Project Title

# Description

A device/product which does X and Y or solves problem Z

# Constraints

Power: Particular power source/ specific battery life

Dimensions: Must fit a specific enclosure

Input/Output Interface:

Specific Components

\*These are examples.

# Features

* Can do X
* Connects to Y
* Control Z
* Senses A

# Block Diagram

Having a block diagram is imperative for a quick design process. DRAW.IO is a decent tool.

# Components

MCU/MPU/FPGA/ASIC: Part number of the main IC

|  |  |  |  |
| --- | --- | --- | --- |
| Criteria | IC 1 | IC 2 |  |
| Price | $ | $ |  |
| Package | QFP/QFN/BGA/SOIC…etc |  |  |
| Manufacturer |  |  |  |
| Current | Max current consumption/rating |  |  |
| Input Voltage | Min – Max voltage/ nominal voltage |  |  |
|  | Mark selected component in green |  |  |
|  |  |  |  |

## Component 1

# Power Budget

|  |  |  |  |
| --- | --- | --- | --- |
| Component | Voltage/s | Current/s | Power |
| Part number 1 | Voltage 1, Voltage 2, Voltage 3… | Current 1, Current 2, Current 3… | Total Power |
| Part number 2 | Input Voltage | Current Consumption | Power |
| Part number 3 | Input Voltage | Current Consumption | Power |
| Total | Total power in Watts | | |

\*Some ICs have multiple voltage rails with different voltage levels.