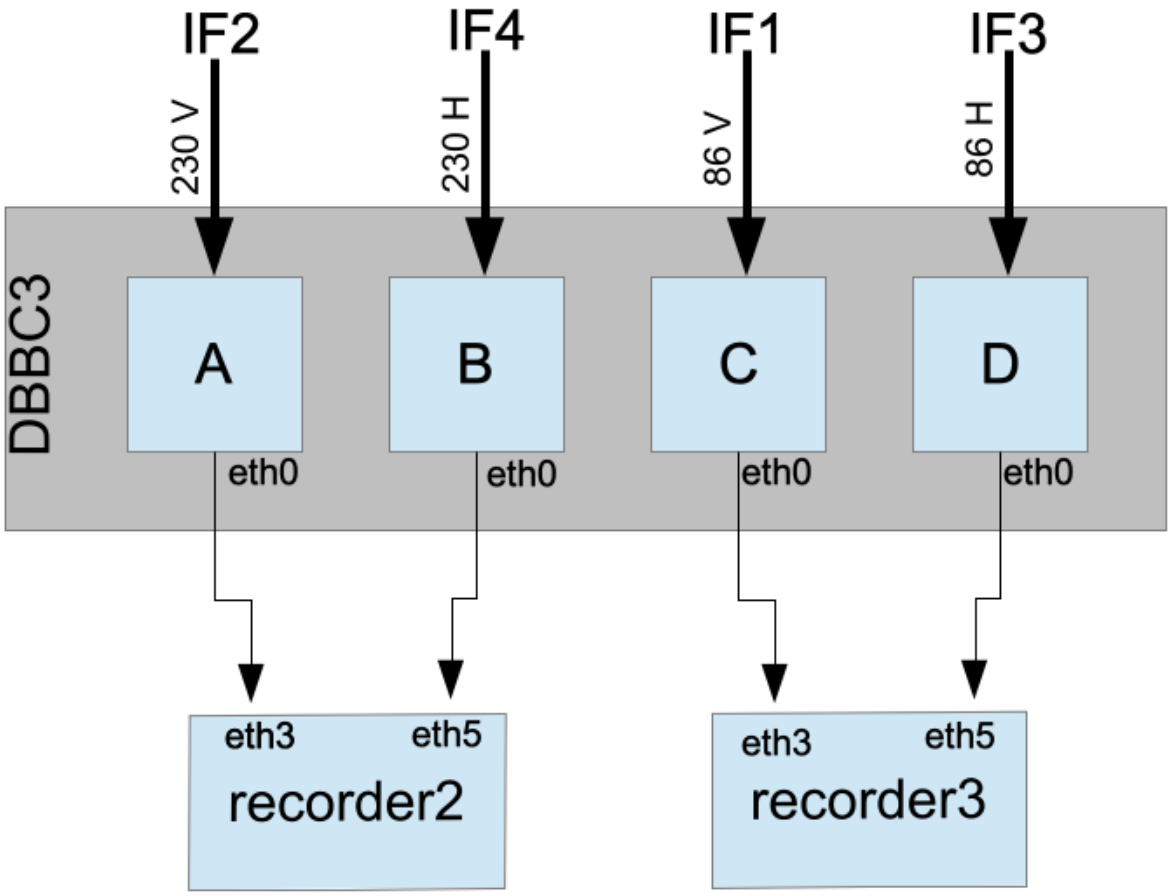
System schematics



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/rottmann/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)~~