#### Flash-IOT

# Weekly Team Meeting 02/13

13 FEB 2020 / 2:30 PM / VLSI LAB

### **ATTENDEES**

Dr. Ay, Dr.Li, Xueren Wang, Wei Hu, Zhicai Li, Yanqin Huang, Yuhang Dai

#### AGENDA

- Discuss the performance of photodiode module
- Discuss the process for PCB manufacture of TR module

#### **NOTES**

- Discuss the performance of photodiode module
  - In our first test, we compared the duty cycle measured on the oscilloscope with the generated signal in ambient light condition and no light condition for different frequency. The purpose of the test is to decide the resolution in duty cycle for the PWM. In our test, we observed when the frequency gets higher, the range of duty cycle that can be observed on the oscilloscope dropped significantly. And in no light condition, the performance increases. However, in our test, we made two mistakes:
    - Lens direction was inverted
    - We didn't calibrate the lens before testing
  - We will perform the second test and fix the mistakes. Dr. Ay helped us to build an
    environment for testing no light conditions.
- Discuss the process for PCB manufacture of TR module
  - We decided to fabricate our TR module in China if it is possible to ship to the United States.
  - We estimated the time from tape-out to receive the product which could be three weeks

- 1 week for fabrication
- 2 weeks for shipping
- Therefore, we decided to design the schematic this weekend so that we can tape-out by next week.

## **ACTION ITEMS**

- Prepared the slides for the second design review next week.
- Design the schematic and finished PCB by next week.
- Perform Tests on the Bit Error Rate.