

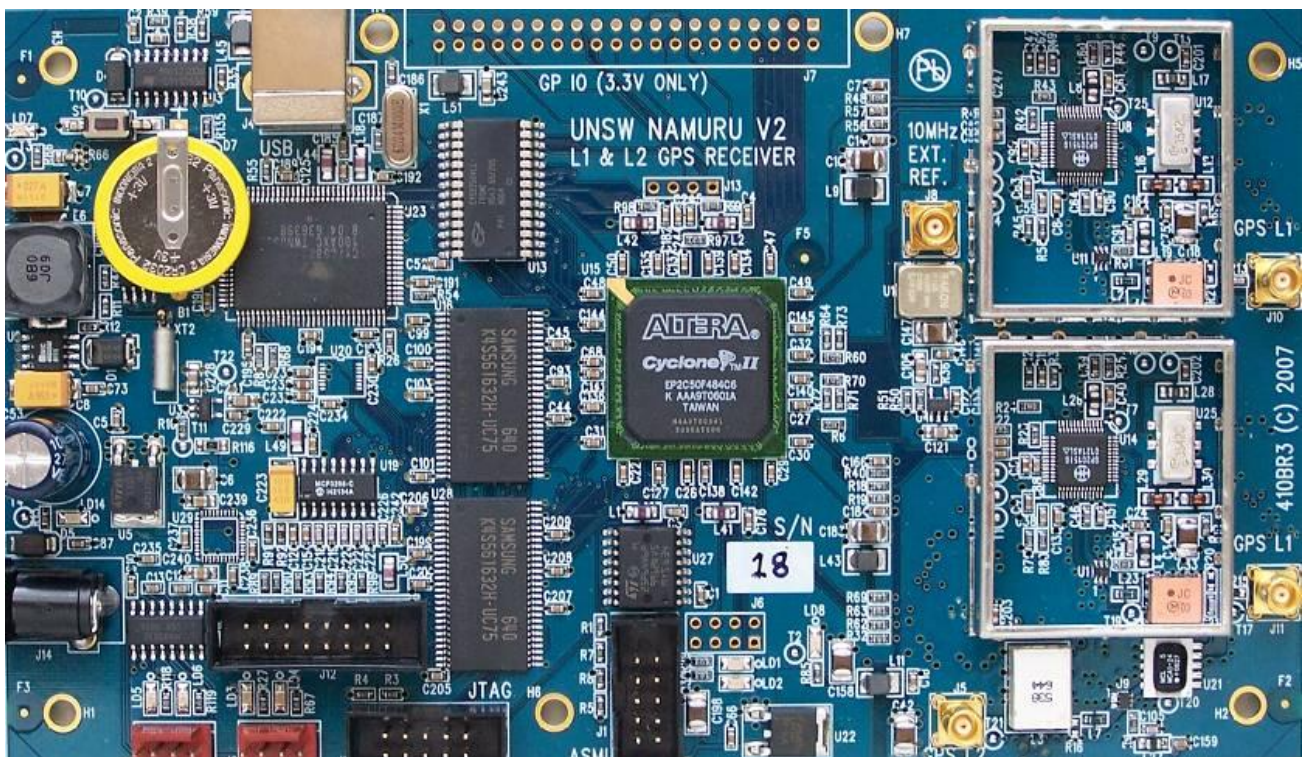
NAMURU V2 GNSS RECEIVER



The Namuru V2 GNSS receiver is a low cost platform ideally suited for research and development of GNSS receivers. The receiver features an Altera Cyclone™ II FPGA with embedded memory and phase locked loop circuitry. The receiver has been designed with a wide range of features to allow a number of different GPS related applications to be researched and developed.

The Namuru receiver is delivered as working GNSS receiver reference design, with fully tested example logic projects showing how to connect the various peripheral components and access the many features. The GPS software delivered is also provided as an example that can be further developed or used as a learning tool.

The source code for the logic, including the GPS baseband processor, is delivered in Verilog. The source code for the GPS software is delivered in C. All code is developed using the Altera Quartus II™ and NIOS IDE tool chains.



Please visit www.dynamics.co.nz for more information and online product ordering

NAMURU V2 FEATURES

Standard

- Dual GPS band RF down-converters for L1 and L2
- 10MHz TCXO source common to both RF channels
- Altera Cyclone 2 EF2C50 FPGA with 50,528 logic elements, 129 M4K RAM blocks, 86 embedded multipliers, 4 PLL's and 294 user I/O pins
- 64Mbit serial flash device for both FPGA image and program code
- 64Mbytes of fast SDRAM
- 32k Bytes of battery backed SRAM
- Battery backed I²C real-time clock
- Power and battery management circuitry
- 8 Channel 12 bit 50 K samples per second A to D converter
- JTAG port for FPGA development
- 30 pin general purpose IO header
- External LVDS FPGA clock input
- External GPS reference clock input
- LED indicators for power and debugging
- Push button reset

Electrical

- Primary power supply - 7 to 9 volts DC @ 600mA
- IO Interface - LVTTTL, 3.3 volts DC only

Communication

- 2 x RS232 serial ports up to 115K bps
- 1 x Fast USB 2.0 port up to 480 M bps

Physical

- Operating temperature -30°C to +80°C
- Humidity - 95% RH, non-condensing
- Size – 100mm x 170mm
- Weight – 105 grams

Optional

- Accelerometer – 3 axis +/- 2.0 g range
- Gyro – 2 axis +/- 500 Degrees per second