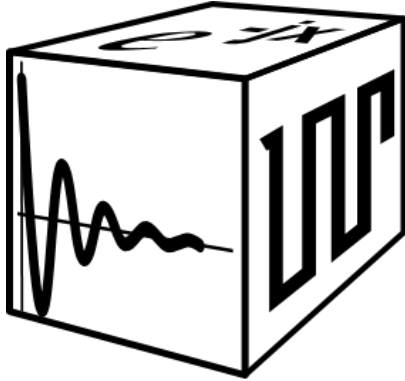# SIGNALBLOX®

AnalogBlox®

CLOCKWORKS
Signal Processing
ANALOG MULTICHANNEL SYSTEM FOR PROTOTYPING

Complete package of AnalogBlox modules to speed system development

- Convenient package of boards for hardware developers that need to test new circuitry.
- Four prototyping boards included to allow for multiple designs.
- 8 channels of single ended or balanced input and output allows building multiple circuit versions for simultaneous comparison in the same environment.
- Triple output or seven output supply can be used with other AnalogBlox systems.
- I^2C control and other standard SignalBlox signals available on carrier.
- Single module carrier can be used with other AnalogBlox modules like volume controls, buffers, and relay switching.
- Kit includes boards, 12V AC adapter, ribbon cables, and power supply cables.
- Additional I/O options are available for RCA single ended or balanced XLR or 1/4" phone via DB25 (TASCAM) and breakout cable.
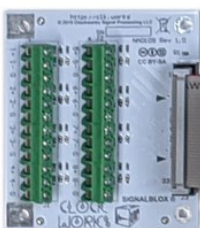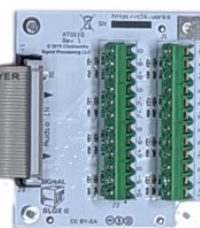

PWR002

NA0109

CC0002

SYSTEM CONFIGURATION

AA0106

AT0110

Introduction

AnalogBlox modules can act as front or back end to DigitalBlox ADC and DAC modules, or be used to create all analog systems. Modules have 8 inputs and 8 outputs supporting both single ended and balanced configurations. More information about the AnalogBlox modules is available in the SignalBlox System Configuration Guide.

All SignalBlox module design information is released under the open source Creative Commons CC-BY-SA 4.0 license.

Details about each of the boards in this kit can be found on the Clockworks website. The SignalBlox System Configuration guide provides details on the module signal use.

Using the kit

As with other SignalBlox components there is no one specific single use that they are restricted to. The modules that comprise this kit, minus the prototyping modules, are used by Clockworks for testing modules independent of other modules. As there's no muxing of I^2C like on the larger carriers it's somewhat simpler to evaluate modules that are controlled via I^2C.

The carrier board implements all control signals, including interrupts and mute.

The prototyping modules have been used to create test circuits for evaluating op-amp performance as well as noise related to different power supply options. For example see TechNote TN003 (available on http://clk.works) which looked at the effect different supply filters had on op-amp output noise. By having different circuit configurations available in one common environment uncertainty was removed from the measurements as the test circuit noise levels were below 1 uV (-120 dBV).
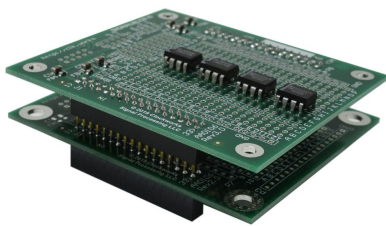
Prototyping board, shown in stacked (pass through) configuration. (Op-amps shown for reference only)
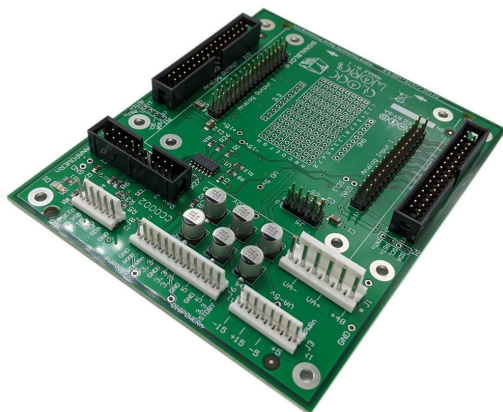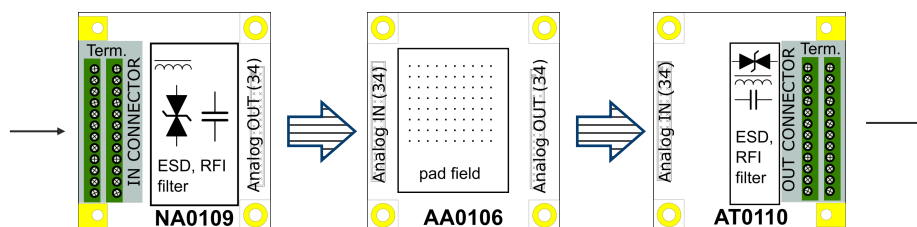
Single module carrier board.

Ordering

SYS01-1 Kit with triple output supply. Order SYS01-1-E for 2 pin European style plug on power supply

SYS01-2 Kit with seven output supply. Order SYS01-2-E for 3 pin European style plug on power supply cordset

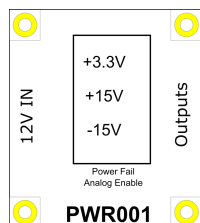(other supply AC plug configurations available on request)

Kit contents

All kit contents can be purchased separately.

Part number	Kit Quantity	Description	Notes
CC0002	1	Single module AnalogBlox carrier	
AA0106-KII	2	Analog prototyping module with connector kit (includes pass through for stacking)	
AA0106-BII	2	Analog prototyping module PCB blank only	
NA0109	1	8 channel screw terminal input	
AT0110	1	8 channel screw terminal output	
PWR001-KIT Or PWR002-KIT	1	12V in triple out: 3.3V 1A, +/-15V 330 mA supply with power fail detect and analog enable. 18W AC supply, CAK01 MTA cable set. Add –E for EU style 2 pin plug 12V in seven out: 3.3V 1A, 3.3 & 5V 3A, +/-5V 1A, +/-15V 330 mA supply with power fail detect and analog enable. 18W AC supply, CAK01 MTA cable set. Add –E for EU style 2 pin plug	-1 option -2 option
CB0005	2	34 pin 6" (157mm) IDC (connects input and output modules to carrier)	
CAK01	1	(1) 12 pin MTA-100 digital power/control cable (1) 8 pin MTA-100 analog power/control cable	
CB0006	2	single pin female jumper	

KIT CONFIGURATION BLOCK DIAGRAM

SignalBlox, DigitalBlox, AnalogBlox and the cube logo are trademarks of Clockworks Signal Processing LLC.

Or PWR002 seven output: 3.3V Stdby, 3.3, 5, +/-5, +/-15