

# FRINGE GENERATOR

- Fringe Tracking and Phase Switching in Transition Period.
- Frequency offset for WIDAR.

# HARDWARE

- Analog Devices AD9852.
- 48 bit Phase Accumulator.
- 48 bit Frequency Accumulator.
- 48 bit Delta Frequency Register.
- 32 bit Update Clock Divisor.
- 14 bit Phase Adjust.

# EXAMPLE PERFORMANCE

- 256 MHz Clock.
- Initial Phase Accuracy:  $3.8\text{E}-4$  rad.
- Phase Resolution:  $2.2\text{E}-14$  rad.
- Frequency Resolution:  $9.1\text{E}-7$  Hz.
- Tuning Range: DC–85MHz.