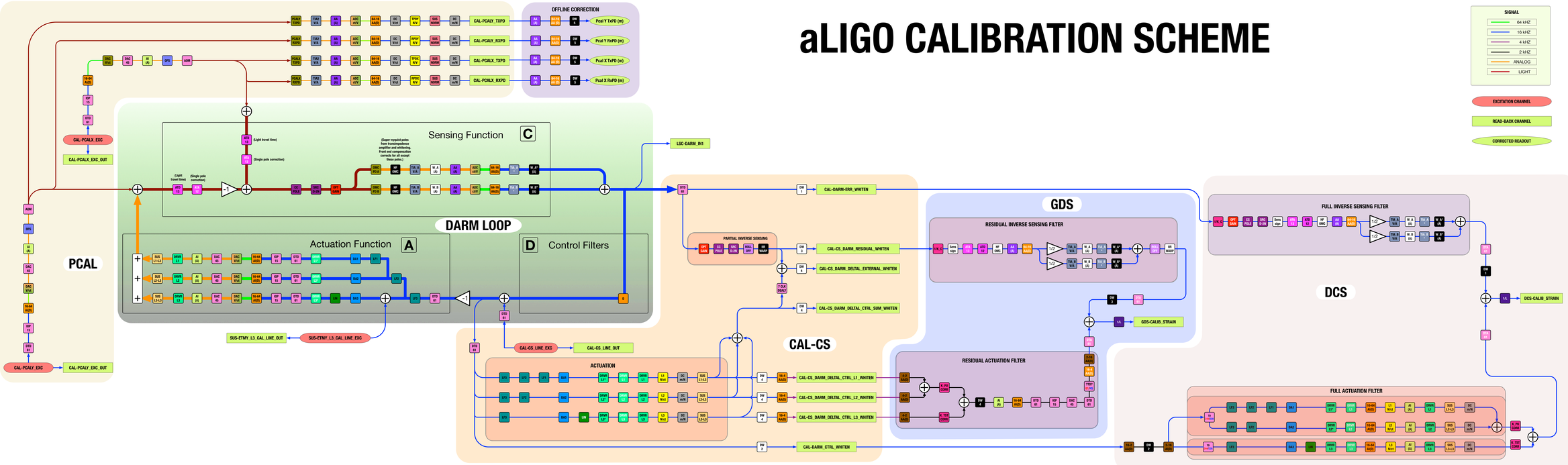
aLIGO CALIBRATION SCHEME



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LEGEND

SIGNAL
- 64 kHZ
- 16 kHZ
- 4 kHZ
- 2 kHZ
- ANALOG
- LIGHT

EXCITATION CHANNEL

READ-BACK CHANNEL

CORRECTED READOUT

	Filter / Delay	Inverse Filter / Advance
TIME DELAY/ADVANCE	TD	TD
DIGITAL WHITENING	DW	DW
ANALOG WHITENING	AW	BW
ANTI-IMAGING (ANALOG)	AI(A)	
COIL/ESD DRIVER	DRVR	DRVR
ANTI-ALIASING (ANALOG)	AA (A)	AA (A)
ANTI-ALIASING (DIGITAL)	64-16 AA (D)	16-64 AA (D)
COUPLED-CAVITY POLE	CC POLE	CC POLE
OPTICAL GAIN	OPT GAIN	OPT GAIN
TRANSIMPEDANCE AMP	TRA	TRA
ANTI-IMAGING (DIGITAL)	2-16 AIDS	16-2 AIDS
ACTUATION COEFFICIENT	L1 N/A	L3 N/A
LOCK FILTER	LCF	LCF
DRIVE ALIGN	DA1	DA2
SUSPENSION	SUS L1-L3	SUS L2-L3
KAPPA CORRECTION	K_TST CORR	K_PU CORR
ANALOG/DIGITAL CONVERTER	DAC V/UE	ADC V/UE
PCAL ACTUATION COEFFICIENT	TEST N/Y	REF N/Y
UP/DOWN SAMPLING	16-4 DAQD	4-16 DAQD
ACTUATION AT DC	DC m/N	
ACOUSTO-OPTIC MODULATOR	AOM	
OPTICAL FOLLOWER SERVO	OFS	
CTS-VOLT CONVERSION	DC V/UE	
NORMALIZED SUSPENSION*f^2	SUS NORM	
PHOTO-DIODE	PD	
SUPER-NYQUIST OMC POLES	SF OMC	SF OMC
IIR FILTER WARPING	IIR WARP	IIR WARP

† The blocks with white letter are inverse of it counterparts in blocks with black letters
* Partial correction (when full correction is not possible)