

Flash-IOT

Weekly Team Meeting 04/16

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ATTENDEES

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AGENDA

- Showing some testing value.
- Showing the CAD module drift.

NOTES

- For testing value
 - At 0.4 meters, photodiode receiver can receive 10 lux of light, the photodiode can convert 0.07 micro ampere. The unit of lux is w/m^2 . It's energy density on the surface.
 - We increase the distance, the lux will drops in square terms. The formula is $I \propto 1/d^2$.
 - When increasing the distance, the current will drop.
 - Its very hard to reach the gain after 14m, because it will occur some problems if we put too large feedback resistors there which will amplifier the noise.
 - For TR module v1.0, in previous testing, under 1m distance the bandwidth only allows 22.314 signal. That's why we could not increase speed, it can only work on 10km

- For TR module V2.0, what we enhance bandwidth is reducing the resistors, also replacing very high bandwidth.
- We've got an improvement on speed with Maximum-3db bandwidth. In previous module, it's not designed for high speed communication.
- For the CAD model of box.
 - We have finished the draft of the module, but this is so much accurate because we will measure the size soon and do some fix on it.

ACTION ITEMS

- We will buy the BOM.
- We will measure the final size of CAD
- We will improvement the testing design.