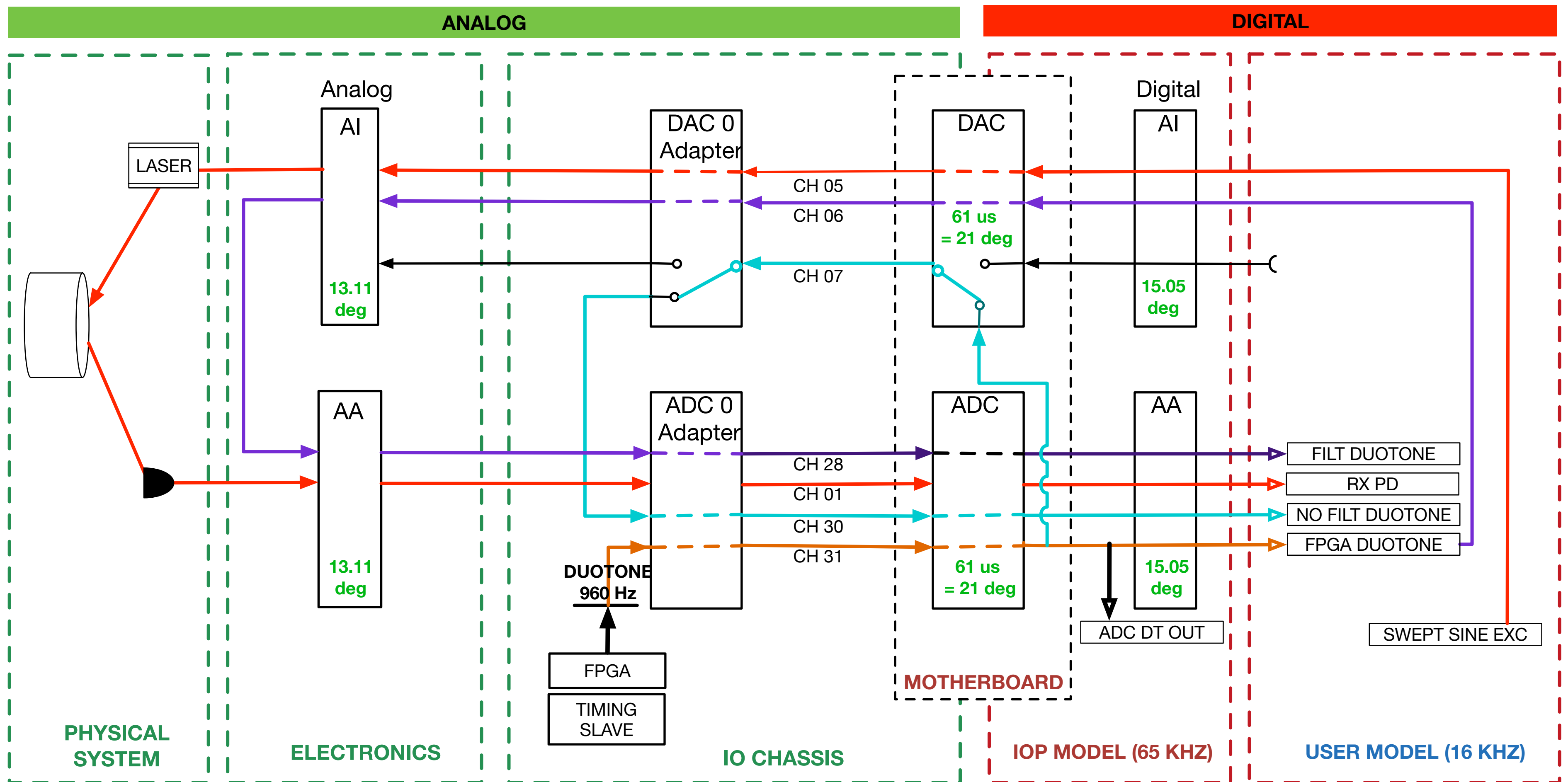


# SCHEMATICS OF PCAL TIMING SIGNALS



All phases referenced at 960 Hz

			Measured Phase (deg)	Measured Delta Phase From 219.4 (deg)	Modeled Delta Phase (deg)
SWEPT SINE EXC	H1:CAL-PCALY_SWEPT_SINE_EXC	T=0	219.4	—	
ADC DT OUT	H1:IOP-ISC_EY_ADC_DT_OUT	T=0	218.6	—	
FPGA DUOTONE	H1:CAL-PCALY_FPGA_DTONE_IN1	T=0	203.8	15.6	15 deg (AAD)
NO FILT DUOTONE	H1:CAL-PCALY_DAC_NONFILT_DTONE_IN1	T=1	182.7	36.7	36 deg = 21 deg (61 us delay) + 15 deg (AAD)
FILT DUOTONE	H1:CAL-PCALY_DAC_FILT_DTONE_IN1	T=2	100.2	119.2	98 deg = 15 deg (AID) + 21 deg (61 us delay) + 13 deg (AIA) + 13 deg (AAA) + 21 (61 us delay) + 15 deg (AAD)
RX PD	H1:CAL-PCALY_RX_PD_VOLTS_OUT	T=2	96.4	123	98 deg = 15 deg (AID) + 21 deg (61 us delay) + 13 deg (AIA) + 13 deg (AAA) + 21 (61 us delay) + 15 deg (AAD)