I will use critical thinking to arrive at solutions based on reasons.

A tool I can use to facilitate critical thinking is asking insightful questions. Kinda like the socratic method. In the Socratic method, one probes another’s line of thoughts by asking them questions.

But solving any problem requires initial thoughts which can be refined if needed. If I just use common sense, I should be able to arrive to solution without conducting much research but still produce a reliable product. For example, if you know the board may caught or fire then use fireproof components. Basically, the idea is to draw inspirations from experience. But of course, some things are not as obvious as you might think and require research. Things like EMI problems.