Interpolation, Decimation & Filters
DAC5688 – Interpolation

Fout=25MHz
Span: 0Hz – 1GHz
1) Fdac=250Mps, Fdata=250Mps, INT=1
2) Fdac=500Mps, Fdata=250Mps, INT=2
3) Fdac=1000Mps, Fdata=250Mps, INT=4
ADS62Pxx – dual 12/14bit up to 125Msps

1. Offset Correction
2. Gain Correction
3. User programmable Filter
4. Decimation Filter
DAC8580 – Integrated Filter

- Relaxed analog filter requirements
- Relaxed computational burden on the processor
- Relaxed burden on the DAC8580 output buffer
ADS1281 – Integrated Filter

- Three cascaded filter stage
  - Variable decimation, 5th order sinc
  - Fixed decimation FIR LPF, with selectable phase
  - Programmable High Pass Filter
- Adjustable: resolution vs. data rate