SIGNALBLOX®
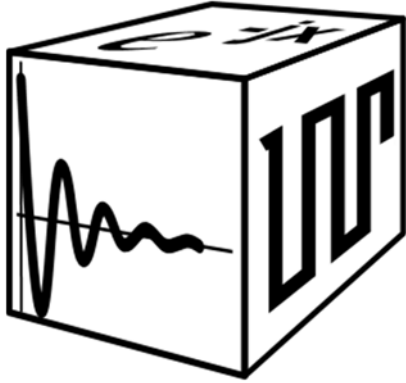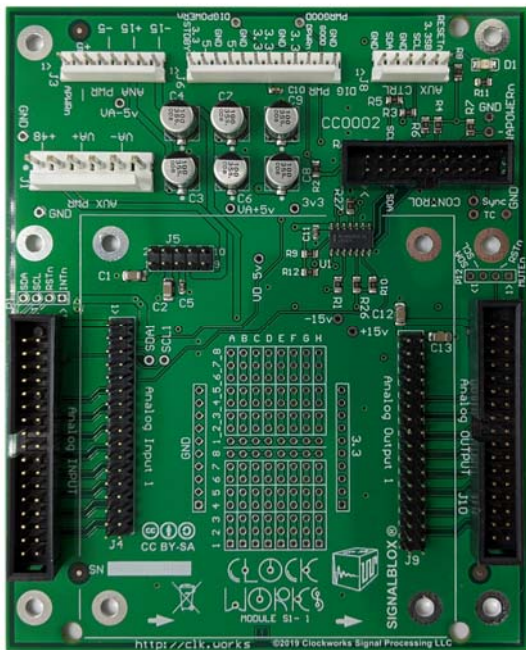

AnalogBlox®

Signal Processing

SINGLE MODULE CARRIER FOR ANALOG TO ANALOG MODULES

Summary

The CC0002 carrier board provides a simple way to use a single Analog-Blox module in a system. Please see the Clockworks website for larger sized module carriers, such as the CC001 3x2 carrier.

The module connects power and signals from the connectors defined in the SignalBlock System Configuration guide to a AnalogBlox module that provides 8 analog input to 8 analog output functionality.

Typically the CC0002 is used for:

- A carrier for evaluating other AnalogBlox modules in a standalone configuration.
- A carrier for working with the AA0106 prototyping modules, which provides a convenient environment for prototyping single and multichannel analog circuits.
- A test fixture for (custom) AnalogBlox modules.

The CC002 can be used with Clockworks multivoltage supplies and I/O cards to create a compact environment for both bench use and for deploying for in-field use.

Introduction

Clockworks SignalBlox product series provide a module system of off the shelf hardware for developing signal processing applications. Modules handle 8 channels, and carrier provide a simple way to parallel modules for channel counts up to 256.

The DigitalBlox products consist of mixed signal modules (ADC, DAC) and DSP modules for signal processing. The AnalogBlox modules have 8 balanced input and outputs. Standard functions from Clockworks include volume control, switching, and single ended/balanced conversion.

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CC0002 specifications

- Number of AA module sites: 1
  - 34 pin input header
  - 34 pin output header
  - 10 pin secondary power header
  - Standard 4 hole mounting, use 11mm M3 standoffs.
- Size:
  - 105 x 130 mm
  - Mounting holes: Six, use M3 bolt. (grounded)
- Power input:
  - SignalBlox *Digital Supply* 12 pin MTA-100 series digital supply connector for 3.3V standby, 3.3V, and 5V plus status and control.
    - 3.3V standby only connects to the 20 pin *Control* header and the 6 pin *Aux Control* header.
  - SignalBlox *Analog Supply* 8 pin MTA-100 +/-15V and +/- 5V , plus control
  - SignalBlox *Aux Supply* 6 pin MTA-156 +48 and +/- user supplies
- Power draw:
  - Dependent on AA module
  - 10 mA typical from 3.3V supply
- Control:
  - SignalBlox *Control* 20 pin .1" header (I2C and GPIO lines)
  - SignalBlox *Aux Control* 6 pin MTA-100 connector
  - Single I^{2}C bus (no I^{2}C controlled MUX)
- Indicators:
  - LED connected to the 3.3V standby to indicate system power is on.
- Prototyping area:
  - Dual 8x8 .1" grids with 3/2/2/1 connect pattern

Ordering information

CC0002   Single AnalogBlox module carrier

Custom AnalogBlox boards

For customers that don't have the resources for designing their own boards Clockworks offers custom design and integration services.