RF Board - LINC transmitter

- RF Switch 50 Ohm
  - 500 – 6000 MHz
  - PC control

- Digital VGA
  - LO/RF range from 2000 to 6000 MHz
  - LO power 0 dBm

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  - LO/RF range from 2000 to 6000 MHz
  - LO power 0 dBm
  - IF range DC-1000 MHz
  - IP3 = 20 dBm at center band

- Digital Attenuator
  - Frequency Range DC to 6 GHz
  - 3 dB steps to 45 dB
  - 2.5 dB Insertion Loss

- ADF4350 PLL synthesizer
  - REFIN range 10 to 105 MHz
  - FREF range 10 to 105 MHz
  - Frequency synthesizer
  - Frequency range 137.5 MHz (with dividers) to 4400 MHz
  - Output -4 dBm to 5 dBm
  - Programmable PLL frequency dividers

- Clock for IF board 100 MHz
- Clock at 10 MHz

- HCMOS 0.4V to 3.6 V at 100 MHz
- Phase Noise -130 dBc/Hz at 1 kHz
- Tunables ± 1 ppm

- AGC
  - Output power -6 dBm to +7 dBm, for fLO from 500 MHz to 3.3 GHz
  - Output Power from 0.87 to 2.4 dBm, with LO = 0 dBm
  - I/Q input Bias Level = 500 mV

- PLL synthesizer
  - Frequency range 137.5 MHz (with dividers) to 4400 MHz
  - Output -4 dBm to 5 dBm
  - Programmable PLL frequency dividers

- Q1 baseband signal
  - From DAC 2
- Q2 baseband signal
  - From DAC 3

- I1 baseband signal
  - From DAC 1
- I2 baseband signal
  - From DAC 4

- LPF

- RF out 1
- RF out 2
- RF in at 2 – 4 GHz