



Advance High Data Rate Modulators

Advanced High Data Rate Modulator

Salient Features

- Complete Digital implementation for GEO-optical payload
- Tele-command configurable modulation schemes

- 16-APSK modulation: 2Gbps/ 675MHz BW
- 8-PSK modulation: 1.5 Gbps/ 675MHz BW
- QPSK modulation: 1 Gbps/ 675MHz BW
- Root raised cosine filter with $\alpha=0.35$
- Two 1.575Gbps SERDES interface for data acquisition, Virtex-5 FPGA, Wide band clock synthesizer, High speed DACs
- DAC and RF Gain flatness response compensation in FPGA
- Two DAC synchronization for external IQ modulator
- Temperature cycling completed in -10°C to 60°C

Technology Transfer

SAC/ISRO offers to transfer this technology of the **Advanced High Data Rate Modulator** developed by SAC to industries in India with adequate experience and facilities. Enterprises interested in obtaining knowhow may register and submit their proposal to IN-SPACE, Ahmedabad at www.inspace.gov.in

For more details, Contact:

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