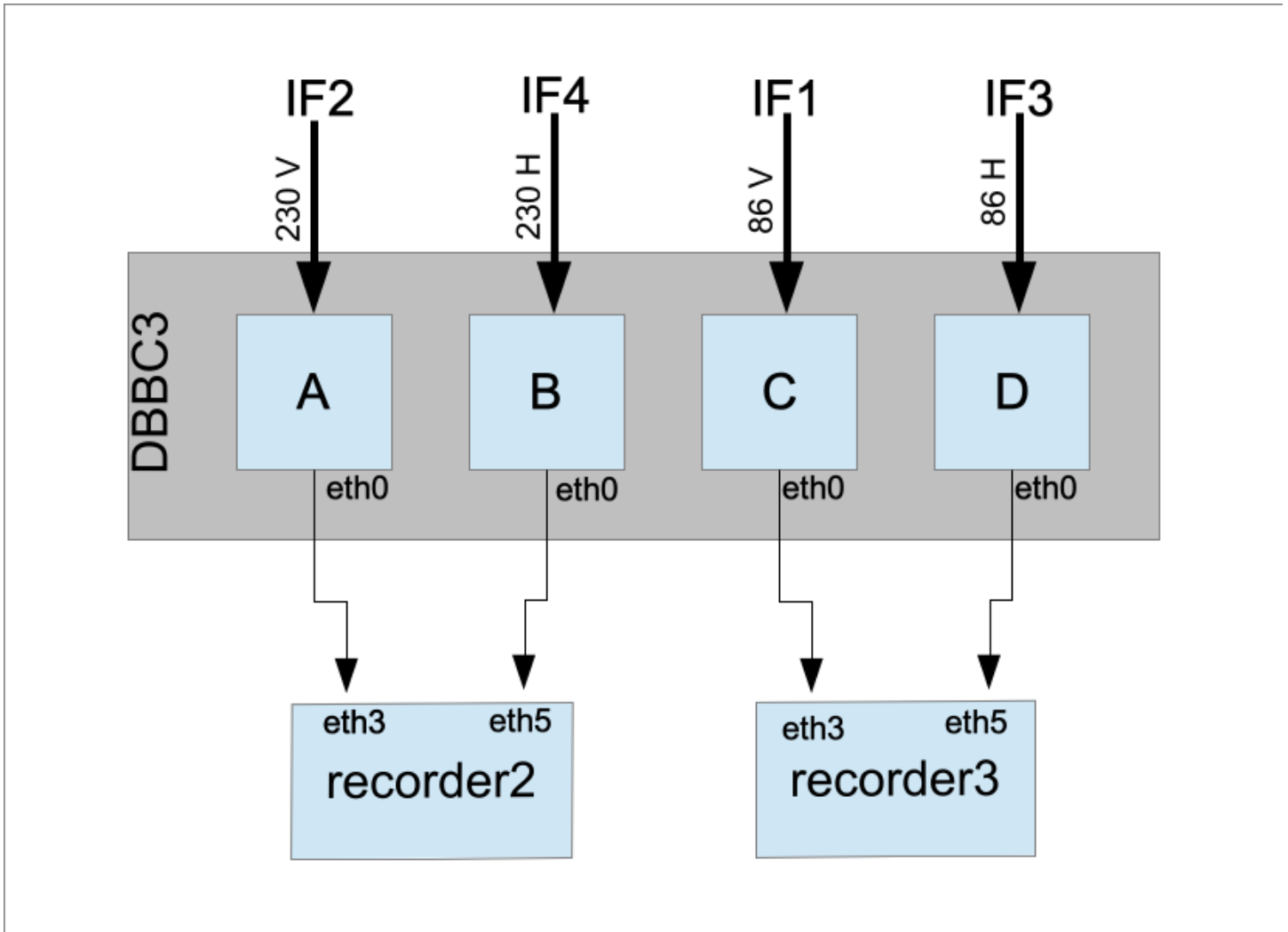


System schematics



Setup 86 GHz

Target band: 86.000 - 88.024

1st LO: 93.0 GHz

RF: LSB 5-9 GHz

2nd LO (DBBC3): 9.048 GHz

Sky freq: 83.952 - 88.048 GHz

sky	83952 =>	86000 =>
after 1st DC	9048	7000
after 2nd DC	0	2048

=> DBBC3 should use filter1= 2000-4000

Setup 230 GHz

EHT target band: 214.010 - 216.058

1st LO: 221.010 GHz

RF: LSB 5-9 GHz

2nd LO (DBBC3): 9.048 GHz

sky	212.004 - 214.052	214.010 - 216.058
after 1st DC	9.048 - 7.0	7.0 - 4.952
after 2nd DC	0 - 2.048	2.048 - 4.096

=> DBBC3 should use filter1+2 = 2000-4000

DBBC3 setup

- load normally the OCT_120 firmware
- run `dbbc3ctl.py` and do `check system all`
- run `/home/oper/rothmann/dbbc3/utilities/setupFPT_Jan24.py dbbc3` (sets the 2GHz filters and the LO freqs)

Modules & Recorders

recorder2

slot 1: EHT%0017

slot 2: EHT%0018

recorder3

slot 1: EHT%0019

slot 2: EHT%0020

module setup (do on both recorders)

```
group=new:12
input_stream=add:stream1:vdif:8224:50:42:eth3:::1
input_stream=add:stream2:vdif:8224:50:42:eth5:::2
input_stream=commit
group=open:12
```

Line injection test (TODO)

230 GHz signal chain

Line freq: 5810 MHz (corresponds to 215.2 GHz sky)

connected to boards A and B (corresponding to IF2 and IF4)

Line is expected to appear at 2248 MHz in base band and at 200 MHz in the filtered band

86 GHz signal chain

Line freq 6800 MHz (corresponds to 86.2 GHz sky)

connected to boards C and D (corresponding to IF1 and IF3)

Line is expected to appear at 2248 MHz in base band and at 200 MHz in the filtered band

Action

- Change GMVA modules to recorder1 (SS)
- Insert new modules to recorders 2 & 3 (SS)
- update google sheet (SS)