



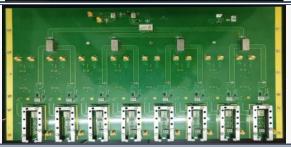
AN ISO 9001:2015 CERTIFIED ELECTRONICS SYSTEM DESIGN AND DEVELOPMENT COMPANY

## Table 1 - 8 CHANNELS FREQUENCY DOWN CONVERTER:









This unit has a single four layer PCB enclosed in 2U/3U 19" temperature controlled chassis. The receiver is an 8 channel board which converts the RF signal to IF signals approximately 20MHz. 8 IF outputs from this unit are fed to the Digital unit. All the eight channels are identical and the specifications of one channel are as below:

- IF frequency: 20 MHz
- LO frequency: 182.5MHz, 345MHz and 670MHz @ 10 dBm
- LO monitor: -10dBm max
- RF Input: 162.5MHz, 325MHz and 650MHz, Max +10dBm
- RF monitor Ouput: -10 dBm max, Channel to Channel isolation = -70dbm
- · Gain in the path of IF out: 16.7dB
- The board also contains RF, LO and IF low pass, SSB mixer, band pass filters, RF amplifiers,
- Attenuators and provision for monitoring signals at various levels
- PCBmaterial and thickness: ROGERS RO4350B 30mil on top layer with FR4 for other layers, 1.6mm

THIS HAS BEEN DEVELOPED FOR BARC, MUMBAI FOR IIFC COLLABORATION WITH FERMILABS, US REQUIRED IN ACCELERATOR CONTROL APPLICATION.