

Weekly Team Meeting 10/10

10 OCTOBER 2019 / 2:30 PM / ISGC Conference Room

ATTENDEES

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AGENDA

- Show the LEDs and photodiode models that can be used in our project
- Show the board that we plan to use in the project
- Discuss Snapshot Day#1 preparation
- Show circuit design for suppressing room light noise

NOTES

- Show the LEDs and photodiode models that can be used in our project:
 - We need to find a pin photodiode to match VAOL-3GWY4 LED
 - High sensitive around 400-500nm.
- Show the board that we plan to use in the project
 - We can borrow it from laboratory(JJ).
- Discuss Snapshot Day#1 preparation:
 - Prepare 9-12 pages of information of this project, which can include:
 - Photo of all Team members.
 - Timeline of this project.
 - Requirement of this project.
 - Instructor and client information.
 - What we have learned of this project.
- Show circuit design for suppressing room light noise:
 - OOK
 - TIA must have an Effect input
 - Ground voltage can be non-zero like 2.5V
 - VR tack the high peak value of PD
 - Return to zero OOK
 - Low power consumption.
 - High pass filter
 - Put a current source parallel to PD.

- Total input current must be DC.
- Design another block of voltage control current source.
- We can put another Low-pass filter for the high frequency noise.
- Not easy to put it in integrated circuits.

ACTION ITEMS

1. Study more about LED and PIN photodiode.
2. Study two type of OOK(return to zero or non-return to zero), finding the advantage and disadvantage of those., and find out does it is good for transistor or receiver.