

Potential Failure Mode	Potential Failure Effect	Severity	Potential Cause	Occurrence
Buffer overflows	Loss of data	6	Head pointer doesn't go back to beginning of buffer	6
UART receiving too many characters at once	Rx Over flow flag is set	7	Supplying an entire block of text	8
Buffer not allocated	Hard Fault	5	malloc did not allocate	7
Heap Size finishes	Overwriting over important memory locations	7	Too much space was requested	4
Water falls on KL25z	Complete loss of system	10	Drinking water close to the board	2

Controls	Detection	Risk Priority
System throws an error/increase size of buffer	5	180
Clear the flag and notice that all characters havent been received, also if terminal has option to delay input use it to space characters out	3	168
Throw an error/ask user to request for smaller space	1	35
Throw an error/ask user to request for smaller space	1	28
Replace board	1	20