 5V – Load	5023	4394	5567	PASS
Vbat: 3000mV - 5V – No load	5056	4424	5601	PASS
Vbat: 3000mV - 5V – Load	5021	4394	5567	PASS
Vbat: 3100mV - 5V – No load	5056	4424	5601	PASS
Vbat: 3100mV - 5V – Load	5021	4395	5567	PASS
Vbat: 3200mV - 5V – No load	5056	4424	5602	PASS
Vbat: 3200mV - 5V – Load	5021	4395	5567	PASS
Vbat: 3300mV - 5V – No load	5056	4424	5602	PASS
Vbat: 3300mV - 5V – Load	5021	4394	5567	PASS
Vbat: 3400mV - 5V – No load	5056	4425	5602	PASS
Vbat: 3400mV - 5V – Load	5021	4394	5567	PASS
Vbat: 3500mV - 5V – No load	5056	4424	5602	PASS
Vbat: 3500mV - 5V – Load	5020	4394	5565	PASS
Vbat: 2900mV - 5V SW – No load	5059	4426	5605	PASS
Vbat: 2900mV - 5V SW – Load	5024	4397	5568	PASS
Vbat: 3000mV - 5V SW – No load	5059	4426	5605	PASS
Vbat: 3000mV - 5V SW – Load	5024	4397	5568	PASS
Vbat: 3100mV - 5V SW – No load	5059	4426	5606	PASS
Vbat: 3100mV - 5V SW – Load	5023	4397	5568	PASS
Vbat: 3200mV - 5V SW – No load	5059	4428	5608	PASS
Vbat: 3200mV - 5V SW – Load	5024	4397	5568	PASS
Vbat: 3300mV - 5V SW – No load	5059	4426	5608	PASS
Vbat: 3300mV - 5V SW – Load	5023	4397	5568	PASS
Vbat: 3400mV - 5V SW – No load	5059	4426	5606	PASS
Vbat: 3400mV - 5V SW – Load	5024	4397	5568	PASS
Vbat: 3500mV - 5V SW – No load	5061	4426	5606	PASS
Vbat: 3500mV - 5V SW – Load	5023	4397	5567	PASS

5V DUT	4970	4423	5575	PASS

Checking the 12V DCDC of the DUT board (35 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Enable DCDC 12V – No load	3154	2825	3478	PASS
Enable DCDC 12V – Load	2791	2407	3120	PASS
Vbat: 2800mV – 12V – POK Disabled	12222	10900	13481	PASS
Vbat: 2800mV – 12V POK – POK Disabled	3850	0	5000	PASS
Vbat: 2800mV – 12V – POK Enabled	1933	1571	8944	PASS
Vbat: 2800mV – 12V POK – POK Enabled	4553	3973	5048	PASS
Vbat: 2900mV - 12V – No load	12225	10900	13488	PASS
Vbat: 2900mV - 12V POK – No load	3105	0	5000	PASS
Vbat: 2900mV - 12V – Load	12168	10852	13437	PASS
Vbat: 2900mV - 12V POK – Load	4111	0	5000	PASS
Vbat: 3000mV - 12V – No load	12235	10913	13499	PASS
Vbat: 3000mV - 12V POK – No load	1652	0	5000	PASS
Vbat: 3000mV - 12V – Load	12175	10867	13448	PASS
Vbat: 3000mV - 12V POK – Load	3576	0	5000	PASS
Vbat: 3100mV - 12V – No load	12245	10918	13510	PASS
Vbat: 3100mV - 12V POK – No load	125	0	5000	PASS
Vbat: 3100mV - 12V – Load	12185	10877	13459	PASS
Vbat: 3100mV - 12V POK – Load	2415	0	5000	PASS
Vbat: 3200mV - 12V – No load	12249	10924	13518	PASS
Vbat: 3200mV - 12V POK – No load	32	0	5000	PASS
Vbat: 3200mV - 12V – Load	12192	10882	13470	PASS
Vbat: 3200mV - 12V POK – Load	408	0	5000	PASS
Vbat: 3300mV - 12V – No load	12259	10933	13529	PASS
Vbat: 3300mV - 12V POK – No load	18	0	5000	PASS
Vbat: 3300mV - 12V – Load	12202	10888	13481	PASS
Vbat: 3300mV - 12V POK – Load	59	0	5000	PASS
Vbat: 3400mV - 12V – No load	12262	10940	13537	PASS
Vbat: 3400mV - 12V POK – No load	13	0	5000	PASS
Vbat: 3400mV - 12V – Load	12209	10895	13488	PASS
Vbat: 3400mV - 12V POK – Load	36	0	5000	PASS
Vbat: 3500mV - 12V – No load	12272	10946	13548	PASS
Vbat: 3500mV - 12V POK – No load	9	0	5000	PASS
Vbat: 3500mV - 12V – Load	12219	10900	13499	PASS
Vbat: 3500mV - 12V POK – Load	28	0	1000	PASS
12V Relay	12215	10886	13474	PASS

Checking the 40V DCDC of the DUT board (38 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Enable DCDC 40V – No load	3143	2822	3478	PASS
Enable DCDC 40V – Load	2772	2387	3113	PASS
Vbat: 2800mV – 40V – POK Disabled	40417	36212	44908	PASS
Vbat: 2800mV – 40V POK – POK Disabled	3450	0	4980	PASS
Vbat: 2800mV – 40V – POK Enabled	31496	26579	36093	PASS
Vbat: 2800mV – 40V POK – POK Enabled	4549	3981	5041	PASS
Vbat: 2900mV - 40V – No load	40451	36242	44945	PASS
Vbat: 2900mV - 40V POK – No load	2337	0	4500	PASS
Vbat: 2900mV - 40V – Load	34322	29777	39277	PASS
Vbat: 2900mV - 40V POK – Load	4549	3983	5041	PASS
Vbat: 3000mV - 40V – No load	40485	36273	44970	PASS
Vbat: 3000mV - 40V POK – No load	439	0	3500	PASS
Vbat: 3000mV - 40V – Load	36036	31360	41150	PASS
Vbat: 3000mV - 40V POK – Load	4554	0	5045	PASS
Vbat: 3100mV - 40V – No load	40519	36283	44996	PASS
Vbat: 3100mV - 40V POK – No load	46	0	2900	PASS
Vbat: 3100mV - 40V – Load	37602	32882	42973	PASS
Vbat: 3100mV - 40V POK – Load	2489	0	4900	PASS
Vbat: 3200mV - 40V – No load	40541	36314	45033	PASS
Vbat: 3200mV - 40V POK – No load	23	0	500	PASS
Vbat: 3200mV - 40V – Load	39214	34241	44558	PASS
Vbat: 3200mV - 40V POK – Load	822	0	3600	PASS
Vbat: 3300mV - 40V – No load	40576	36324	45057	PASS
Vbat: 3300mV - 40V POK – No load	14	0	250	PASS

Vbat: 3300mV - 40V – Load	40360	35619	44895	PASS
Vbat: 3300mV - 40V POK – Load	96	0	3000	PASS
Vbat: 3400mV - 40V – No load	40598	36355	45082	PASS
Vbat: 3400mV - 40V POK – No load	10	0	1000	PASS
Vbat: 3400mV - 40V – Load	40417	36242	44933	PASS
Vbat: 3400mV - 40V POK – Load	54	0	1000	PASS
Vbat: 3500mV - 40V – No load	40621	36365	45108	PASS
Vbat: 3500mV - 40V POK – No load	9	0	250	PASS
Vbat: 3500mV - 40V – Load	40439	36273	44958	PASS
Vbat: 3500mV - 40V POK – Load	43	0	250	PASS
WDT HW with pulses – 40V	40541	36303	45033	PASS
WDT HW with pulses – Pulses	3018	2701	3329	PASS
WDT HW without pulses – 40V	13041	2970	15219	PASS
WDT HW without pulses – Pulses	7	0	250	PASS

Checking the charging circuit of the DUT board (11 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Input Voltage – TVS Off	16	0	250	PASS
Input Voltage – TVS Off 5V	3879	3160	5000	PASS
Input Voltage – TVS On 12V	6784	5970	12100	PASS
Charge Time	13033	9912	45000	PASS
Battery Voltage – TP9	3566	3199	3929	PASS
Charge detection – TP93	13	0	250	PASS
Charge status – TP94	31	0	250	PASS
Battery Voltage	3204	2881	3524	PASS
Charge Voltage - TP117	4954	4201	5702	PASS
Charge status – TP94	1441	731	1800	PASS
V Battery - ADC DUT	3356	3020	3713	PASS

Screen illumination check (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Screen illumination check	-	-	-	PASS

Screen contrast check (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Screen contrast check	-	-	-	PASS

Screen pixels check (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Screen pixels check	-	-	-	PASS

External EEPROM memory check (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
External EEPROM memory check	-	-	-	PASS

Checking the LEDs (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Checking the LEDs	-	-	-	PASS

Buzzer check (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Buzzer check	-	-	-	PASS

Push button check (6 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Pushbutton - Menu 1	-	-	-	PASS
Pushbutton - Menu 3	-	-	-	PASS
Pushbutton - Menu 4	-	-	-	PASS
Pushbutton - On/Off	-	-	-	PASS
Pushbutton – Start/Stop	-	-	-	PASS

Dial check (2 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Right Turn	-	-	-	PASS
Left Turn	-	-	-	PASS

Accelerometer – X Axis (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Accelerometer – X Axis	16378	14557	18021	PASS

Secondary microcontroller programming with PGM TEST (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Secondary microcontroller programming with PGM TEST	-	-	-	PASS

Checking communications between Sauron and Orco (1 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Checking communications between Sauron and Orco.	-	-	-	PASS

Checking channel A (58 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Step 1 TP100 - 12V CHA	12198	10877	13466	PASS
Step 1 TP102 - 40V CHA	38657	31625	44433	PASS
Step 2 TP101 - DC+ CHA	41	0	65	PASS
Step 3 TP105 - DC- CHA	44	0	65	PASS
Step 4 TP101 - DC+ CHA	1155	1000	1284	PASS
Step 4 TP105 - DC- CHA	26	0	50	PASS
Step 5 TP101 - DC+ CHA	5573	4857	6186	PASS
Step 5 TP105 - DC- CHA	26	0	50	PASS
Step 6 TP101 - DC+ CHA	9987	8715	11088	PASS
Step 6 TP105 - DC- CHA	29	0	50	PASS
Step 7 TP101 - DC+ CHA	23	0	50	PASS
Step 7 TP105 - DC- CHA	1158	1013	1290	PASS
Step 8 TP101 - DC+ CHA	26	0	50	PASS
Step 8 TP105 - DC- CHA	5564	4857	6163	PASS
Step 9 TP101 - DC+ CHA	26	0	50	PASS
Step 9 TP105 - DC- CHA	9973	8709	11042	PASS
Step 10 Shunt	654	536	732	PASS
Step 10 TP103 - Load +	40256	36049	44710	PASS
Step 10 TP4 - Relay Out +	107	84	132	PASS
Step 11 Shunt	732	549	813	PASS
Step 11 TP4 - Relay Out +	40242	38103	44725	PASS
Step 12 Shunt	654	533	732	PASS
Step 12 TP104 - Load -	40377	36170	44887	PASS
Step 12 TP3 - Relay Out -	93	60	200	PASS
Step 13 Shunt	728	553	817	PASS
Step 13 TP3 - Relay Out -	40068	38103	44518	PASS
Step 14 TP103 - Load +	62	32	95	PASS
Step 14 Shunt	967	788	1112	PASS
Step 14 TP100 - 12V CHA	12222	10900	13492	PASS
Step 14 TP102 - 40V CHA	40337	36130	44821	PASS
Step 15 TP103 - Load +	120	82	175	PASS
Step 15 Shunt	8630	7499	9715	PASS
Step 15 TP100 - 12V CHA	12232	10904	13499	PASS
Step 15 TP102 - 40V CHA	40212	35721	44708	PASS
Step 16 TP103 - Load +	155	112	200	PASS
Step 16 Shunt	14379	12554	16141	PASS
Step 16 TP100 - 12V CHA	12235	10906	13504	PASS
Step 16 TP102 - 40V CHA	38850	31952	44634	PASS
Step 17 TP104 - Load -	61	32	80	PASS
Step 17 Shunt	967	788	1096	PASS
Step 17 TP100 - 12V CHA	12222	10900	13488	PASS
Step 17 TP102 - 40V CHA	40337	36130	44807	PASS
Step 18 TP104 - Load -	119	82	175	PASS
Step 18 Shunt	8633	7499	9610	PASS
Step 18 TP100 - 12V CHA	12232	10904	13499	PASS
Step 18 TP102 - 40V CHA	40212	35701	44708	PASS
Step 19 TP104 - Load -	155	112	200	PASS

Step 19 Shunt	14383	12558	15975	PASS
Step 19 TP100 - 12V CHA	12235	10906	13507	PASS
Step 19 TP102 - 40V CHA	38816	31870	44571	PASS
Step 20 ADC DUT	1010	839	5501	PASS
Step 20 TP32 - V+ Load ADC	1048	869	5497	PASS
Step 21 ADC DUT	859	714	4069	PASS
Step 21 TP32 - V+ Load ADC	858	718	4060	PASS
Step 22 ADC DUT	1011	849	5501	PASS
Step 22 TP32 - V- Load ADC	1051	875	5497	PASS
Step 23 ADC DUT	858	723	4060	PASS
Step 23 TP32 - V- Load ADC	864	728	4072	PASS

Checking channel B (110 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Step 1 TP106 - 12V CHB	12205	10879	13474	PASS
Step 1 TP108 - 40V CHB	39599	32738	44908	PASS
Step 2 TP107 - DC+ CHB	38	0	60	PASS
Step 3 TP116 - DC- CHB	38	0	60	PASS
Step 4 TP107 - DC+ CHB	1152	1000	1277	PASS
Step 4 TP116 - DC- CHB	20	0	50	PASS
Step 5 TP107 - DC+ CHB	5570	4852	6173	PASS
Step 5 TP116 - DC- CHB	23	0	50	PASS
Step 6 TP107 - DC+ CHB	9984	8707	11068	PASS
Step 6 TP116 - DC- CHB	26	0	50	PASS
Step 7 TP107 - DC+ CHB	20	0	50	PASS
Step 7 TP116 - DC- CHB	1155	1011	1287	PASS
Step 8 TP107 - DC+ CHB	23	0	50	PASS
Step 8 TP116 - DC- CHB	5564	4863	6177	PASS
Step 9 TP107 - DC+ CHB	23	0	50	PASS
Step 9 TP116 - DC- CHB	9973	8717	11065	PASS
Step 10 Shunt	673	576	801	PASS
Step 10 TP109 - Load +	40068	35879	44503	PASS
Step 10 TP110 - Load -	93	60	175	PASS
Step 11 Shunt	673	576	801	PASS
Step 11 TP109 - Load +	40054	35879	44503	PASS
Step 11 TP110 - Load -	93	60	175	PASS
Step 11 TP6 - Relay ES +	80	60	102	PASS
Step 12 Shunt	673	576	780	PASS
Step 12 TP109 - Load +	93	60	118	PASS
Step 12 TP110 - Load -	39947	35783	44385	PASS
Step 13 Shunt	673	572	801	PASS
Step 13 TP109 - Load +	93	60	118	PASS
Step 13 TP110 - Load -	39947	35783	44385	PASS
Step 13 TP5 - Relay ES -	93	60	118	PASS
Step 14 Shunt	669	576	796	PASS
Step 14 TP6 - Relay ES +	80	60	118	PASS
Step 15 Shunt	743	642	861	PASS
Step 15 TP6 - Relay ES +	39947	35783	44385	PASS
Step 16 Shunt	673	576	801	PASS
Step 16 TP5 - Relay ES -	93	60	118	PASS
Step 17 Shunt	746	642	861	PASS
Step 17 TP5 - Relay ES -	40001	35819	44429	PASS
Step 18 Shunt	669	576	793	PASS
Step 18 TP8 - Relay GALV +	80	60	102	PASS
Step 19 Shunt	743	616	866	PASS
Step 19 TP8 - Relay GALV +	40148	35964	44622	PASS
Step 20 Shunt	673	576	780	PASS
Step 20 TP9 - Relay GALV -	93	60	132	PASS
Step 21 Shunt	746	590	866	PASS
Step 21 TP9 - Relay GALV -	40001	35819	44429	PASS
Step 22 TP109 - Load +	107	72	175	PASS
Step 22 Shunt	1169	1013	1372	PASS
Step 22 TP106 - 12V CHB	12239	10906	13496	PASS
Step 22 TP108 - 40V CHB	40576	36345	45070	PASS
Step 23 TP109 - Load +	174	121	250	PASS
Step 23 Shunt	8633	7592	9711	PASS
Step 23 TP106 - 12V CHB	12249	10913	13504	PASS

Step 23 TP108 - 40V CHB	40451	36273	44970	PASS
Step 24 TP109 - Load +	201	157	300	PASS
Step 24 Shunt	14291	12578	16031	PASS
Step 24 TP106 - 12V CHB	12252	10915	13515	PASS
Step 24 TP108 - 40V CHB	39929	33219	44933	PASS
Step 25 TP110 - Load -	107	72	175	PASS
Step 25 Shunt	1177	1016	1363	PASS
Step 25 TP106 - 12V CHB	12239	10906	13499	PASS
Step 25 TP108 - 40V CHB	40576	36355	45070	PASS
Step 26 TP110 - Load -	161	121	300	PASS
Step 26 Shunt	8681	7578	9727	PASS
Step 26 TP106 - 12V CHB	12245	10913	13504	PASS
Step 26 TP108 - 40V CHB	40451	36273	44970	PASS
Step 27 TP110 - Load -	201	145	300	PASS
Step 27 Shunt	14361	12524	16052	PASS
Step 27 TP106 - 12V CHB	12252	10915	13507	PASS
Step 27 TP108 - 40V CHB	39895	33229	44921	PASS
Step 28 TP109 - Load +	107	72	175	PASS
Step 28 Shunt	618	519	740	PASS
Step 28 TP106 - 12V CHB	12235	10906	13499	PASS
Step 28 TP108 - 40V CHB	40598	36355	45082	PASS
Step 29 TP109 - Load +	147	108	200	PASS
Step 29 Shunt	5422	4734	6073	PASS
Step 29 TP106 - 12V CHB	12239	10906	13499	PASS
Step 29 TP108 - 40V CHB	40485	36283	45008	PASS
Step 30 TP109 - Load +	174	132	300	PASS
Step 30 Shunt	9064	7929	10128	PASS
Step 30 TP106 - 12V CHB	12245	10913	13504	PASS
Step 30 TP108 - 40V CHB	40428	36273	44958	PASS
Step 31 TP110 - Load -	107	72	175	PASS
Step 31 Shunt	625	523	732	PASS
Step 31 TP106 - 12V CHB	12235	10906	13499	PASS
Step 31 TP108 - 40V CHB	40587	36355	45082	PASS
Step 32 TP110 - Load -	147	96	200	PASS
Step 32 Shunt	5451	4734	6085	PASS
Step 32 TP106 - 12V CHB	12242	10906	13499	PASS
Step 32 TP108 - 40V CHB	40485	36283	45008	PASS
Step 33 TP110 - Load -	174	121	300	PASS
Step 33 Shunt	9112	7922	10152	PASS
Step 33 TP106 - 12V CHB	12245	10909	13504	PASS
Step 33 TP108 - 40V CHB	40439	36263	44958	PASS
Step 34 ADC DUT	946	806	1053	PASS
Step 34 TP41 - V+ Load ADC	980	825	1097	PASS
Step 35 ADC DUT	784	674	879	PASS
Step 35 TP41 - V+ Load ADC	794	680	887	PASS
Step 36 ADC DUT	953	804	1054	PASS
Step 36 TP44 - V- Load ADC	987	825	1100	PASS
Step 37 ADC DUT	792	674	882	PASS
Step 37 TP44 - V- Load ADC	797	674	890	PASS
Step 38 ADC DUT	944	805	1051	PASS
Step 38 TP41 - V+ Load ADC	981	825	1099	PASS
Step 39 ADC DUT	781	671	875	PASS
Step 39 TP41 - V+ Load ADC	788	673	880	PASS
Step 40 ADC DUT	949	799	1049	PASS
Step 40 TP44 - V- Load ADC	983	822	1097	PASS
Step 41 ADC DUT	792	674	880	PASS
Step 41 TP44 - V- Load ADC	795	673	889	PASS

Checking channel C (58 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Step 1 TP24 - 12V CHC	12219	10891	13485	PASS
Step 1 TP96 - 40V CHC	39497	33596	44783	PASS
Step 2 TP63 - DC+ CHC	38	0	60	PASS
Step 3 TP99 - DC- CHC	41	0	60	PASS
Step 4 TP63 - DC+ CHC	1143	989	1261	PASS
Step 4 TP99 - DC- CHC	23	0	50	PASS
Step 5 TP63 - DC+ CHC	5528	4814	6134	PASS

Step 5 TP99 - DC- CHC	23	0	50	PASS
Step 6 TP63 - DC+ CHC	9913	8642	10999	PASS
Step 6 TP99 - DC- CHC	23	0	50	PASS
Step 7 TP63 - DC+ CHC	20	0	50	PASS
Step 7 TP99 - DC- CHC	1149	1003	1274	PASS
Step 8 TP63 - DC+ CHC	20	0	50	PASS
Step 8 TP99 - DC- CHC	5540	4828	6117	PASS
Step 9 TP63 - DC+ CHC	23	0	50	PASS
Step 9 TP99 - DC- CHC	9928	8655	10964	PASS
Step 10 Shunt	610	519	772	PASS
Step 10 TP97 - Load +	40310	36110	44783	PASS
Step 10 TP2 - Relay Out +	107	60	120	PASS
Step 11 Shunt	687	582	801	PASS
Step 11 TP2 - Relay Out +	40457	36230	44916	PASS
Step 12 Shunt	610	513	719	PASS
Step 12 TP98 - Load -	40175	35977	44622	PASS
Step 12 TP1 - Relay Out -	93	60	150	PASS
Step 13 Shunt	687	586	801	PASS
Step 13 TP1 - Relay Out -	40202	36013	44651	PASS
Step 14 TP97 - Load +	57	29	175	PASS
Step 14 Shunt	927	774	1059	PASS
Step 14 TP24 - 12V CHB	12245	10922	13515	PASS
Step 14 TP96 - 40V CHB	40473	36263	44958	PASS
Step 15 TP97 - Load +	115	77	200	PASS
Step 15 Shunt	8578	7426	9505	PASS
Step 15 TP24 - 12V CHB	12259	10924	13521	PASS
Step 15 TP96 - 40V CHB	40337	36181	44845	PASS
Step 16 TP97 - Load +	151	106	300	PASS
Step 16 Shunt	14343	12448	15886	PASS
Step 16 TP24 - 12V CHB	12265	10931	13529	PASS
Step 16 TP96 - 40V CHB	39770	34342	44795	PASS
Step 17 TP98 - Load -	58	29	175	PASS
Step 17 Shunt	927	764	1064	PASS
Step 17 TP24 - 12V CHB	12249	10918	13515	PASS
Step 17 TP96 - 40V CHB	40473	36273	44958	PASS
Step 18 TP98 - Load -	117	77	200	PASS
Step 18 Shunt	8578	7383	9537	PASS
Step 18 TP24 - 12V CHB	12259	10924	13518	PASS
Step 18 TP96 - 40V CHB	40337	36181	44858	PASS
Step 19 TP98 - Load -	152	108	300	PASS
Step 19 Shunt	14335	12382	15930	PASS
Step 19 TP24 - 12V CHB	12269	10931	13529	PASS
Step 19 TP96 - 40V CHB	39747	34281	44795	PASS
Step 20 ADC DUT	1018	848	1130	PASS
Step 20 TP50 - V+ Load ADC	1052	865	1178	PASS
Step 21 ADC DUT	854	714	944	PASS
Step 21 TP50 - V+ Load ADC	858	714	952	PASS
Step 22 ADC DUT	1011	834	1133	PASS
Step 22 TP53 - V- Load ADC	1047	858	1179	PASS
Step 23 ADC DUT	847	700	945	PASS
Step 23 TP53 - V- Load ADC	849	703	950	PASS

BQ Programming (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
BQ Programming	-	-	-	PASS

Main microcontroller programming with PGM FINAL (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Main microcontroller programming with PGM FINAL	-	-	-	PASS
Firmware Version Primary uC	4717	-	-	-

Turning on the device (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Turning on the device	-	-	-	PASS

Secondary microcontroller programming with PGM FINAL (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Secondary microcontroller programming with PGM FINAL	-	-	-	PASS
Firmware Version Secondary uC	3385	-	-	-

Turning off the device (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Turning off the device	-	-	-	PASS

Measurement of the standby consumption of the equipment (1 test).

Test Description	Reading	Lower Range	Upper Range	Result
Current – Low side (standby)	169	136	259	PASS

23/07/2024 13:28:40 Mockup Main Board Checking (4 tests).

Test Description	Reading	Lower Range	Upper Range	Result
Reference Voltage - Microcontroller	4090	4008	4172	PASS
AT MPP Manual Measurement	4098	4008	4172	PASS
Reference Voltage – Multiplexer 1	4090	4008	4172	PASS
Reference Voltage – Multiplexer 2	4090	4008	4172	PASS
Comms	OK	-	-	PASS

All tests performed with the overall result of PASS