## Specialization Project - Weekly meeting

Fredrik Feyling

August 21, 2020

## Specs

| Specifications    |       |           |             |  |  |  |  |  |  |  |  |
|-------------------|-------|-----------|-------------|--|--|--|--|--|--|--|--|
| Parameter         | Value | Unit      | Comment     |  |  |  |  |  |  |  |  |
| Carrier frequency | 5     | MHz       |             |  |  |  |  |  |  |  |  |
| Bandwidth         | 5     | MHz       | 2.5-7.5 MHz |  |  |  |  |  |  |  |  |
| ENOB              | >10   | bits      |             |  |  |  |  |  |  |  |  |
| Noise density     | <8    | nV/rt(Hz) | NF=3dB      |  |  |  |  |  |  |  |  |
| Supply Voltage    | <0.8  | V         |             |  |  |  |  |  |  |  |  |
| Power consumption | <100  | uW        |             |  |  |  |  |  |  |  |  |
|                   |       |           |             |  |  |  |  |  |  |  |  |
|                   |       |           |             |  |  |  |  |  |  |  |  |
|                   |       |           |             |  |  |  |  |  |  |  |  |
|                   |       | <u> </u>  |             |  |  |  |  |  |  |  |  |
|                   |       |           |             |  |  |  |  |  |  |  |  |
|                   |       |           |             |  |  |  |  |  |  |  |  |

## Timeline

| Activity\Week                  | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | Comments  |
|--------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| Literature study               |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | Study system as well as individual blocks.                                  |
| Specify problem<br>description |    |    | х  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| Architecture study             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | Python simulations and analythical calculations for different architecures  |
| Choice of architecture         |    |    |    |    |    | x  |    |    |    |    |    |    |    |    |    |    |    |    |   |
| Implementation                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | Do some kind of implementation to ge<br>an estimate for current consumption |
| Final results ready            |    |    |    |    |    |    |    |    |    |    |    |    |    | х  |    |    |    |    |   |
|                                |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| Report writing                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| Report deadline                | П  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | х  | 19.12.202   |

Today