

selecta

Fully tunable single frequency GNSS RF Front End for software defined radio applications. Selectable frequencies include:

- GPS L1/L2/L2C/L5
- Galileo L1/E5a/E5b/E6/AltBOC
- GLONASS L1/L2/L3
- Compass B1/B2/B3

Board details:

- VINmin = 5V, VINmax = 24V, I_{max} < 700mA
- MAX2112 DVB-S2 satellite tuner
- 61.44MHz VCXO with software control feedback
- Low noise clock fan-out/divider
- 65Msps dual 8-bps ADC
- CPLD to work as glue logic between MAX2112 and the USB2.0 microcontroller
- USB2.0 microcontroller
- antenna inputs powered with VIN
- Software configuration of the MAX2112, the ADC, the VCXO reference, and the clock distribution chip
- All lines broken out (to enable connection to a FPGA or connecting two together)
- Alternative clock input (SMA) and additional clock output (MCX) onboard



Technical details:

The MAX2112

- I and Q direct conversion receiver
- the LO can tune between 900 MHz and 2400MHz
- has a SSB bandwidth of 4 to 32MHz
- has a configurable gain

The USB2.0 micro

- Sustains transfer speeds up to 30MBytes/sec
- Configures the CPLD
- Configures the MAX2112 gain and registers
- Configures the VCXO reference



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