**BIRDS-X Payload Competition Application Form Phase 2**

Date of Application: 202X/MM/DD

Team name:

1. System Diagram

1.1 System Diagram

Please put detailed system diagram of your designed payload including each component and the interfaces for communication between the components.

1.2 Pin Assignment

Please put the pin assignment for the 50-pin connector your team will use and specify which power line(s) will be used for the components in the payload (5V only, 3.3V only or both)

2. Bill of Materials (BOM)

Please put a BOM below. Do not forget to put operating temperature range of each component.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | Component | Provider | Model number | Cost (USD) | Operating Temperature |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 5 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 7 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| 9 |  |  |  |  |  |
| 10 |  |  |  |  |  |

3. Feasibility

Please show the functionality test and feasibility of your Bread Board Model (BBM) in terms of power, mass and volume, concept of operation, preliminary link budget.

3.1 Power

Please show how much power does your payload consume in each mode.

3.2 Mass and Volume

Please show expected mass and volume information of your payload.

3.3 Concept of operation

Please show more detailed concept of operation of your designed payload. Also please mention what are the mission modes for your payload.

3.4 Preliminary link budget

Please check the sensitivity of your designed payload and estimate link budget for communication from ground to space.

4. Safety compliance

Please write how do you plan to avoid interference to other subsystems/missions.

4.1 Isolation system during emergency

Please write how do you plan to isolate the payload from the rest of the satellite during emergencies and what are the precautions taken to avoid interference and harm to other subsystems/missions in the case of failure.

5. Schedule

Please show updated schedule of your payload development.

|  |  |
| --- | --- |
| Year / Month / Day | Event |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
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|  |  |
|  |  |

6. Outreach effort

Please provide the outreach activities your team has carried out after Phase 1 and how you plan to continue.