



# ADC\_1x1

## Combined Analog/Digital Daughter Board



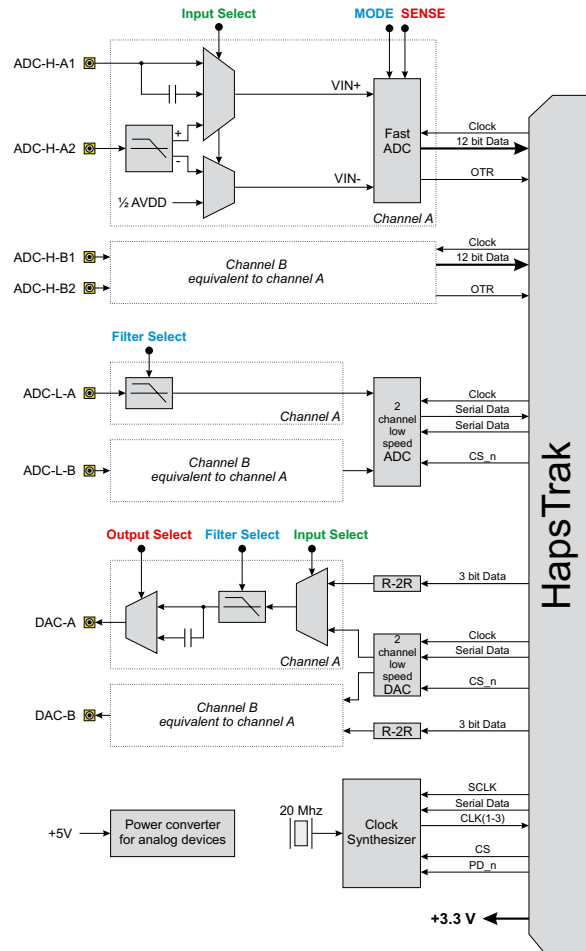
Part of the Confirma™ ASIC/ASSP Verification Platform

ADC\_1x1 is a combined analog-to-digital and digital-to-analog board, with two high speed (80 Msp/s) and two low speed ADC channels, as well as two low speed DAC channels.

The high speed ADC channels are designed for a wide variety of applications, including SW radio and IF/IQ demodulation.

### Features

- Form factor 1x1 (one daughter board connector)
- Runs on a HAPS system with +3.3V VCCO
- High speed ADCs (2 channels):
  - Max sample rate: 80 Msp/s
  - Resolution: 12 bits
  - Single ended, 50 Ohm impedance, MMCX connectors
  - Input signal level: selectable between +/- 0.5V and +/- 1V
  - Input filter bandwidth: 22 MHz
  - Input filter can be bypassed for direct access to ADC input
  - Digital interface: 12 bit parallel data
- Low speed ADCs (2 channels):
  - Max sample rate: 200 ksp/s
  - Resolution: 12 bits
  - Single-ended, DC-coupled, > 50 kOhm impedance, MMCX connectors
  - Input signal level: 0 – 3.3V
  - Input filter bandwidth: 200 Hz or 20 kHz
  - Digital interface: 12 bit serial SPI-like
- Low speed DACs (2 channels):
  - Settling time: typical 1 us
  - Resolution: 12 bits
  - DC or AC-coupled, MMCX connectors
  - Output signal level: 0 – 2V
  - Output filter bandwidth: 200 Hz or 20 kHz
  - Digital interface: serial SPI-like or 3 bit PWM
  - Alternate passive DAC with R-2R network
- Clock Synthesizer:
  - Programmable clock synthesizer



**HapsTrak™**  
 A set of rules for pinout and mechanical characteristics, which guarantees compatibility with previous and future generation HAPS motherboards and daughter boards.



Synplicity, Inc.  
 600 West California Avenue  
 Sunnyvale, CA 94086 USA

Phone: (U.S.) +1 408 215-6000  
 Fax: (U.S.) +1 408 222-0263  
 www.synplicity.com

30308HAPS