Prism IBA01

Features^{1,2} Embedded MicroPython Board STM32F405 (12bit)ADCs, DAC, GPIOs, UARTs PWMs, Timers, I2C, SPI MicroSD Slot Note some resources used by the IBA01, see schematic PYBv1.1 micropython.org V1 (TPS7A7200) Two Programmable DC Supplies 500-3500mV, 50mV Steps, 500mA Maximum Current measurement, ±100µA, 100mA Max V2 (TPS7A7200) 500-3500mV, 50mV Steps, 500mA Maximum Current measurement, ±100µA, 100mA Max Programable Battery Emulator/Supply VBAT (LT1118) Source and Sink Current to 800mA Maximum 1650-4500mV, 50mV Steps Current measurement, ±1mA, 500mA Max **USB Embedded HUB** Two free USB (2.1) ports Based FT2232 **USB Virtual Serial Port** Based FT2232 **USB JTAG Programmer** Two inputs, based on ADS1115 16Bit ADC 9V, 500mA Maximum² Two non-programmable Supplies 5V (VSYS) (Supplied externally thru USB-C) **DUT Supply Connect Relays** Relays control when V1, V2, VSYS, 9V, VBAT are connected to DUT LoRa Module **RF Solutions RFM95W** For WiFi/Bluetooth Connectivity **Arduino Nano Slot** Based on TPL0102 **Digital Resistor** Based on LTC6090 **Buffer Amplifier** Based on TXS0104 **Level Translator**

The IBA01 PCB provides a prototype for all the above functions. The PCB can be forked and modified to suit specific DUT needs. All functions are available through simple Python class² available in the Prism Framework.

¹ Subject to change without notice.

² Some functions are in development, or will be developed based on request.