Requirement	Description	Requirement Reference & Documentation	Write Up Done	Test Plan Completed	All Needed Materials Fielded	Test Complete (Requirement Met)	Responsible Engineer(s) In Charge of Req.	Completion Notes
Free of dust and contaminates	Visual Inspection	R1.1	☑	☑	Need to order cleaning supplies	Final cleaning will take place after post-env. testing	Jackson O'Neill	Jackson, Aidan, Peter
Materials w TML less than 1% and CVCM less than 0.1% (outgassing)	BOM Inspection	R1.2	☑	☑	☑	☑	Aidan, Peter	
No prohibited materials (see Req. Reference ->)	BOM Inspection	R1.3	☑	☑	☑	☑	Peter Gibbons	Block Diagram BOM
No pyrotechnics, propulsion, radios, high-res cameras	Prohibited Items Inspection	R1.4	☑	☑	☑	☑	Peter Gibbons	Block Diagram BOM
No energy storage devices	Prohibited Items Inspection	R1.5	☑	☑	☑	☑	Peter Gibbons	Block Diagram BOM
No space debris risk	Vibe test for loose connections	R1.6	☑	???	???	???	Jackson O'Neill	Jackson, Robby, Johnny
Operate between -30 to 60 C and survive -40 to 80 C	BOM inspection	R1.7	☑	☑	☑	☑	Peter, Aidan, Sarah	Sarah
Fit the payload space	Calibers measure payload sizing	R1.8	☑	☑	☑	20 pin connector black spacers are 1 mm out of spec.	Jackson O'Neill	Jackson, Robby, Johnny
Rigid mounting	Calibers measure thread depth	R1.9	☑	☑	Correct mounting parts ordered	Waiting for correct parts to arrive	Jackson O'Neill	Jackson, Robby, Johnny
Bus connect in proper location	Primary Pinheader alignment verification	R1.10	☑	☑	☑	☑	Peter Gibbons	PCB layout , verify with Valpo emulator board
Payload below 250g (adjusted to 500 g in last meeting)	Virtual and in-person system mass verifcation	R1.11	☑	☑	☑	Full assembly almost complete... almost certainly will meet this req	Jackson O'Neill	Jackson, Robby, Johnny
Powered by bus only	In-person 0V standalone verification	R2.1	☑	☑	☑	☑	Aidan	Aidan
Should survive bus voltage ripples of +/- 5%	Prove supply voltage margins	R2.2	☑	☑	☑	☑	Aidan	Aidan
No inrush current	Oscilloscope inrush current verification	R2.3	☑	☑	☑	In-rush too high, next iteration will have filtering inductor	Aidan, Peter	Aidan, Peter
No more than 1 A on 3.3V rail	Max current consumption verification	R2.4	☑	☑	☑	☑	Aidan, Peter	Aidan, Peter
No more than 1 A on 5V rail	Max current consumption verification	R2.5	☑	☑	☑	☑	Aidan, Peter	Aidan, Peter, Sarah
Less than 2 A power draw, max load total	Max current consumption verification	R2.6	☑	☑	☑	☑	Aidan, Peter	Aidan, Peter
Readable labels, test points accessible after integration	Test points for every net of primary connector	R2.7	☑	☑	☑	Next iteration of board will contain all test points. Ordering board in a couple of days	Aidan	
Pinout compliance on shared bus	Continuity testing each bus pin and test pad	R2.8	☑	☑	☑	☑	Peter Gibbons, Aidan	Works with Valpo board
All payload outputs should be less than 5V	Circuit analysis for voltage spikes	R2.9	☑	☑	☑	☑	Aidan	Aidan O, Peter Gibbons
Processor on payload should be 3.3V or 5V	Payload bus command for power switching	R2.10	☑	☑	☑	☑	Aidan	We don't use switches other than switch 1!
Payload tolerant to abrupt power loss	Prove code is prepared for power loss	R2.11	☑	☑	☑	☑	Isaac	Aidan O, Isaac B

Requirement	Description	Requirement Reference & Documentation	Write Up Done	Test Plan Completed	All Needed Materials Fielded	Test Complete (Requirement Met)	Responsible Engineer(s) In Charge of Req.	Completion Notes
Payload should draw no more than 0.5W nadir or 3W sun-pointing	**Operational mode power consumption verification**	R2.12	☑	☑	☑	Full functional test for verifying power consumption happening in next week	isaac	This probably doesn't apply to us as much since we're detumble, but idle p
No EMI or RF radiation which interfere with bus ops	**NULL**	R2.13	☑	???	???	???	Sarah, Isaac	Isaac, Sarah
Payload can send downlinks	**Prove uplink, downlink, reboot commands**	R3.1	☑	☑	☑	☑	Isaac	Isaac B
Payload should produce useful, relevant data in limited throughput scenarios	**24 Hour test with Emulator**	R3.2	☑	☑	☑	**Ongoing**: Still need to complete this SW implementation	Isaac	Isaac B
Pass pre-environmental functional tests	**All operational modes test prior to bake out**	R4.1	☑	☑	☑	**Ongoing**: Will be completed withing 3 days of IRR	Isaac	Sarah K, Isaac Brej
TVAC bakeout at 60 C at 1e-4 torr for 6 hours	**Bake out**	R4.2	☑	☑	☑	**Pending**: Can be done whenever ready	Isaac	Isaac Brej
Payload post-environemental functional tests	**All operational modes test post bake out**	R4.3	☑	☑	☑	**Pending:** Done whenever TVAC happens	Isaac	Sarah K, Isaac Brej