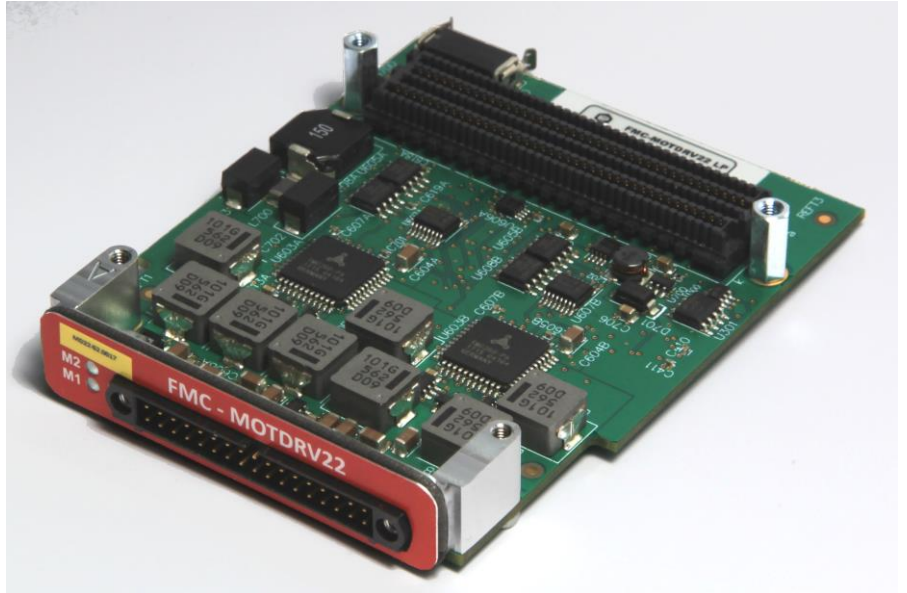


FMC 2-channel stepper motor driver

DFMC-MD22

HIGHLIGHTS

2-channel stepper motor driver with real-time support



FEATURES

FPGA Mezzanine Card (FMC)

2-channel stepper motor driver

Real-time support

Supports 2A peak motor coil current

Supports up to 256 micro-steps

Programmable current slopes

The DFMC-MD22 is a cost-efficient two-channel stepper motor driver compliant to the ANSI/VITA57.1 specification.

DESY offers the DFMC-MD22 for licensing to industry. DESY can modify this product to meet special customer requirements.

FMC 2-channel stepper motor driver DFMC-MD22

TECHNICAL SPECIFICATIONS

ARCHITECTURE			
Physical	Dimensions	Single-width 10mm stacking height	
		Regions 1,2 and 3 occupied	
		Size: 84 x 69 mm	
Standards	ANSI/VITA 75.1	FPGA mezzanine card (FMC)	
	Module management		
	FMC standard	LPC (low pin count)	
	compatible products	DAMC-FMC20, DAMC-FMC25, DAMC-FMC2ZUP, DAMC-FMC1Z7IO and many others	
CONFIGURATION			
Type	FMC-stepper motor driver	Number of channels	2
Electrical properties		Power consumption	max. 12W (over FMC Connector) max. 60W (only with ext. supply)
		Motor	2 phase bipolar stepper motor
		max. motor supply with ext. supply	12V / 2A peak, 1.4A RMS
		max. motor supply from FMC connector	12V / 0.4A per coil
		CONNECTIVITY	
Inputs/Outputs	per Connector	Motor	2 phase bipolar stepper motor
		Endswitch	Hall sensor or mechanical switch
		Encoder	EnDat2.2 or incremental
		Connector type	male-plug 2mm pitch M80-5423405
OTHER FEATURES			
Environmental		Operating temperature	0 ... 70 °C
		Storage temperature	- 40 ... + 90 °C
		Relative humidity	5 ... 90 %, non-condensing
		Weight	0.3kg
OTHER			
Compliance	RoHS		
Standards	ANSI/VITA 75.1		
Licensing to industry	Yes / Deutsches Elektronen-Synchrotron - Notkestr. 85, 22607 Hamburg - Germany - Email: mtca-techlab@desy.de		
Trademarks and Logos	DESY products are constantly being improved; therefore, DESY reserves itself the right to modify the information herein at any time without notice. The FMC logo is trademark of VITA..		

DESY

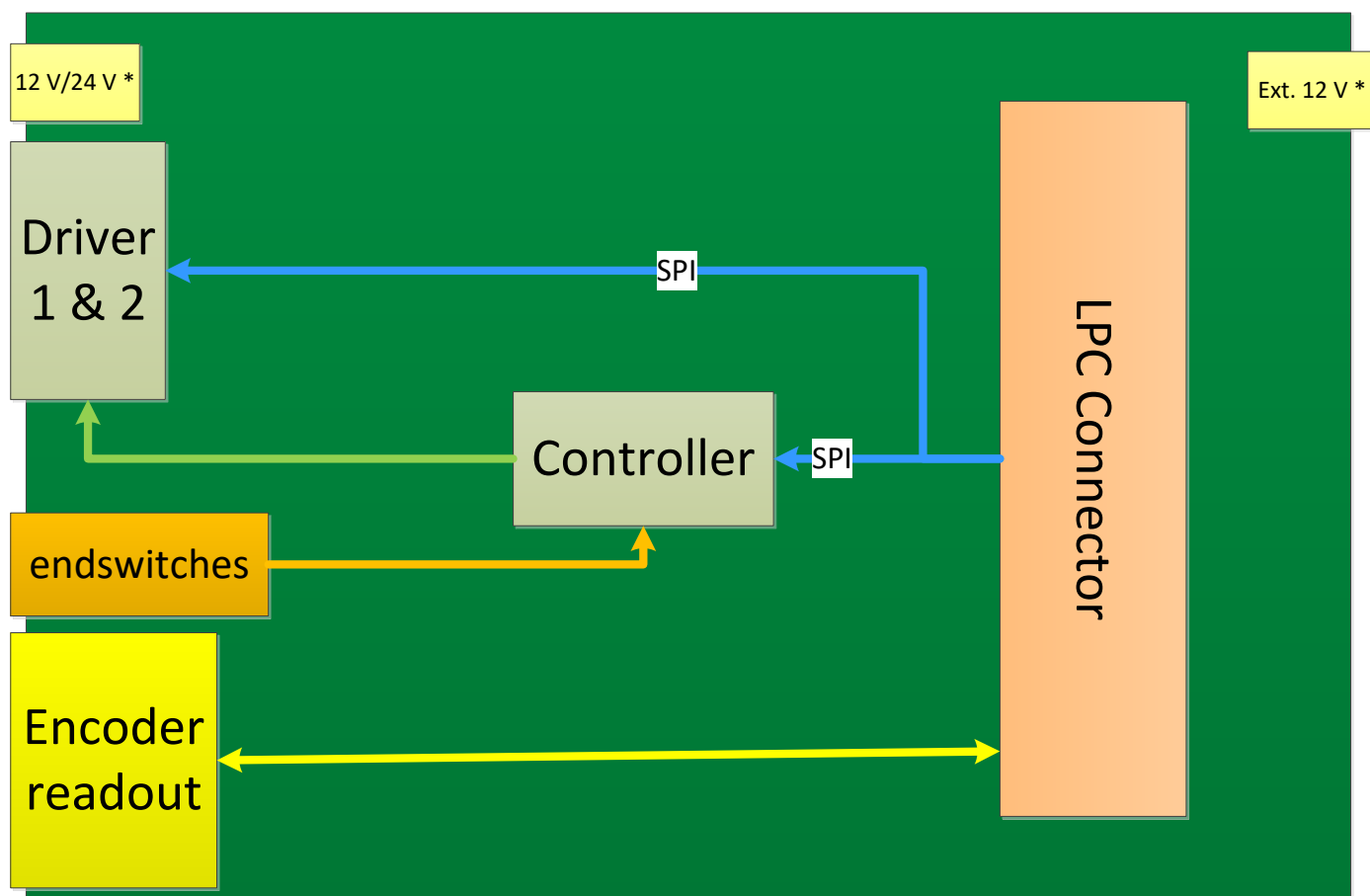
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microTCA
TECHNOLOGY LAB



FMC 2-channel stepper motor driver DFMC-MD22

FUNCTIONAL BLOCK DIAGRAM



* power supply either front or back

OPTIONS

DFMC-MD22-INT12V, -EXT12V, -EXT24V

INT12V	Voltage rating 12 V Internal power supply
EXT12V	Voltage rating 12 V External power supply
EXT24V	Voltage rating 24 V External power supply