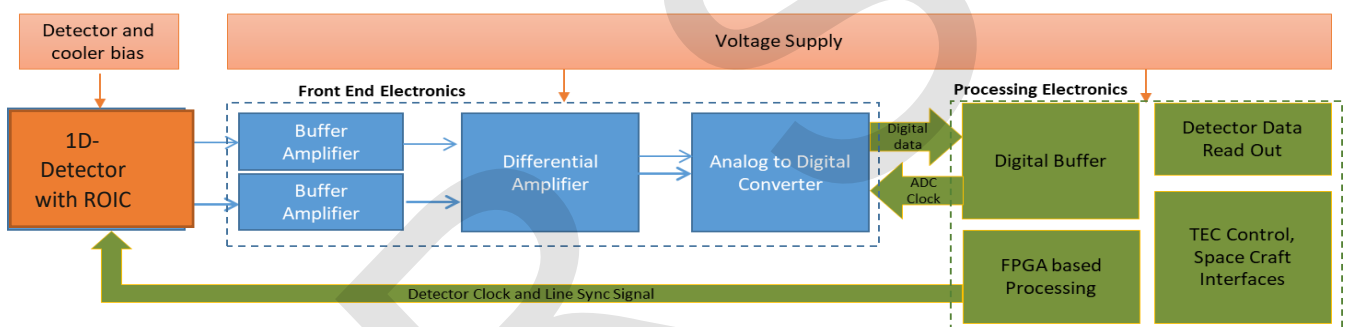


Electronics for 1D NIR Pixellated Detector with Inbuilt ROIC

U R Rao Satellite Centre (URSC) of Indian Space Research Organization (ISRO) has developed Electronics for one Dimensional Near-Infra-Red Pixelated Detector which comes with inbuilt read out integrated circuit (ROIC).

Salient Features

- The electronics system is capable of generating 1D Images the 256 pixel NIR detector having inbuilt ROIC.
- Low noise (<2 mV per pixel) and low power (2 W) electronics system capable of reading up to 256 linear pixel data either individually for Imaging applications or in summation for photometry mode.



Major Specifications

- Detector noise < 2 mV per pixel at 100KHz readout.
- Detector SNR >100 at 0 degC.
- Readout modes –
 - Individual Pixel Readout
 - Sum of Pixel Readout
- Up to 11 bits digitization.
- Suitable for detectors with differential output of 2.5V dynamic range and requires a clock and a synchronised pulse as the input.
- The Charge Integration Time is Programmable from 10ms to 1000ms.
- Pixel Saturation Detection Implemented.
- Programmable TEC controller for maintaining the detector temperature.

Technology Transfer

URSC-ISRO offers to transfer this technology of Electronics for 1-D NIR Pixelated Detector which comes with inbuilt ROIC by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

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