

Prim



GNSS L1 RF Front End for software defined radio applications capable of GPS/Galileo/Glonass/Compass/SBAS signal reception. Example applications include:

- Vehicle tracking and monitoring
- Location Based Services
- Teaching and research



Board details:

- Maxim/Dallas MAX2769 RF front-end
- $V_{IN_{min}} = 5V$, $V_{IN_{max}} = 16V$, $I_{max} < 150mA$
- Rakon IT3205 0.5PPM TCXO
- Xilinx CoolrunnerII CPLD to work as glue logic between MAX2769 to the USB2.0 microcontroller
- Cypress FX2 USB2.0 microcontroller

Technical details:

The MAX2769

- GPS/GLONASS/Galileo Receiver
- has a bandwidth of 2.5, 4.2, 8, or 18 MHz (18 MHz only in low-pass filter mode)
- has a sampling frequency of up to 40 MHz

The CPLD

- compresses the samples bits in a byte
- performs logic level translation
- performs basic signal conditioning

The USB2.0 micro

- sustains transfer speeds up to 30 MBytes/sec
- configures the CPLD
- configures the MAX2769



Nottingham Scientific Ltd, Loxley House, Tottle Road, Nottingham, NG2 1RT, UK

Tel: +44 (0)115 9682960 Email: enquiries@nsl.eu.com Http: www.nsl.eu.com