

Potential Failure Mode	Potential Failure Effect	Severity	Potential Cause	Occurence	Controls	Detection	RPN
Damage of board due to blowing of MOSFET	Unpredictable behaviour of board	7	Keeping the board in fragile environment(static electricity)	4	Always use static shield	7	196
Data Overflow of circular buffer	corrupts/lost data	9	Not handling overflow (not performing wrapping)	5	Check for overflow and perform wrapping and use realloc	4	180
Disconnection of UART comm.	Since it stops communication hence program stops	7	Unplugging the Board	3	Make sure the board is connected all the time and make a function to exit in safe manner if disconc.	3	168
Splling water on the board (By accident)	Damages the board	7	handling board with care	6	Covering board with waterproof material	2	84
Using special character	Doesn't print the input in terminal	2	User typing non-alpha numeric characters	5	Constraining the character to only standard characters(ASCII)	3	30
Incorrect Baud rate	Printing garbage values in terminal	5	Mismatch between BUS clock and SYS clock	5	Make sure terminal board rate & Code baud rate are same before debugging	1	25