Development of electronics of a UV monitoring system for spaceborne instruments for future planetary missions

The UV measurement system (in the extreme UV region) is being developed for future planetary missions. The instrument consists of the detectors, front-end electronics and the backend electronics. The back-end electronics consists of the data acquisition system and the processing electronics. The Data acquisitions system consists of the digitization of the analog data coming from the front end (interfacing the ADC), basic processing of the digitised data (in microcontroller/DSP) and relaying the data for storage in external memory.

Scope of work

The work will involve the design and development of the backend electronics for the UV measurement system. It will involve the development and testing of the data acquisition system and the development and testing of the processing electronics.

Academic Project Requirements:

1) Required No. of student(s) for the academic project: **01**

2) Name of course with branch/discipline: **Analog and Digital Electronics, Basic Programming skills (ECE, EEE, CE)**

3) Pre-requisite(s), if any: **knowledge of basic analog and digital electronics**

4) Academic Project duration: **4-6 months**

(a) Total academic project duration (max**.) 22 weeks**.

(b) Student's presence required at PRL for academic project work: **YES. (5 days/week)**

5. Preferred mode of training: ~~Online~~/**Offline**/~~Partial online~~ and partial offline (strike off whichever is not applicable)

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