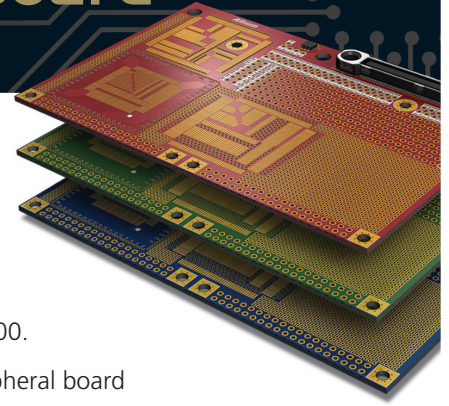


# Altium Prototyping Peripheral Board



## Highlights

- Provides a rapid prototyping space to quickly test out additional hardware resources – made available for use by the User FPGA device on a NanoBoard NB2 or NanoBoard 3000.
- Plugs directly into the peripheral board connector on-board a NanoBoard 3000, or peripheral board connectors A or C of a NanoBoard NB2.
- Pre-defined land patterns for easy location of surface mount devices (with 0.5mm, 0.65mm, 0.8mm, and 1.27mm pitches). Each SMD pad is connected to a 0.5mm hole to allow simple connections using prototyping wire.
- General purpose areas offering 0.1" (thru-hole) and 0.05" pitches.
- Board identification achieved through provision of a 1-Wire compatible slave memory device (DS2502).
- Provides easy access to generic IO and common services.

## Specifications

- Single on-board connector follows standard Altium peripheral board pinout providing easy access to the following generic IO and common services:
  - 50 x general purpose IO (IO01 – IO50).
  - Hard and Soft JTAG signals – allowing for inclusion of a JTAG-equipped physical device such as an additional FPGA resource.
  - Audio signals – Line In (L+R), Line Out (L+R) and Mic In.
  - I2C interface (SDA, SCL) – allowing use of resources possessing an I2C-compatible interface.
  - SPI Bus interface, with two dedicated chip select lines – allowing for up to two SPI-based resources.
  - 1-Wire Bus interface signal (1W) – allowing for use of one or more slave 1-Wire compatible devices.
  - Four pins made available to receive gated clock signals from the NanoBoard's Host (NanoTalk) Controller (3 clock signals and 1 enable signal).
  - Power signals – +5V, +3V3, +2V5, +1V8, +1V2, and GND.
- Standard, double-sized peripheral board.
- 3 standard board colors – red, green and blue.
- High-quality gold PCB finish.

## Availability

- Available in packs of 3 or 20 boards (all colors included in each pack).

## Resource materials

Altium provides extensive online resources designed to get you up and running as quickly as possible.

- Full technical information on the Prototyping peripheral board – [www.altium.com/wiki/pb30](http://www.altium.com/wiki/pb30)