MP-1

Quad UAV Interfacing

# Flight experience

Describe your experiences in practicing controlling the quad.

# Describe PPM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Channel # | Min w/o Trim | Max w/o Trim | Min | Max | Description |
| 1 | 0.602 | 1.622 | 0.602 | 1.622 | Left dial |
| 2 | 0.601 | 1.632 | 0.601 | 1.632 | Right dial |
| 3 |  |  |  |  | Left stick(H) |
| 4 |  |  |  |  | Left stick(V) |
| 5 |  |  |  |  | Right stick (V) |
| 6 |  |  |  |  | Right stick(H) |

# Concerns About Connecting to ZedBoards

The transmitters use 5 V but the zedboards use 3.3 V. We will have to use a level shifter to convert between the two. The connectors that we have in lab also limit what pins on the pmods that we can use.

\*\*Note about the cable\*\*

Red is Vcc. White is data/signal. Black is ground.

# Structural Diagram

/\* place diagram here \*/

The AMBA bus has an array of two Integers called IPIF\_ARD\_NUM\_CE\_ARRAY. This holds two ‘spaces’. The soft reset space and the user logic slave space. The first is set to zero, therefore there are no clock enables in the soft reset space. The second is set to one, therefore there is one clock enable in the user logic slave space. These values get added and placed in to the signals ‘ipif\_Bus2IP\_RdCE’ and ‘ipif\_Bus2IP\_WrCE’. These signals are used directly to indicate the value of ‘user\_Bus2IP\_RdCE’ and ‘user\_Bus2IP\_WrCE’ respectively.