Griffith UNIVERSITY

Griffith School of Engineering

PROFESSIONAL PRACTICE
CATEGORY A, B & C ACTIVITY LOG SHEET

1. PERSONAL DETAILS

Griffith identification Number						
5	1	3	8	8	7	7

Family Name: Barber

Other Names: Jessy

2. PROFESSIONAL PRACTICE ACTIVITY

CATEGORY (See Note 1): **A**

Days (See Notes 2 & 3): **5**

Week Beginning	**30 / 1 / 2023**	**Week Ending**	**3 / 2 / 2023**
Supervisor Name: Alex Forward		**Contact Ph:** +61755492370	
Organisation Name: Gilmour Space Technologies		**Email:** alex.forward@gspace.com	
Organisation Address: 5 Millenium Circuit Helensvale			

3. ACTIVITY DESCRIPTION & REFLECTION

Description of Activities Undertaken: (Approximately 50 words)
This week was focused on taking the insight from the critical design review and applying these changes to my PCB. This included a reworking of the EMI and ESD protection, some trace routing and choosing a different optocoupler component due to a thorough analysis of the system current draw. These changes were added to an updated design review slide pack and sent to the review team.

Discuss the Engineering Application Abilities Developed: (Approximately 50 words) (See Note 5)
The iterative process of design for this PCB via the design review was an example of systematic engineering design, proficiently applying technical knowledge and open-ended problem solving to fix design issues that were present with the initial PCB design. This experience has opened my eyes to the importance of iterative system design for electronics and how important from design review is in the context of holistic system design.

Discuss the Professional and Personal Attributes Developed: (Approximately 50 words) (See Note 5)
To solve the EMI and ESD issues with the PCB, and to gain a greater understanding of the component current draw from the processor I really had to become closely familiar with electromagnetic design and electronic theory in terms of PCB design. This was an example of being aware of the broader fields of science as electromagnetism, electro-static discharge and radio frequency design are complex topics that greatly influence the design of electronics. Attaining a grasp of these theories I was able to redesign my PCB whilst adhering to physical constraints, developing new ideas from professionals in other fields, such as the lead radio frequency engineer, to finalize the design of my PCB.

4. STUDENT SIGNATURE

Student Signature:

Date:

Notes:
1. See the table provided in the Activity Log Guidelines for the definition of each category of professional practice.
2. For work experience paid on a casual hourly basis, a day of work is taken as 7.25 hours.
3. Only days between Monday and Friday can be counted for research undertaken at Griffith University in Category B Professional Practice, unless prior approval has been granted by the course convenor for 6008ENG.
4. At least one Activity Log Sheet must be provided with each Record Sheet for Professional Practice in categories A, B and C.
5. Refer to the Engineers Australia Stage 1 Competencies.