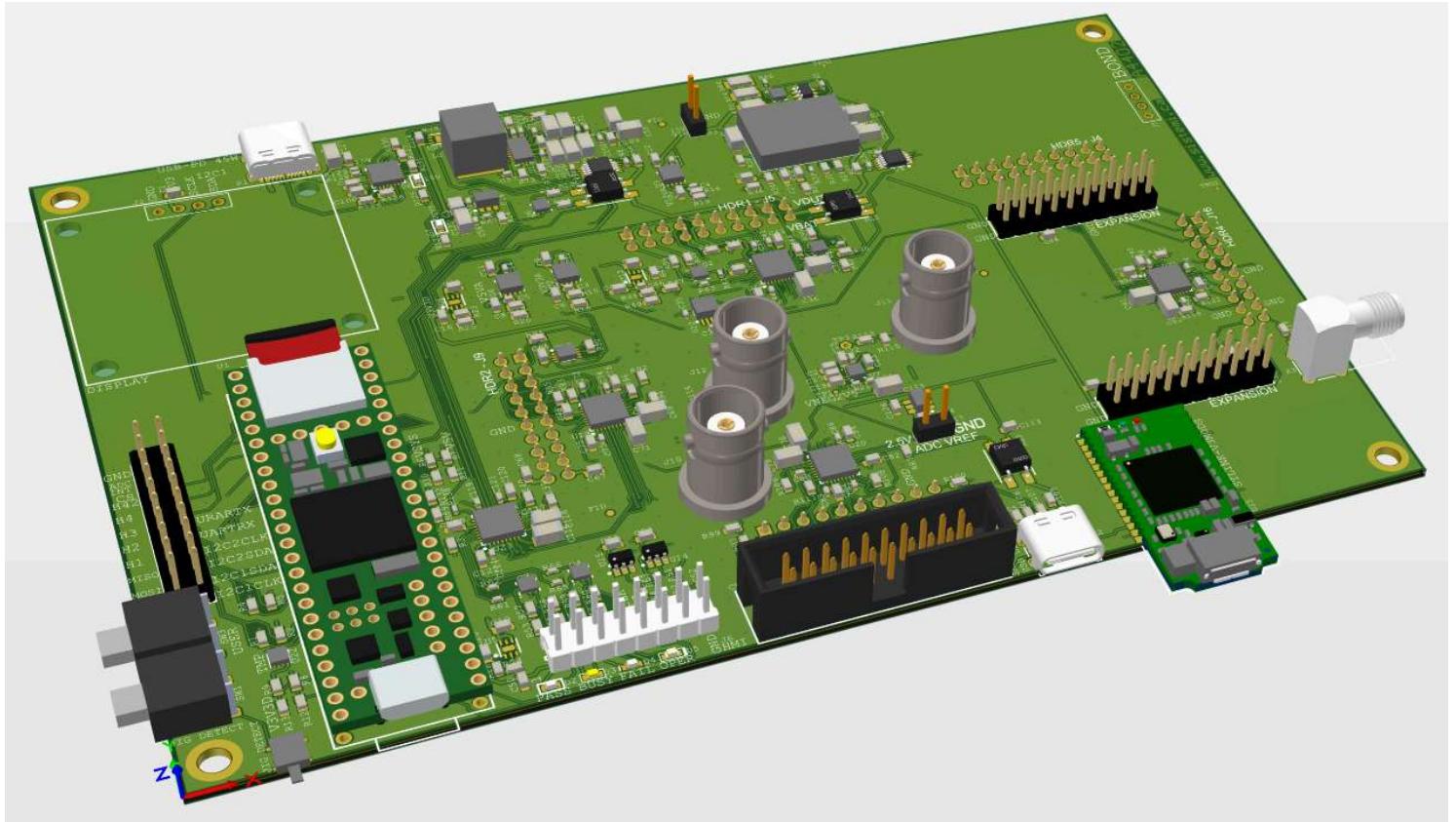


BOND

(Bed Of Nails Design - Open Source Hardware)

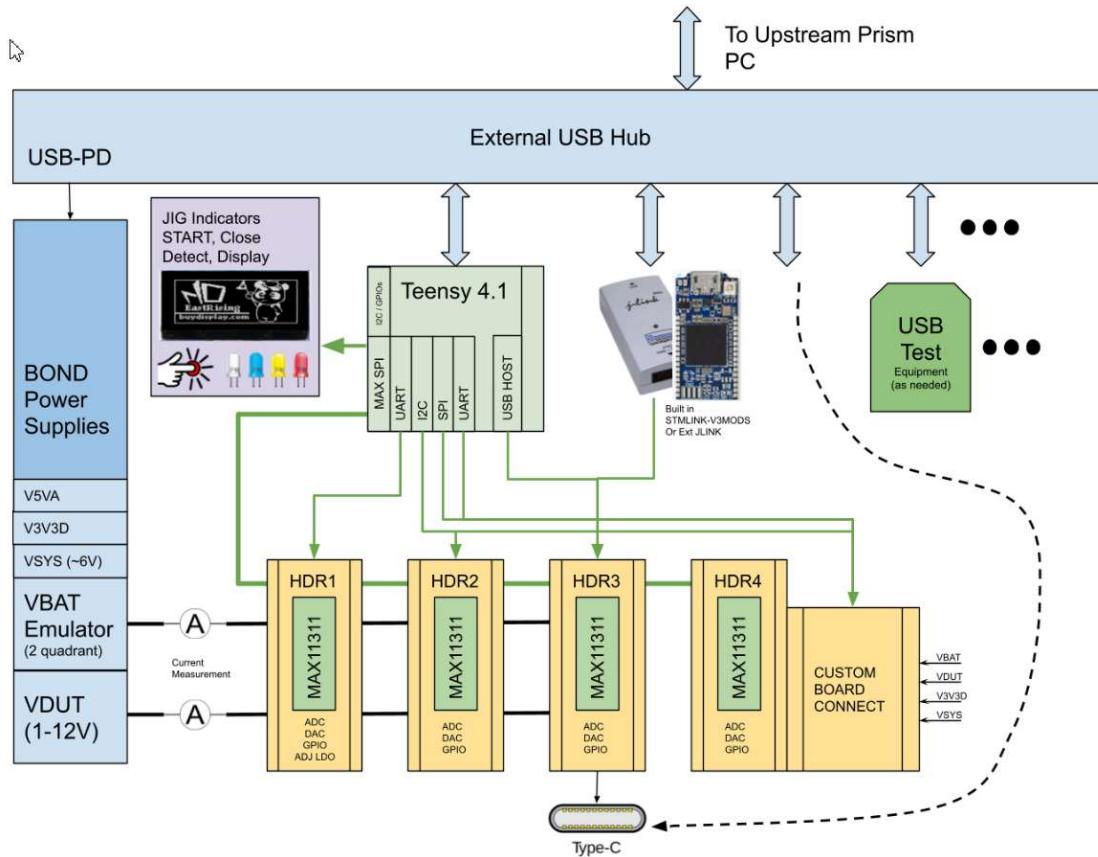


BOND in combination with a Pogo Board, which translates BOND testing headers with your DUT Test Points, can program and test your Target device. With BOND as a testing “platform” new products can be accommodated with new simple Pogo boards.

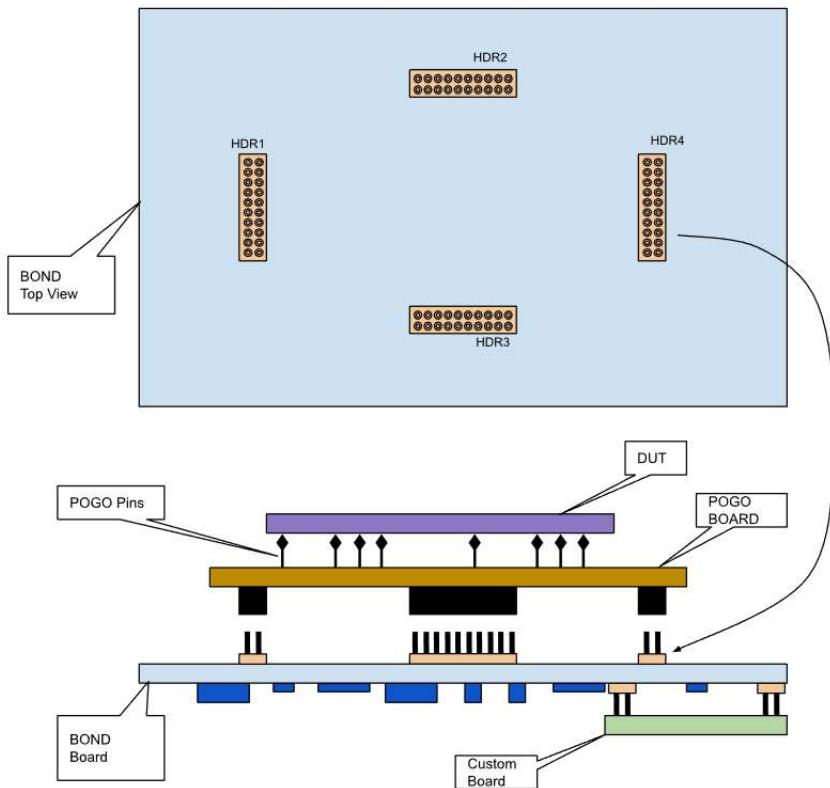
FEATURES

- | | |
|--|---|
| <ul style="list-style-type: none"> • Up to 30 DUT Test points • Test Points can assigned as, <ul style="list-style-type: none"> ◦ ADC Inputs (0-10V) ◦ DAC Outputs (0-10V) ◦ GPIO (0-10V) ◦ MAX11311 implements all test points, see datasheet for more details • Power Supplies <ul style="list-style-type: none"> ◦ Battery Emulator (2-5V) Sink (up to 500mA) & Source up to 1Amp. ◦ VDUT (1-12V, 2Amp) ◦ Current measurement $\pm 200\mu\text{A}$ • JTAG Programming <ul style="list-style-type: none"> ◦ Standard JLINK 20 pin header ◦ STM-JLINK V3MODS • USB-PD Input Power | <ul style="list-style-type: none"> • USB to DUT Passthru • Analog BNC Ports • Jig Status Connector <ul style="list-style-type: none"> ◦ Pass/Fail/Busy LEDs ◦ Jig Closed Detect ◦ User Button ◦ I2C Display Interface • Expansion Header Mezzanine <ul style="list-style-type: none"> ◦ Add new test capability • Additional Circuits to DUT <ul style="list-style-type: none"> ◦ I2C (with level translation) ◦ UART (with level translation) • Teensy 2.1 Controller <ul style="list-style-type: none"> ◦ Running Arduino “server” ◦ Extensive “self-test” on power up ◦ Display for debug and status • Available SCH and STEP files |
|--|---|

Block Diagram



Stack Up



BOND attaches to a Pogo Board. The Pogo Board is a simple “pass-through” of BOND’s test headers to the Device Under Test (DUT) test pad locations.

To support other products, only the Pogo Board for the new product needs to be created. BOND is reusable across multiple products.

The Pogo Board can also optionally include additional test stimulus or measurement functionality to support the Product without changing BOND.

Prism includes a BOND Driver that has APIs for configuring BOND test headers, and making measurements.