

Analog Processor Mezzanine

MODEL 682M



KEY FEATURES

Two models allow selection of only as much capability as required for your application

Model 682M-32 provides: 32 discrete outputs 32 12-bit D-to-A outputs in software selectable ranges of +/- 5V, +/- 10V, and +/- 20V

32 discrete 28V outputs, 16 12-bit A-to-D +/- FS inputs

Supports the full range of Acroamatics multi-stream real-time range telemetry data server/processing system products: MD2900AP, MD2510AP, and MD3022AP

Companion plug-in mezzanine to Acroamatics Model 1635AP PCI-bus Data Distribution and Programmable Data Stream Processor

GENERAL DESCRIPTION

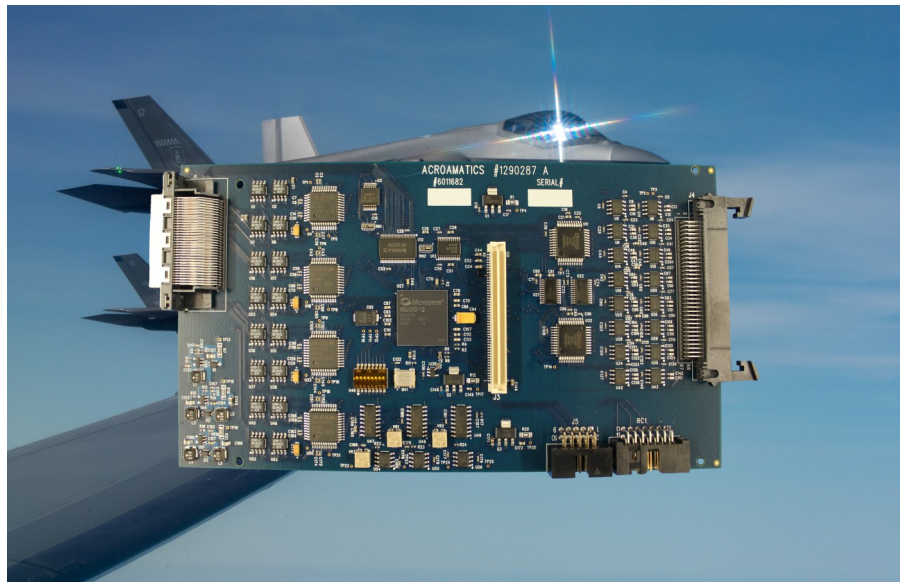
Model 682M is a mezzanine module for the PCIe-bus Model 1635AP Programmable Data Stream Processor telemetry system EU processing and data distribution card.

Model 682M-32 provides a total of 32 channels of 12-bit D-to-A output plus 16 channels of 12-bit A-to-D input with a 400 KHz sample rate.





Model 1635AP cards, when equipped with a Model 682M-32 mezzanine an additional chassis card slot I/O opening (two total) is required to accommodate DAC, Discrete, and A-to-D signal I/O connectors.

The Model 682M is "plug-n-play" compatible with existing Acroamatics telemetry data system DAC mezzanine card and project installations, supporting those interested in updates to existing systems or mixing of old and new generation Acroamatics TDP products.

All Acroamatics documentation is supplied on a CD-ROM.



RELATED PRODUCTS

Real-time PCIe PDSP	Recorder	Telemetry Data Processor	ADAT
 <p>Model 1635AP</p>			

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TECHNICAL SPECIFICATIONS

Function:	Characteristics:
Input setup bus & connectors to the ABUS:	Interfaces to Acroamatics 1635AP PDSP over a mezzanine connector
Analog Outputs:	Output Loaded with 10k OHM and 50pf in parallel:
Outputs:	32 Outputs
Resolution:	12 bits of resolution, 2's complement binary input
Accuracy:	± 10 LSB counts ($\pm .2\%$)
Linearity:	± 1 LSB count
Stability:	10ppm / °C
Settling Time:	2.5 μ sec to within ± 1 LSB
Slew rate:	3 Volts / μ sec
Output current:	1 mA maximum @ $\pm 5V$
Output voltage:	Software selectable voltage ranges of $\pm 5V$, $\pm 10V$ and $\pm 20V$
Discrete Outputs:	
Outputs:	16 discrete output lines – TTL compatible
Addressing mode:	The discrete outputs may be addressed as two 16-bit registers, four 8-bit registers, or 32 1-bit registers. When selected as 16-bit registers, you can use strobe and acknowledge signals to synchronize message transfers
Output current:	-32mA @2.4V, and +48mA @0.40V
Analog Inputs:	
Differential:	16 inputs with individual instrumentation amplifiers
Impedance:	100K ohms minimum
Input Amplitude:	± 5 Volts full scale
Operation:	
Sampling rate	32 to 400K samples per second
Resolution:	12 bits
Data format:	Offset binary or 2's complement, right or left justified
Nonlinearity:	± 1 LSB
Accuracy:	± 1 LSB
Requirements:	
Power:	+5VDC @ 500mA +12VDC @ 250mA -12VDC @ 100mA
Temperature:	Operating: 0 to +40°C, Non-operating: -40 to +86°C
Relative humidity:	Up to 90% non-condensing
Air Flow:	30 Linear FPM
Shock:	Operating: 6G Nonoperating: 50G
Vibration:	Operating: .5G, 5 to 2000Hz, Nonoperating: 1.2G, 5 to 500Hz

Recognizing that no standard product fits every mission, Delta Telemetry Systems is ready to deliver tailored solutions for your unique application requirements. Specifications subject to change without notice.

