

Preliminary Design Form

Please TYPE this form in this template and expand the space for answers as needed
(Four copies of this form are to be brought to the review meeting)

Name the part you are documenting:

List all responsible parties for this part and underline the single point-of-contact:

Explain the general purpose and function of this part:

List the Goals and Requirements of the part, including competition rules that will affect the design of your part:

Describe all major interactions and physical interfaces with other systems in which your part will have to be designed to interface with. Elaborate on any difficulties you may encounter when designing your part to interface well with other systems. You may also want to make comparisons with previous years' part:

a. Interaction (influence on other parts)

b. Interface (boundary, size, what connects to it?)

Please list at least 3 ideas for this part. For each idea list the pros and cons in relation to your subteam goals:

1. Idea 1
 - Pros –
 - Cons –
2. Idea 2
 - Pros -
 - Cons -
3. Idea 3
 - Pros -
 - Cons

What is your plan for determining which idea to pursue for the project? What tests will you conduct and what criteria will you use to make your decision? Give timeline for how you plan to prepare for Secondary Design:

Timeline (Dates AND Milestones):

Give a rough estimated cost for each of the ideas (in \$, in design time and in manufacturing time):

Everyone responsible for this part should list what they have read (reports, articles, books) or have otherwise learned about through important conversations, emails, etc., with experienced members and knowledgeable non-members in regards to this part. Also, vote how helpful it was and what other systems might also benefit from this reading:

How did your research go? What ways would have optimized you're your searching (practical and dream scenario)?