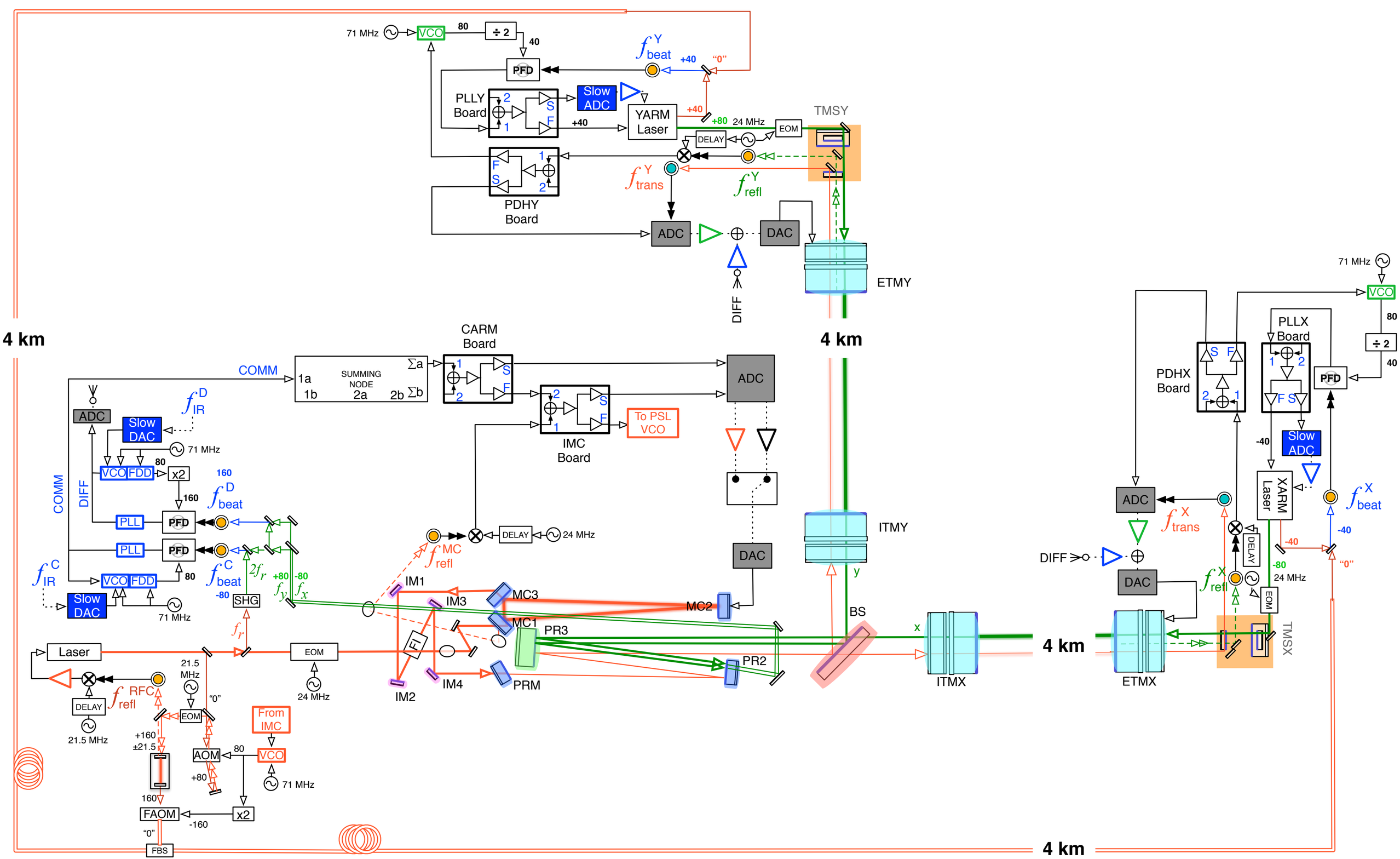
71 MHz
VCO
80
÷ 2
40
PFD
f^{Y}_{beat}
+40
"0"
PLLY Board
Slow ADC
YARM Laser
+40
+80
24 MHz
EOM
DELAY
TMSY
f^{Y}_{trans}
f^{Y}_{refl}
PDHY Board
ADC
DAC
DIFF
ETMY
4 km
4 km
CARM Board
COMM
SUMMING NODE
1a
1b
2a
2b
Σa
Σb
ADC
Slow DAC
f^{D}_{IR}
71 MHz
VCO
FDD
80
x2
160
f^{D}_{beat}
PLL
PFD
IMC Board
To PSL VCO
DELAY
24 MHz
f^{MC}_{refl}
f^{C}_{IR}
f^{C}_{beat}
$2f_r$
+80
-80
f_y
f_x
SHG
f_r
IM1
IM3
IM2
IM4
FI
MC3
MC1
MC2
PR3
PR2
PRM
ITMY
BS
ITMX
x
y
Laser
EOM
21.5 MHz
f^{RFC}_{refl}
DELAY
21.5 MHz
"0"
+160
±21.5
160
AOM
80
+80
From IMC
VCO
71 MHz
FAOM
x2
-160
"0"
FBS
PDHX Board
PLLX Board
XARM Laser
-40
-80
f^{X}_{beat}
f^{X}_{trans}
f^{X}_{refl}
TMSX
ETMX
4 km
4 km