

MZ523B – Mezzanine for MRT523, 12 Channel Variable Gain

Mezzanine for MRT523



MZ523B in MRT523

KEY FEATURES

- Mezzanine module for MRT523
- Routes 12 analog inputs, 2 analog outputs and CLK IN from rear panel SMPM to mezzanine connector
- Routes TRIG IN/OUT, user I/O routed from rear panel DensiShield to mezzanine connectors
- Per channel AC/DC selection and programmable gain
- RoHS compliant

Benefits of Choosing VadaTech

- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

The MZ523B is a mezzanine module for VadaTech's MRT523. The AMC/MRT523 combination provides 12-channel ADC 16-bit @ 125 MSPS, and this mezzanine routes analog inputs to the ADC.

The MZ523B provides user-programmable selection, per channel, AC or DC coupling and input gain. The user can set these parameters via the rear-panel or by an I2C controller in the AMC523 FPGA.

- ADC gain selection per channel allows analog input signal +/-0.5V, +/-1V, +/-5V or +/-10V
- AC coupling or DC coupling selection per channel
- 50Ω or 1MΩ impedance selection per channel (1MΩ fixed for +/-10V input voltage)

The selection of the configuration per channel is persistent over system power cycles.

The MZ523B complies with the MRT523 Mezzanine Interface Specification, which can be made available to research partners to allow them to develop their own application-specific mezzanine modules.

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BLOCK DIAGRAM

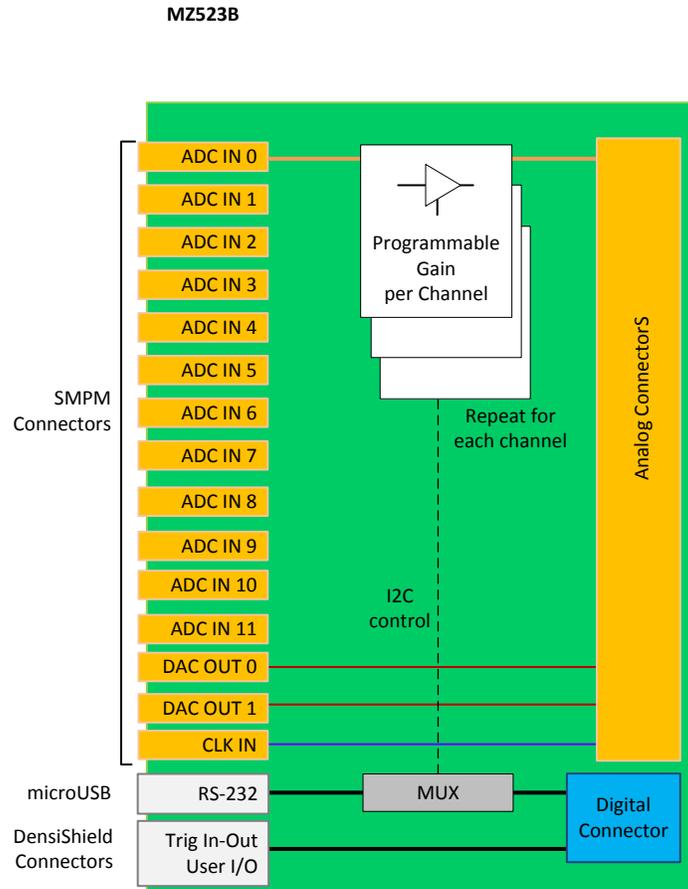


Figure 1: MZ523B Block Diagram



Figure 2: MZ523B

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SPECIFICATIONS

Architecture		
Physical	Dimensions	Per MRT523 Mezzanine Interface Specification (available on request)
Type	RTM Mezzanine	Routes 12 analog inputs, 2 analog outputs, 1 clock input, 1 trigger I/O, and 3 user defined digital I/O
Configuration		
Power	MZ523B	Under 10 W
Environmental	Temperature	Operating Temperature: -5° to 45°C (55°C for limited time, performance restrictions may apply) Storage Temperature: -40° to +85° C
	Relative Humidity	5 to 95 percent, non-condensing
Rear Panel	Interface Connectors	15 SMPM connectors 1 high density DensiShield connector 1 micro USB
Other		
MTBF	MIL Hand book 217-F @ TBD Hrs	
Certifications	Designed to meet FCC, CE and UL certifications where applicable	
Standards	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards	
Warranty	Two (2) years	

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and μ TCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

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ORDERING OPTIONS

MZ523B – 00C – 000 – 00J

C = Front Panel *

- 1 = Reserved
- 2 = Reserved
- 3 = Reserved
- 4 = Reserved
- 5 = Mid-size
- 6 = Full-size

J = Temperature Range and Coating

- 0 = Commercial (–5° to +55° C), No coating
- 1 = Commercial (–5° to +55° C), Humiseal 1A33 Polyurethane
- 2 = Commercial (–5° to +55° C), Humiseal 1B31 Acrylic
- 3 = Industrial (–20° to +70° C), No coating
- 4 = Industrial (–20° to +70° C), Humiseal 1A33 Polyurethane
- 5 = Industrial (–20° to +70° C), Humiseal 1B31 Acrylic

* Front Panel size must match the host MRT523

RELATED PRODUCTS



AMC523
DAC Converter



VT811 MTCA.4
Chassis



MRT523 12-ch ADC
RTM for AMC523

CONTACT US

VadaTech Corporate Office

198 N. Gibson Rd.
Henderson, NV 89014
Email: info@vadatech.com
Telephone: +1 702 896-3337
Fax: +1 702 896-0332

Asia Pacific Sales Office

7 Floor, No. 2, Wenhua Street, Neihu District
Taipei 114, Taiwan
Email: info@vadatech.com
Telephone: +886-2-2627-7655
Fax: +886-2-2627-7792

VadaTech European Sales Office

VadaTech House, Bulls Copse Road,
Southampton, SO40 9LR
Email: info@vadatech.com
Telephone: +44 2380 016403