

IP-FastDAC-x

Summary

The IP-FastDAC-x is a ultra precise 16 bit D/A Industry Pack module. There are eight 4-quadrant multiplying DAC channels using the Linear Tech LTC1821 digital to analog chip. The settling time for each DAC is 2 microSeconds. The IP-FastDAC-x offers a differential Output voltage ranges Unipolar: 0V to 10V and Bipolar +/-10V

The IP-FastDAC-8D offers the flexibility of selecting the on board reference or using and external Differential input Vreference input per channel.

The DACs are accurate to 1LSB over the industrial temperature range in both uni-polar and bipolar modes.
These devices include an internal deglitcher circuit that reduces the glitch impulse to less than 2nV-s (typ).



Ultra Precise 2 µSecond 4-Quandrant Multiplying DACs 8 channels 16 bit Differential Outputs



IP-FASTDAC-8

Features

- 2 μS settling time
- 4-Quandrant Multiplying DAC
- Unipolar: 0V to 10V
- Bipolar Mode: ±10V
- 1LSB Max DNL and INL Over the Industrial Temperature Range
- Glitch Impulse < 2nV-s
- Power-On Reset to 0V
- Differential Output buffers : Current drive 5ma
- Selectable Internal/External Vref with Differential Input per Channel
- Global output buffer w/ internal or external triggering

Applications

- Process Control and Industrial Automation
- Precision Instrumentation
- Direct Digital Waveform Generation
- Software-Controlled Gain Adjustment
- Automatic Test Equipment

Programmable via

• IP Bus

IP interface

- 8/32 Mhz clock
- 16 bit data

Operating: Environmental

- Operating temperature

 Commercial: 0 to +55 °C

 Optional: -25°C to +80°C
- Non-operating: -40°C to 85 °C
- Airflow requirement: .5 CFM
- Humidity: 5 to 90% (non-cond.)
- Altitude: 0 to 10'000 ft

Mechanical: Environmental

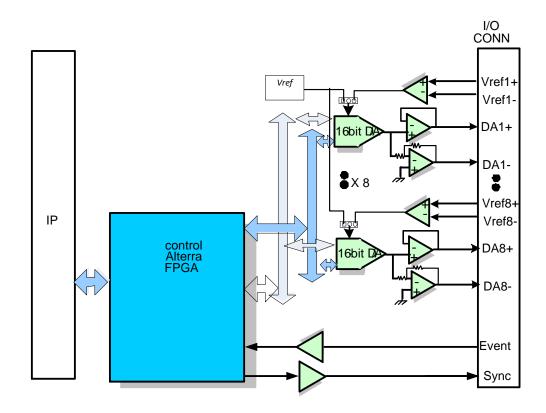
- Size: Vita 4 Type 1 IP 1.8" x 3.9"
- Power: +5, +12, -12 volts
- Vibration: 0.5G RMS

20-2000 Hz rand

- Shock: 20 G, 11 ms, 1/2 sine
- Weight: tbd
- MTBF: >250000 hours



IP-FastDAC-x



Functional Block Diagram

ORDERING INFORMATION

Part Number: IP-FastDAC-4 4 Channel 4 Quadrant DAC Industry Pack Module

IP-FastDAC OR IP-FastDAC-8 8 Channel 4 Quadrant DAC Industry Pack Module

IP-FastDAC-x -I Same as above with -40 to +85 C

Optional Accessories

Part Number: TB-50-HDR 50 pin terminal block and 1meter flat ribbon cable

CBL-50-HDR 50 pin,1meter flat ribbon cable, IDC header connector

Alphi Technology Corporation

1898 E. Southern Ave., Tempe, Arizona 85282, USA

Tel: (480) 838 2428 Fax: (480) 838 4477

For ordering information: sales@alphitech.com

825-20-000-4100

Please visit our web site at www.alphitech.com