

Analog Discovery[™] Developed with Analog Devices



A Complete Analog Design Kit for the Price of a Textbook

The Digilent Analog Discovery[™] design kit, developed in conjunction with Analog Devices Inc., is the first in a new line of all-in-one analog design kits that will enable engineering students to quickly and easily experiment with advanced technologies and build and test real-world, functional analog design circuits anytime, anywhere - right on their PCs. For the price of a textbook, students can purchase a low-cost analog hardware development platform and components, with access to downloadable teaching materials, reference designs and lab projects to design and implement analog circuits as a supplement to their core engineering curriculum.

Engineering schools have traditionally had to build and maintain centralized teaching labs. These labs, with their specialized equipment and trained lab assistants, are expensive and hard to maintain. With the Analog Discovery design kit, we're helping schools build distributed labs - labs that can be found in dorm rooms, cafeterias, libraries - anywhere students want to work.

Analog Inputs

- AD9648 dual, 14-bit, 105 MSPS, 1.8 V dual analog-to-digital converter
- 2-channel differential (1 M Ω , 24 pF), ±20 V max
- 250 µV to 5 V/division with variable gain settings
- 100 MSPS, 5 MHz bandwidth, up to 16k points/channel record length

Analog Outputs

- AD9717 dual, 14-bit, 125 MSPS, low power digital-to-analog converter
- 2-channel, single-ended, arbitrary waves up to ±4 V
- 100 MSPS, 5 MHz bandwidth, up to 16k samples/channel
- Standard and user-defined waveforms
- Sweeps, envelopes, AM and FM modulation

Power Supplies

• 2 fixed +5 V (+50 mA) and -5 V (+50 mA)

Digital I/O

- 16 signals shared between logic analyzer, pattern generator, and discrete I/O devices
- 100 MSPS, buffer size is 4k transitions per pin
- Cross triggering with scope channels

Software

- Waveforms[™] software: full-featured GUI for all instruments
- Windows[®] XP[®] or newer



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