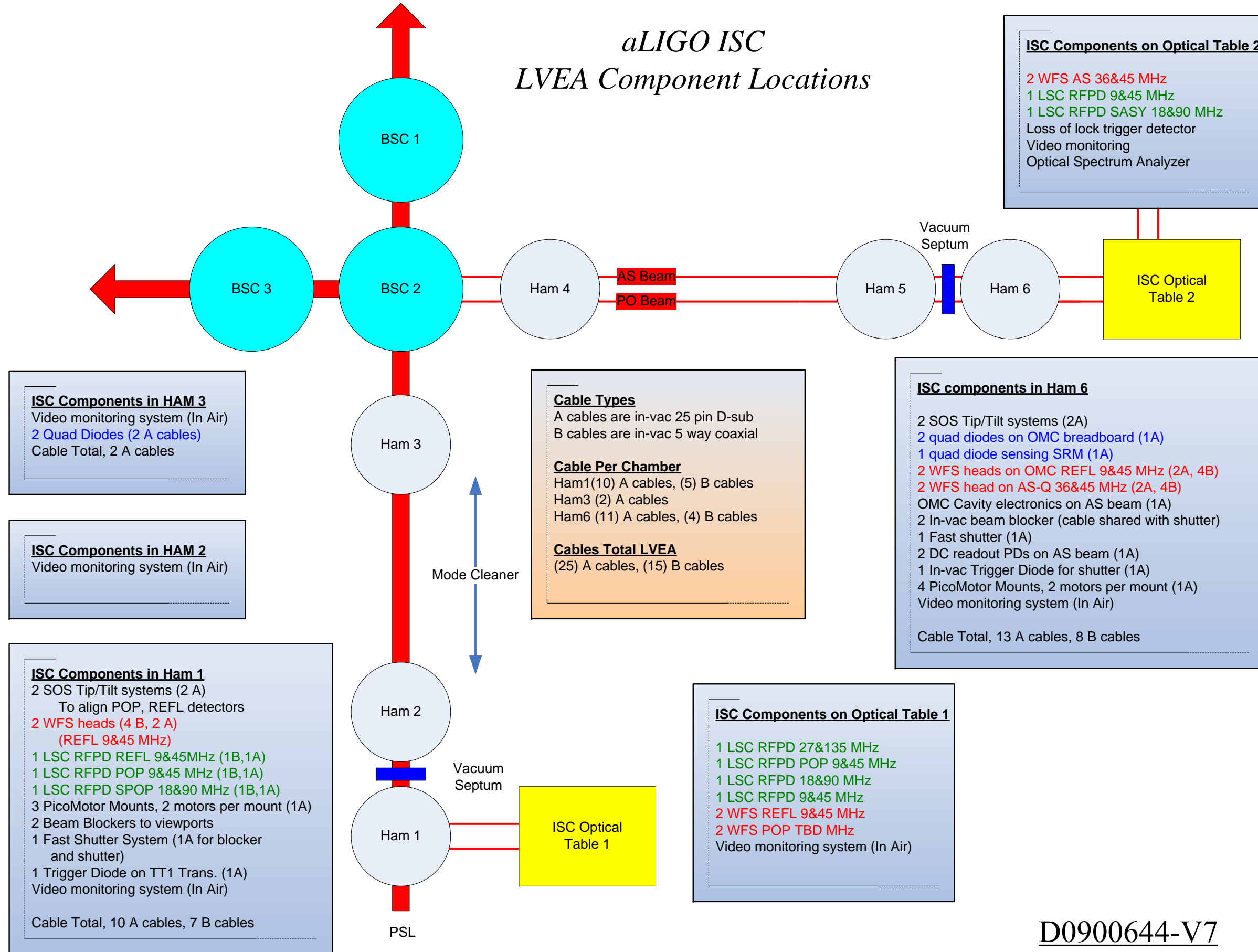


aLIGO ISC

LVEA Component Locations



D0900644-V7

End Station Optical Table

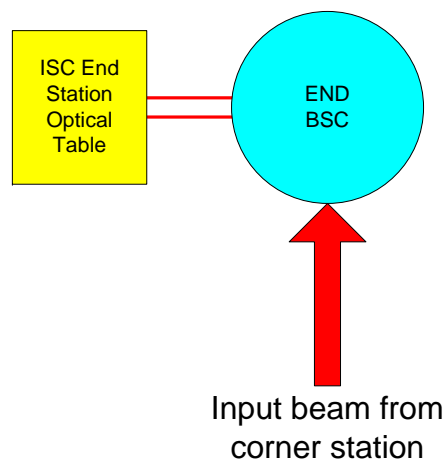
ALS - End Station Optical Table

- (1) DC PD, 532 nm (commercial)
- (1) DC PD, 1064 nm (commercial)
- (1) RF PD @24.5 MHz, 532 nm (PDH)
- (2) RF WFS @24.5 MHz, 532 nm
- (2) XY PZT Steering Mirror (interface to Mad City Labs Module, 2x in, 2x out)
- (1) RF PD broadband BW~, 1064 nm (Phase locking)
- (1) DC PD, 1064 nm (TRX/Y high gain PD for IFO lock acquisition)

Single Arm Test - End Station Optical Table

- (1) RF PD @xx MHz, 1064 nm (PHD Ref Cav)
- (1) DC PD, 1064 nm (Tr Ref Cav, commercial)

aLIGO ISC End-station Component Locations (for one IFO)



ISC Components in End BSC

- 4 PicoMotor Mounts, 2 motors per mount (1A cables)
- 2 ETM TransMon. Quads 1064nm (1 A cable)
- 2 ETM TransMon. Quads 532nm (1 A cable)
- 1 TransMon Beam Diverter (1A cable)

Cable Total – (4) A cables

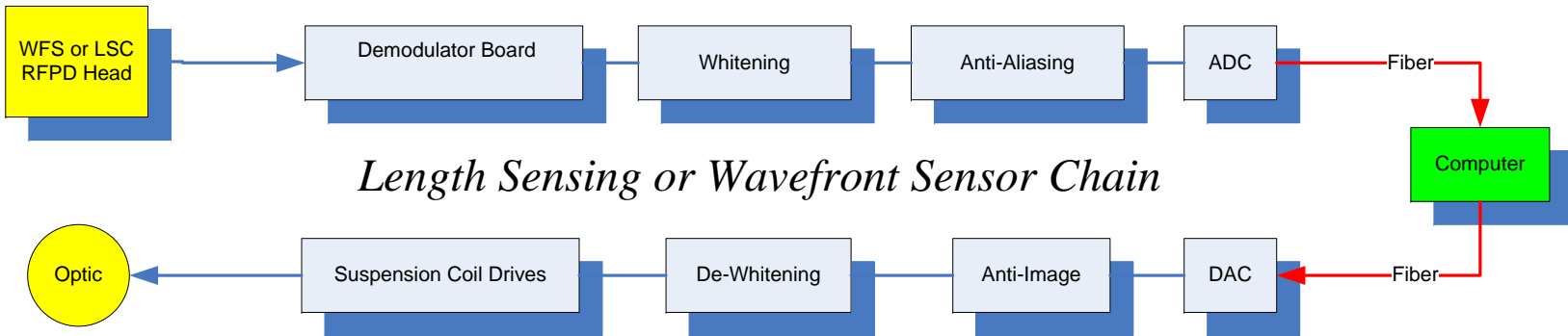
Cable Types

- A cables are in-vac 25 pin D-sub
- B cables are in-vac 5 way coaxial

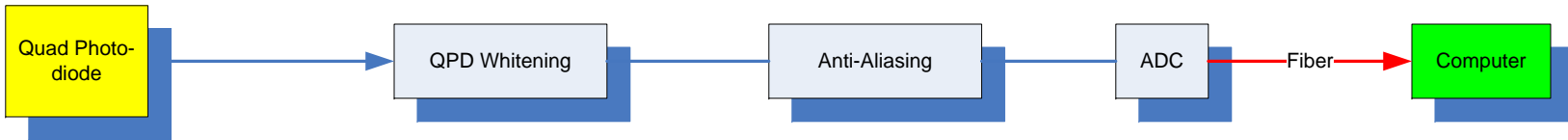
Cable Totals

End BSC (6) A cables

Typical ISC Electronics Chains

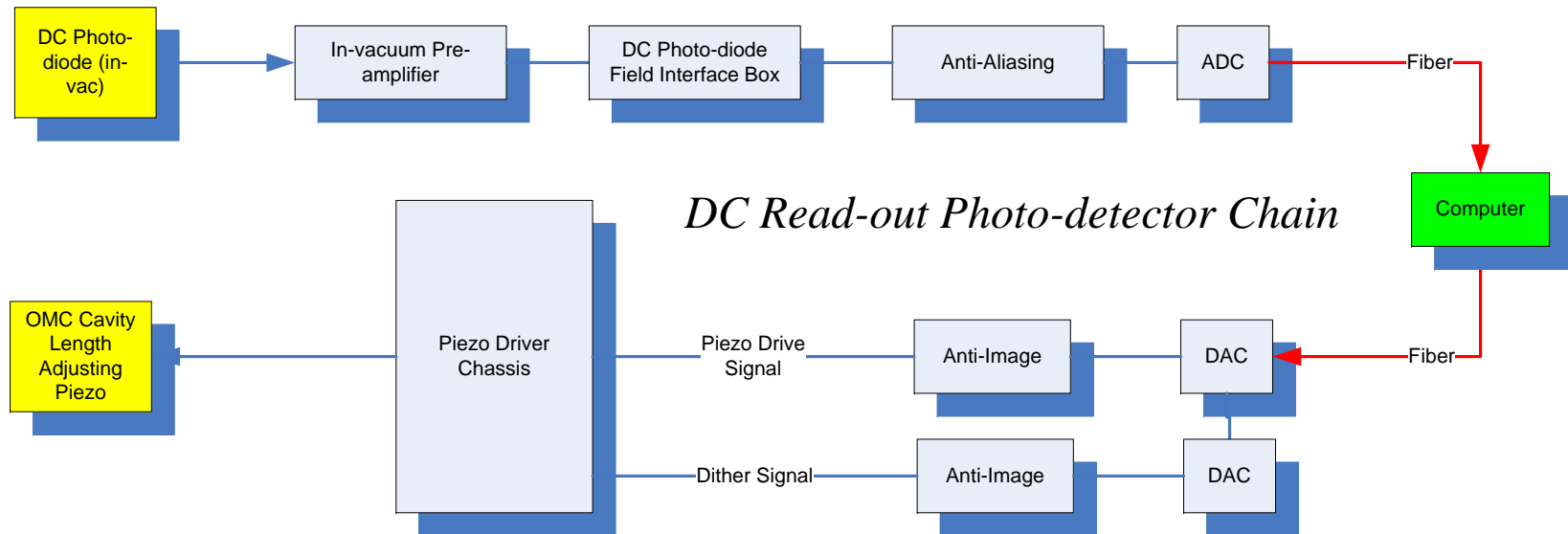


Length Sensing or Wavefront Sensor Chain



Quadrant Photo-diode Sensor Chain

Typical ISC Electronics Chains (Cont.)



RF Demodulation Chain

