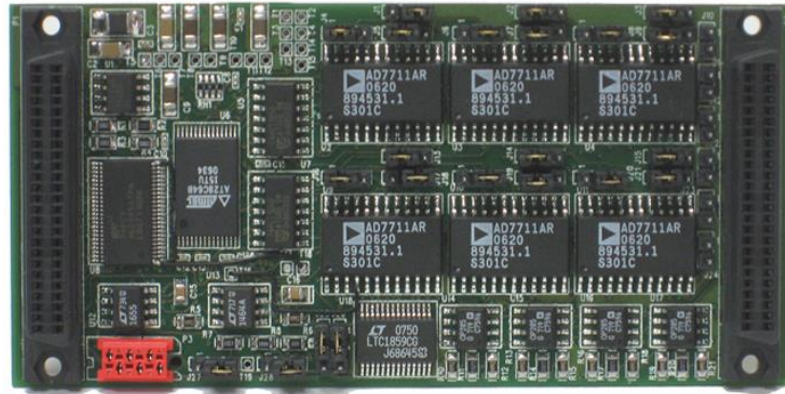**ALPHI TECHNOLOGY CORPORATION**

6 TEMPERATURE CHANNELS - 8 HIGH VOLTAGE CHANNELS INDUSTRY PACK MODULE

Summary

The **IP-THERMISTOR** is designed around the delta sigma A/D converter AD7711 from Analog Devices. It is a 24/16 bit precision temperature measurement single width IP module, with fixed and optional programmable current source. Each of the 6 temperature measurement channel has its own A/D converter with two matched 200µA current sources.
The Board also features 8 single-ended high impedance analog inputs. Also a 16 bit A/D converter with 8 channels multiplexed allows measurement of input voltage in excess of +/- 20volts.

IP-THERMISTOR

Features:

- 6 Temperature Measurement Channels
- 16 or 24 Bits precision programmable
- Eight x 16 Bits A/D channels
- Input Voltage up to +/- 20V
- Each Analog input is programmable separately ±10V, ±5V, 0-5V, 0-10 V
- Input with software programmable Gain from 1-128
- Sampling clock of 100KSPS

Programmable via:
- IP Bus

IP interface:
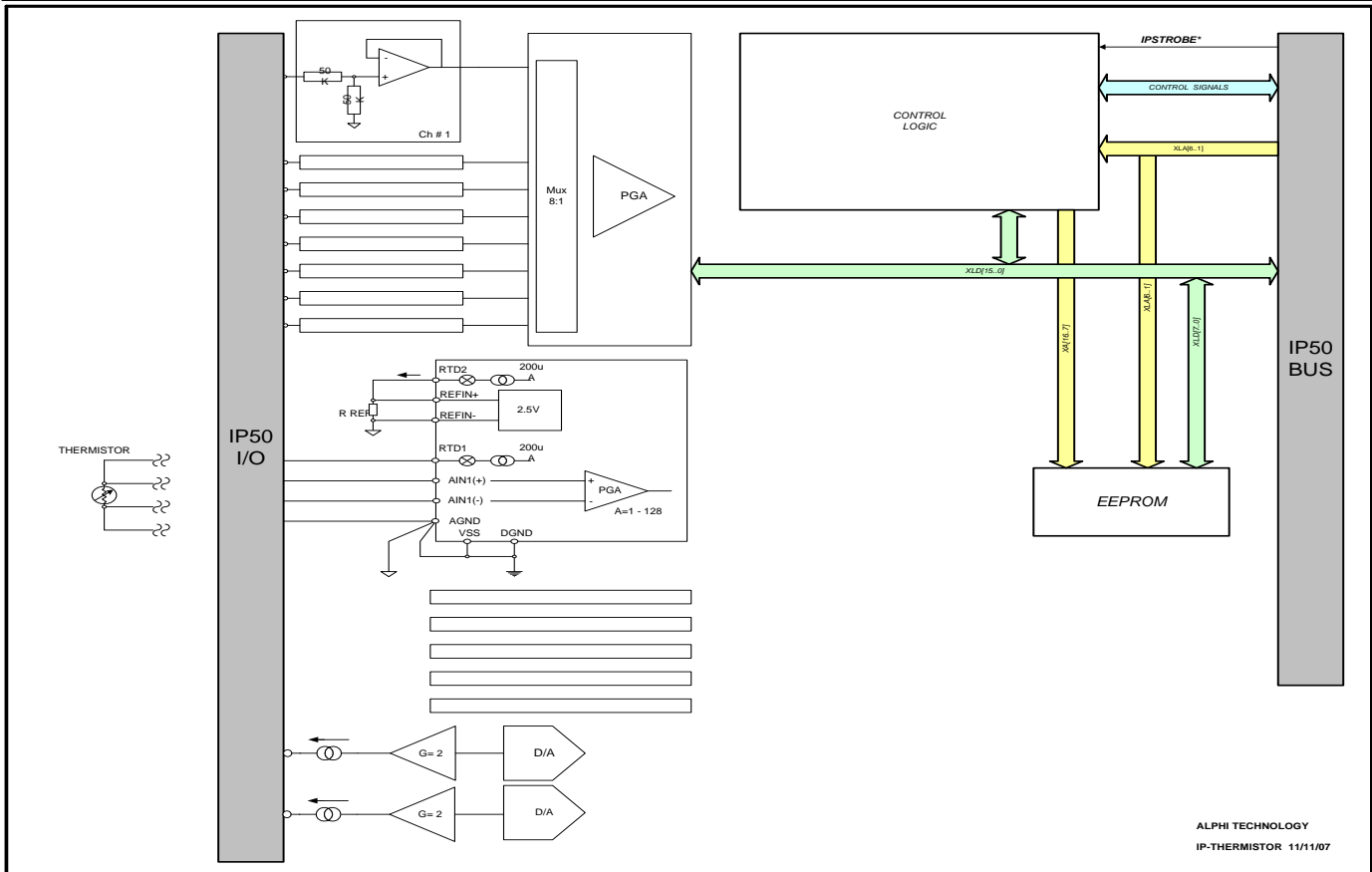- 8/32 MHz clock
- 16 bit data
- Interrupts

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: up to 3.5 watt
- Vibration: 0.5G RMS
  20-2000 Hz rand
- Shock: 20 G, 11 ms, ½ sine
- Weight: tbd
- MTBF: >250000 hours

ALPHI TECHNOLOGY
IP-THERMISTOR 11/11/07

Functional Block Diagram

ORDERING INFORMATION

Part Number: IP-THERMISTOR 6-Temperature Channels – 8 Voltage Inputs

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

For ordering information: sales@alphitech.com   Please visit our web site at www.alphitech.com