

Sr No	Potential failure mode	Severity	Potential Cause	Occurrence	Controls	Detection	RPN
1.	UART disconnection	9	Board disconnect, serial terminal is faulty	3	Make sure board is connected , terminal is on	2	54
2.	Data overflow in circular buffer	9	Loss of data if not handled properly	7	Realloc,	7	441
3.	Board is faulty	10	MOSFET is blown by static, other mechanical failures	3	Always use static shield pouches	10	300
4.	Program does not respond	9	Not handling special or specific characters	6	Handling other inputs from user	1	54
5.	Program crash	10	Overallocation of memory past heap	1	Make sure Allocations Within heap Constraints	10	100