FREQUENCY DEVICES™, INC.

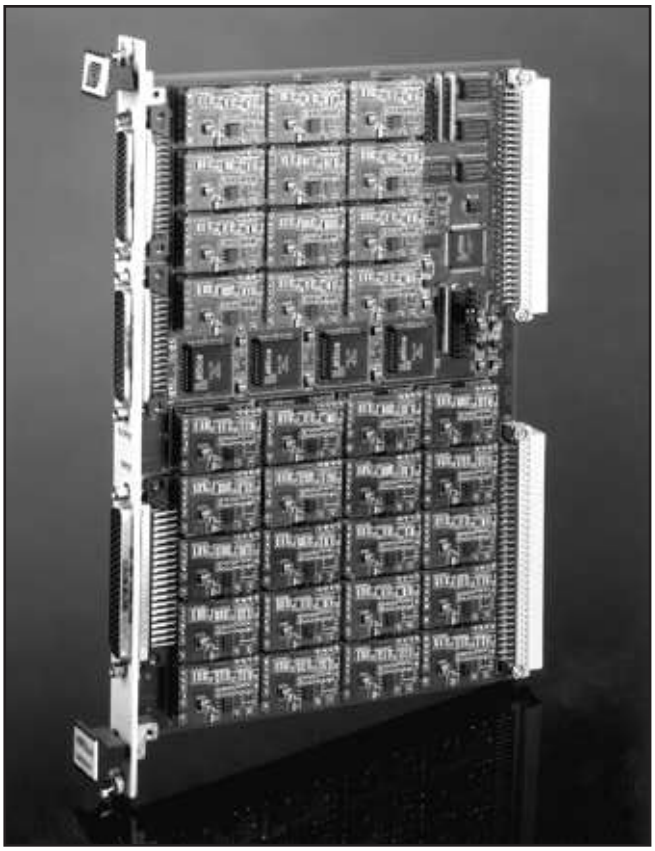
Model VM32PA2.0

32 Channel

Programmable Amplifier >100 kHz to 2.0 MHz VME Board

Description

Frequency Devices' Model VM32PA2.0 comprises a family of VMEbus amplifier boards offering software programmable differential amplifiers in a single width B-size (6U) VME form factor. VM32PA2.0 boards provide simultaneous access to 32, DC-coupled wideband signals while providing programmable gain from –12dB to +36dB in 6dB steps for signal bandwidths from >100 kHz to 2.0 MHz. VM32PA2.0 boards may be configured with 8, 16, or 32 channels. The boards conform to VME revision C.1 as an A16/D16 Slave. Available options include AC-coupled input.



Features/Benefits:

- Simultaneous access over 32 channels offers a low cost, versatile and convenient way to provide amplification.
- Three active read/write registers provide programming and set-up verification.
- Phase match of ±2.0º and gain accuracy of ±0.1dB provides precision performance solutions to design engineers, system integrators and OEM's.
- High channel count density without sacrificing performance maximizes chassis utilization.

Signal conditioning applications include:

- Sonar, navigation and aerospace
- Engine test and simulation
- Acoustic and vibration analysis
- Satellite and telecommunications
- Laboratory R & D
- Automatic test equipment (ATE)
- Industrial process control

U.S. Selling Price (1-4)

VM32PA2.0-8	. .$1,700.00
VM32PA2.0-16	. . 1,800.00
VM32PA2.0-32	. . 2,200.00
Add Price of PGA Modules	
U.S. Selling Price + 20%	
F.O.B. Haverhill, MA	
Accept Visa, Mcard, Amex	

Orders for Export
Minimum Order Value $150.00
Lead-Time: 6-8 weeks A.R.O

GAIN AMPLIFIER
PGA5-2.0 -12 dB to +36 dB in 6 dB steps

Ordering Information

8, 16, or 32Channels — **Optional: A- AC Coupled Input**

VM32PA2.0-32-PGA5-2.0-A

25 Locust St, Haverhill, Massachusetts 01830 • Tel: 800/252-7074, 978/374-0761 • FAX: 978/521-1839
e-mail: sales@freqdev.com • Web Address: http://www.freqdev.com

Specifications

(@ 25°C and rated power Input)

Wideband Programmable Gain Amplifier

32 CHANNEL VME SIGNAL CONDITIONING BOARD

Analog Input	
1. Impedance	1 MΩ differential, 500 kΩ to ground, each leg
2. Linear input range	8 V pk-pk, each leg
3. CMRR	≥ 50 dB, DC to 100 kHz
	≥ 40 dB, 100 kHz to 2 MHz
4. Maximum input range	20 V pk-pk, each leg
5. AC coupling (Optional Fixed Freq.)	20 Hz to 1.0 kHz
Analog Output	
6. Impedance	50 Ω, single-ended
7. Drive capability	≥ 50 Ω load impedance
8. Linear operating range	2 V pk-pk
9. Offset voltage	< 25 mV typ. at output
10. Offset temp. coeff.	1.5 mV/°C at output
	25 mV/°C referred to input
Programmable Amplifier	
11. Signal bandwidth (-3 dB)	2 MHz
12. Amplitude match	0.2 dB over specified bandwidth, chan. to chan.
13. Phase match	±2.0° over specified bandwidth
14. Noise voltage density, RTI	16 nV/√Hz
15. Distortion (2 V pk-pk)	≤ -60 dB, 20 Hz to 100 kHz
	≤ -50 dB, 100 kHz to 2 MHz
16. Gain programming	0.25X to 64X in factors of 2
17. Gain accuracy	± 0.1 dB
VMEbus	
18. Interface	A16/D16, D08 (EO), Slave
19. Registers	Three active R/W registers in 64 byte blocks
Power Supply	
20. From VME Backplane	+5V – 1.0A max.
	±12 - 1.25A max.
Environmental	
21. Operating	0°C to +70°C
22. Storage	-25°C to +85°C
23. Humidity	0 - 95% non-condensing
Mechanical	
24. Card Size	VMEbus 6U single slot 9.17 x 6.3 inches, (233 x 160 mm)
25. No. of Input Channels	32 Differential
26. No. of Output Channels	32 Single Ended, Two groups of 16
27. Mating Connectors	Input: Male high density 78-pin D sub, Quantity 1
	Output: Female high density 44-pin D sub, Quantity 2
28. Weight	1.0 LBs., (454 grams)

25 Locust St, Haverhill, Massachusetts 01830 • Tel: 800/252-7074, 978/374-0761 • FAX: 978/521-1839

e-mail: sales@freqdev.com • Web Address: http://www.freqdev.com