# TECHNOLOGY TRANSFER

#### **Interest Exploratory Note**

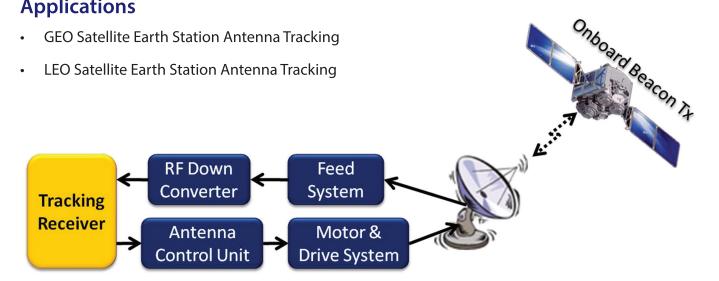
# **Two-Channel Digital Monopulse Tracking Receiver for Earth Station**

The two-channel digital monopulse tracking receiver for earth station is a 70-MHz monopulse tracking receiver. The monopulse tracking receiver is one of the sub-systems of monopulse antenna tracking system in large earth stations. It generates DC error signals proportional to antenna off-pointing by processing the input IF signals in digital domain. These output error signals are used to drive the antenna in appropriate direction to correct the off-pointing error.



### **Applications**

- GEO Satellite Earth Station Antenna Tracking
- LEO Satellite Earth Station Antenna Tracking



Department of Space has authorised NSIL for Technology Transfer of Two-Channel Digital Monopulse Tracking Receiver for Earth Station to suitable entrepreneurs/ Industry in India. Interested Parties may please fill the enclosed form and send by email to contact-nsil@isro.gov.in

# TECHNOLOGY TRANSFER

#### **Interest Exploratory Note**



- Wide Tracking Range : 70 MHz ± 250 KHz
- Wide dynamic range
- : 80 dB
- Selectable loop BW : 300 Hz, 1 KHz and 3 KHz
- Low input C/No threshold : 36 dBHz
- Selectable Tracking Range : 50 KHz, 150 KHz & 250 KHz
- User friendly Monitoring & Control for Local and Remote operation
- Save/ Recall configuration for different satellite
- DC Error signals output : Analog and Digital
- Low cost, flexible, easier production
- 19 inch rack mountable 3U chassis

#### Testing

•

- POC model has been tested using Stimulus Generator in laboratory
- Completed in-system-testing at MCF, Bhopal and successfully tracked various satellites