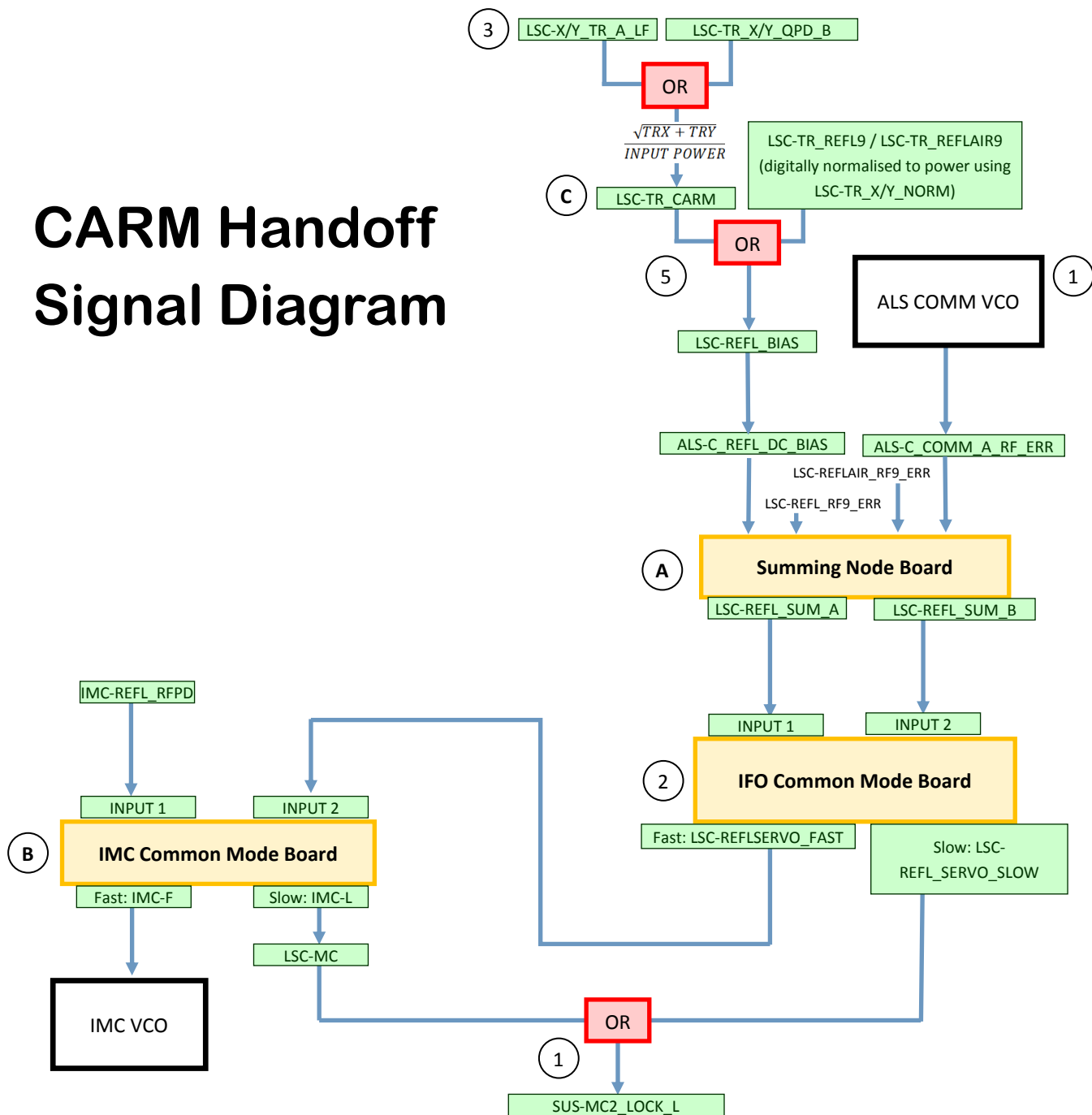


CARM Handoff Signal Diagram



Notes:

- A** There are four inputs and two outputs on the SNB which allows for analogue transition of CARM offsets. For the moment only two of the inputs are being used, with the other CARM transitions happening in digital land.
- B** The inputs into the IMC CMB are combined to control PSL frequency. The IMC-REFLPD gain scales with input power. The IFO CMB fast input is added as soon as there is a signal from ALS-COMM.
- C** The CARM offset is reduced incrementally using LSC-TR_CARM_OFFSET before handoff to REFL9.

Changes in signal inputs during handoff:

- 1** Control CARM through IFO CMB with ALS_COMM. Switch MC2 control from IMC_L to slow output of IFO CMB.
- 2** Transition LSC-TR_CARM from ALS_COMM to LSC_TR_CARM, with control signals coming from LSC_TR_X/Y channels
- 3** Transition LSC-TR_CARM from LSC-TR_X/Y to LSC_TR-X/Y_QPD_B
- 4** (not shown) switch DARM from ALS-DIFF to ASAIR_A_RF_45_Q
- 5** Transition CARM from LSC-TR_CARM to normalised REFL_9 signal.