

Risk assessment matrix

lh2640

Rank #	Risk(s)	What might be affected and how	Existing controls & measures	Severity (A)	Likelihood (B)	Risk rating (A x B)
5	LED overheating from prolonged use	Component degradation or display malfunction	Use of low-power LEDs, indoor cool environment, passive cooling	2	3	6
4	PCB defects during manufacture	Short circuits or signal issues requireing rework	Gerber file verificatoin; peer review	4	2	8
1	Arduino failure	Device fails to function, time lost replacing part	Use of regulated power supply; spares available	5	3	15
2	Delivery delays	Late delivery of components of boards, project may not be completed in time	Early ordering, local sourcing, submission on time	3	4	12
1	Leaded solder health risk	Inhalation or contact risk during assembly affects persons longterm health	PPE, handwashing	5	3	15
3	Incorrect component placement during assembly	Malfunctioning baord, time spent troubleshooting and repairing	Follow interactive BOM, look at datasheets for device orientation	4	4	9
6	Acrylic/MDF laser cut errors	Misaligned or poor fitting components, aesthetic and lighting function affected	Check files for corret dimensions before cutting	2	2	4