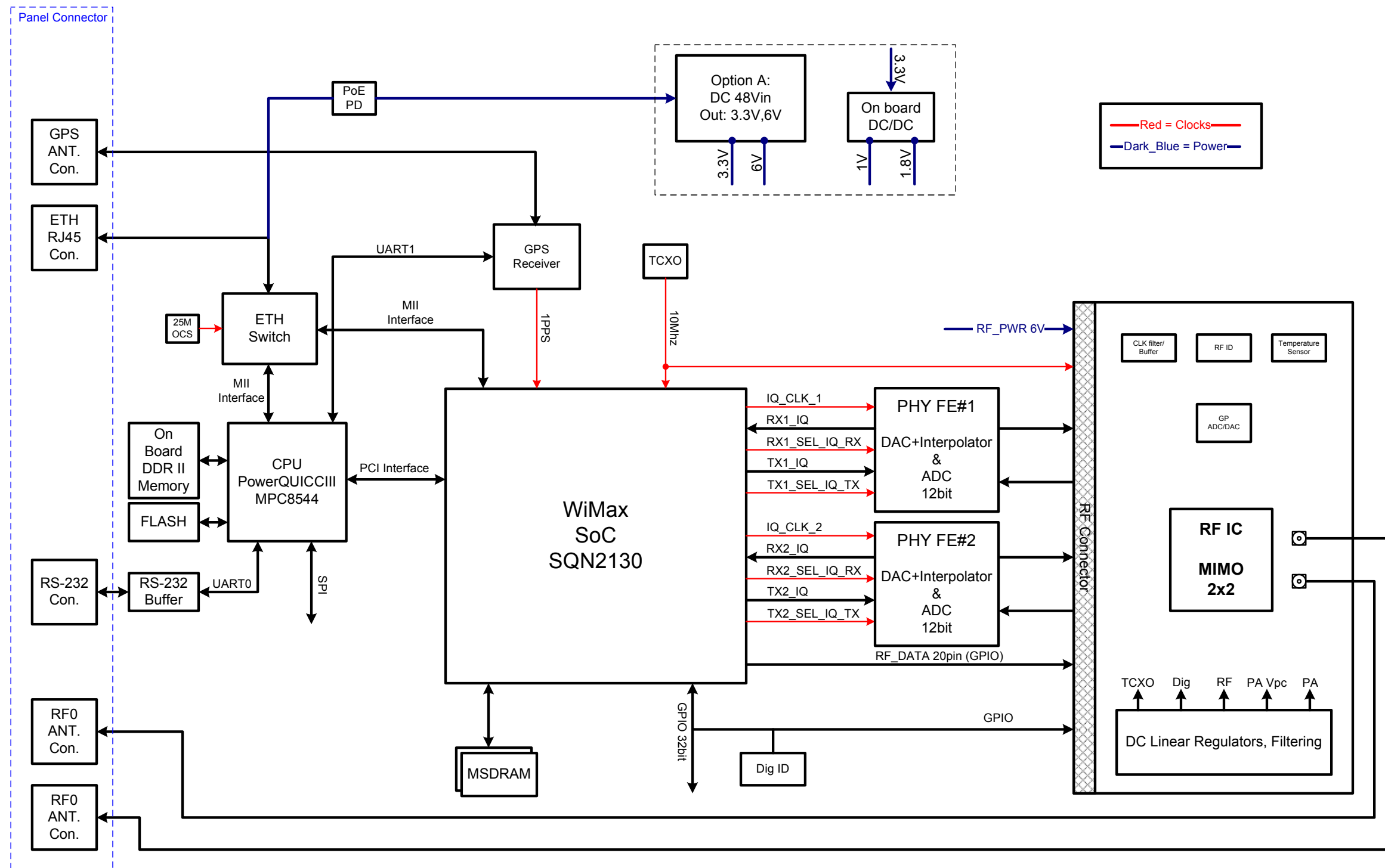


**BLOCK DIAGRAM**



### ***Pico Base-Station Block Diagram***

| Device   | IC                        |   | 1V   | 1.8V  | 3.3V | 6V | Total Power (W) |                    |
|--|---------------------------|---|------|-------|------|----|-----------------|--------------------|
| WiMax SoC  | SQN2130                   | 1 |      | 2     | 0.5  |    | 2.5             |                    |
| SoC MSDRAM - 128Mb SDRAM                               | MT48LC4M32B2B5-7 IT:G     | 2 |      |       | 0.9  |    | 0.9             |                    |
| 12-Bit Mixed-Signal Front-End (MxFE®) Processor        | AD9863                    | 2 |      |       | 1.2  |    | 2.4             |                    |
|  |                           |   |      |       |      |    |                 |                    |
| ETH PHY  | 10/100 Phy                | 1 |      |       |      |    | 0.3             |                    |
|  |                           |   |      |       |      |    |                 |                    |
| CPU Power QUICC II                                     | PPC8313E                  | 1 | 1.02 | 0.266 | 0.32 |    | 1.606           |                    |
| CPU DDRII - 512Mb                                      | MT47H32M16BN-5E IT:D      | 2 |      | 0.44  |      |    | 0.88            |                    |
| CPU NAND Interface Flash Memory - 128 Megabit          | S30ML128P                 | 1 |      |       |      |    | 0.3             |                    |
|  |                           |   |      |       |      |    |                 |                    |
|  |                           |   |      |       |      |    |                 |                    |
| RF - MIMO 2xTx, 2xRx                                   | PMC,SMI,TI.... RF IC + PA |   |      |       |      |    | 12              | RMS 8W-peak per RF |
|  |                           |   |      |       |      |    |                 |                    |
| semi SUM   |                           |   |      |       |      |    | 20.886          |                    |
| PS down converters                                     |                           |   |      |       |      |    |                 |                    |
|  |                           |   |      |       |      |    |                 |                    |
| General: PS efficiency (80%), oring diode, temperature |                           |   |      |       |      |    | 5.2215          |                    |
|  | SUM                       |   |      |       |      |    | 26.1075         |                    |

