**Budget**

|  |  |  |  |
| --- | --- | --- | --- |
| Personnel | % Time | Year 1 | Total |
| Dr. Jason Dykes | 50 | $60,000.00 |  |
| Project Manager |  |  |  |
| Bryan Luu | 30 | $21,000.00 |  |
| Electrical Engineer |  |  |  |
| Brian McRee | 30 | $21,000.00 |  |
| Maintainability Engineer |  |  |  |
| Jacob Sanchez | 30 | $21,000.00 |  |
| Software Engineer |  |  |  |
| Daniel Lee | 60 | $24,996.00 |  |
| Lead Technician |  |  |  |
| Lab Technician 1 | 90 | $31,500.00 |  |
| Lab Technician 2 | 90 | $31,500.00 |  |
| Lab Technician 3 | 90 | $31,500.00 |  |
|  |  |  |  |
| Total Salaries |  | $242,496.00 |  |
| Fringe Benefits |  | $82,033.80 |  |
|  |  |  |  |
| Total Personnel |  | $324,529.80 | $324,529.80 |
|  |  |  |  |
| Equipment |  |  |  |
| 6 B&K Precision 1823A |  | $2,820.00 |  |
| RF Generator |  | $2,000.00 |  |
|  |  |  |  |
| Total Equipment |  | $4,820.00 | $4,820.00 |
|  |  |  |  |
| Travel |  |  |  |
| 2 person-trips per year |  | $1,200.00 |  |
|  |  |  |  |
| Total Travel |  | $1,200.00 | $1,200.00 |
|  |  |  |  |
| Supplies |  |  |  |
| Cables, Surface mounts, |  | $5,000.00 |  |
| MCU, and RF absorbent Material(RAM), |  |  |  |
| External hard drive, and structure materials |  |  |  |
|  |  |  |  |
| Total Supplies |  | $5,000.00 | $5,000.00 |
|  |  |  |  |
| Total Direct Cost |  | $335,549.80 | $335,549.80 |
| Indirect Cost |  | $99,218.94 | $99,218.94 |
|  |  |  |  |
| **Total Budget** |  | $434,768.74 | $434,768.74 |

**Budget Justification**

* Personnel
* Dr. Jason Dykes
* Project leader organizing the meetings and provide technical knowledge to resolve issues when necessary as stated in Key Personnel.
* Lab Technicians
* Three lab technicians are needed for the testing to go smoothly. It is essential that we have two peoples during the testing of the chips to ensure that the experiment and data collection goes smoothly. The third person will mainly focus on documentation of the experimental methods and will start on plotting the gathered data looking for possible trend lines to present at the weekly meetings.
* Equipment
* B&K Precision 1823A
* Extra are bought to follow the rule of “one is none and two is one”.
* Travel
* Two Person Trips
* This is for possible events where information could be given to help us in our research efforts.
* Supplies
* Misc. Equipment
* This is the equipment needed to build the device that is going to be used to hold the MCU’s, materials to house the MCU’s, external hard drives that might be needed to hold the data, and the MCU’s themselves.