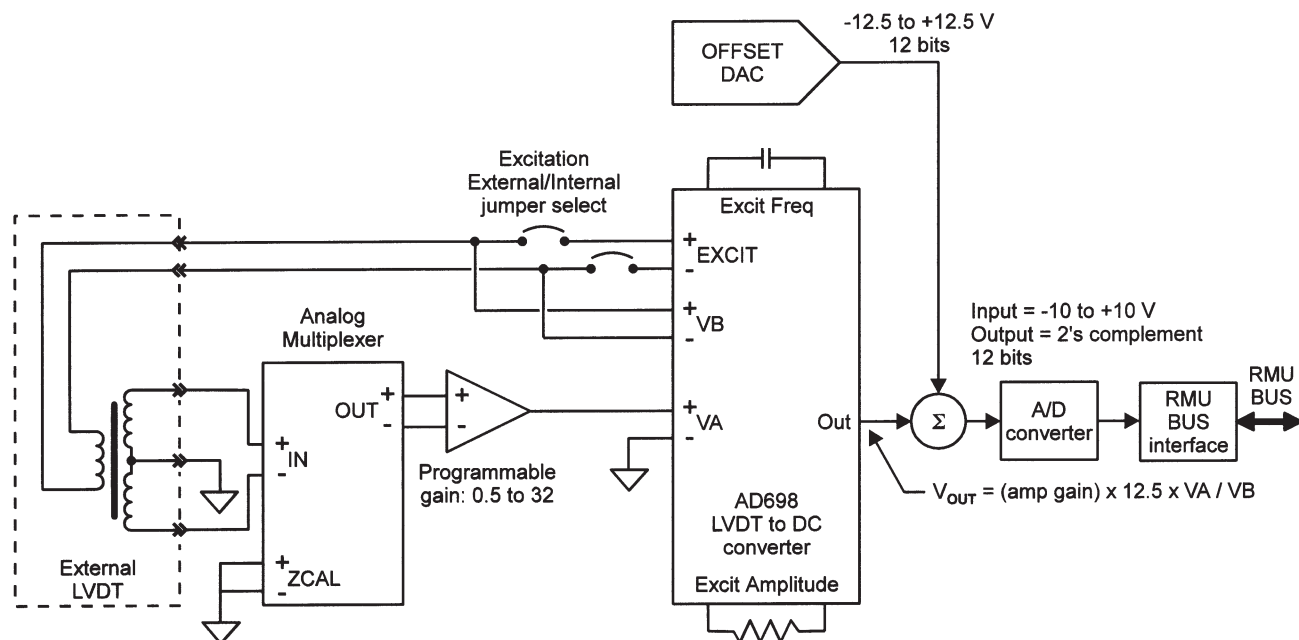




DESCRIPTION

The MSC1000-035 is a two channel LVDT Conditioning Module which provides a precision, flexible interface between 4 and 5 wire LVDT's and the MicroDAS system. The module contains the following salient features:

FEATURES

- Programmable gains from 0.5 to 32
- Frequency range from DC to 20 KHz
- Programmable offset from -12.5 to +12.5 Volts per channel
- Selectable AC excitation



communications

ELECTRICAL SPECIFICATIONS

Excitation (Per Module)

- Sinusoidal voltage source
- Factory selectable as internal or external
- Factory adjustable frequency and amplitude
- Frequency range: 20 Hz to 20 KHz
- Amplitude range: 1 to 20 VPP
- Output current capability: 12 mARMS

Input

- Signal amplitude range: 0.1 to 3.5 VRMS
- Signal frequency range: DC to 20 KHz
- Input impedance: 200 K ohms minimum
- CMRR: 200 ppm per volt $\pm 3V$ signal
- Phase compensation available, consult factory for details

Gains and Linearity

- Gain: selectable from 0.5, 1, 2, 4, 8, 16 and 32 per channel
- Gain error: $\pm 1\%$ FS
- Gain stability: $\pm 0.5\%$
- Analog output
- Digital output: (2's complement)
- Offset: programmable from -12.5 to +12.5 VDC per channel
 - Definition: 0V at the channel input with 0V offset results in 000H counts at the channel output.
 - Error: $\pm 1\%$ of full scale
 - Stability: $\pm 0.5\%$ of full scale

Calibration

- ZCAL: Channel input is 0 Volts.

Output (One A/D per module)

- A/D converter: 12 bits with an RTO analog range of -10 to +10 volts (2's complement)

