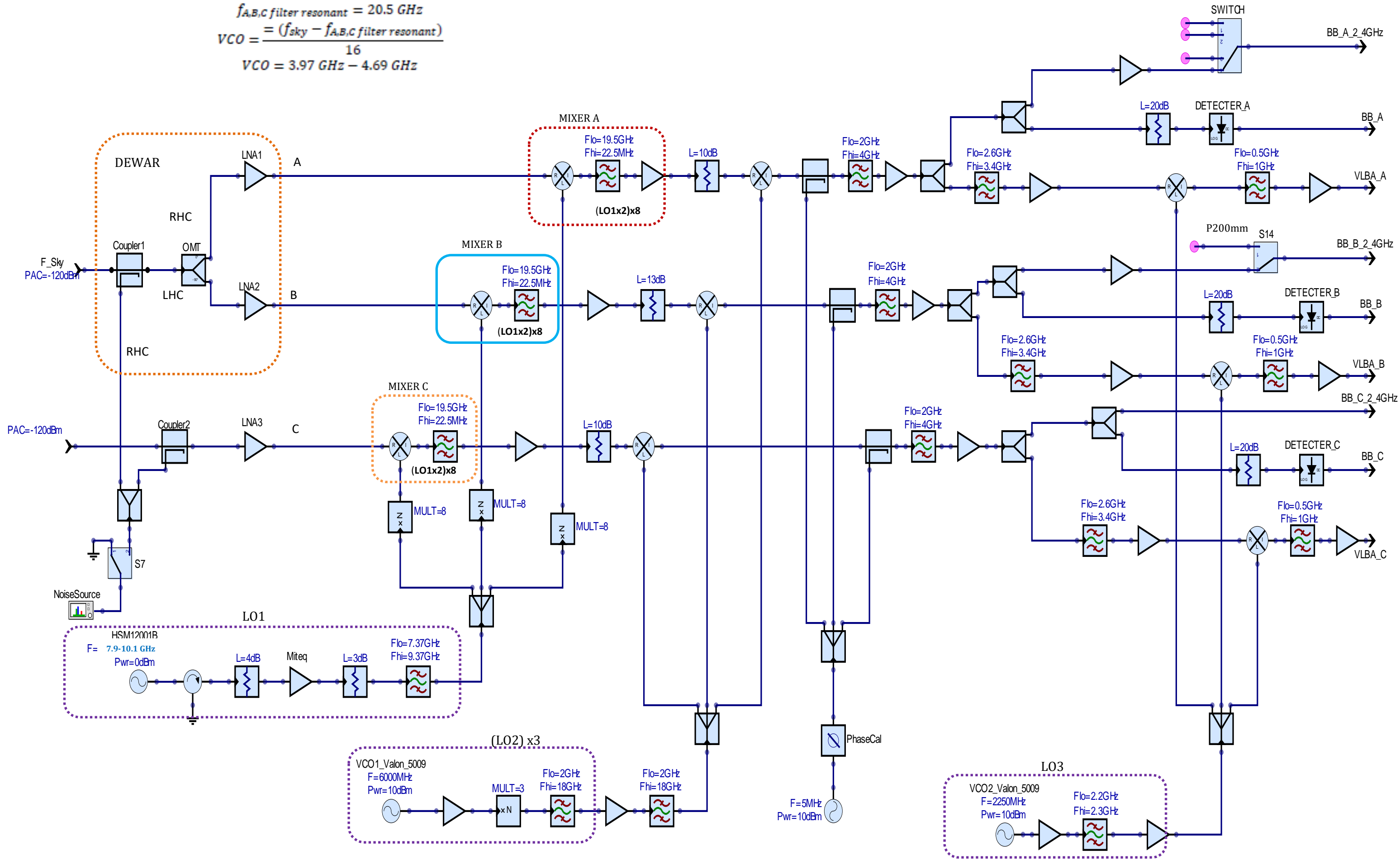


$f_{sky} = 84 \text{ GHz} - 95.5 \text{ GHz}$; MIXER A, B & C Filter Band Width = 2.5 GHz

$f_{A,B,C \text{ filter resonant}} = 20.5 \text{ GHz}$

$$VCO = \frac{(f_{sky} - f_{A,B,C \text{ filter resonant}})}{16}$$

$VCO = 3.97 \text{ GHz} - 4.69 \text{ GHz}$



| MPIFR-EFFELBERG | | | |
|------------------------------|------------|--------------|----------|
| Date | 24.08.2021 | Prepared by: | Z.Kidane |
| 3 mm PFK Receiver (~ 89 GHz) | | | |