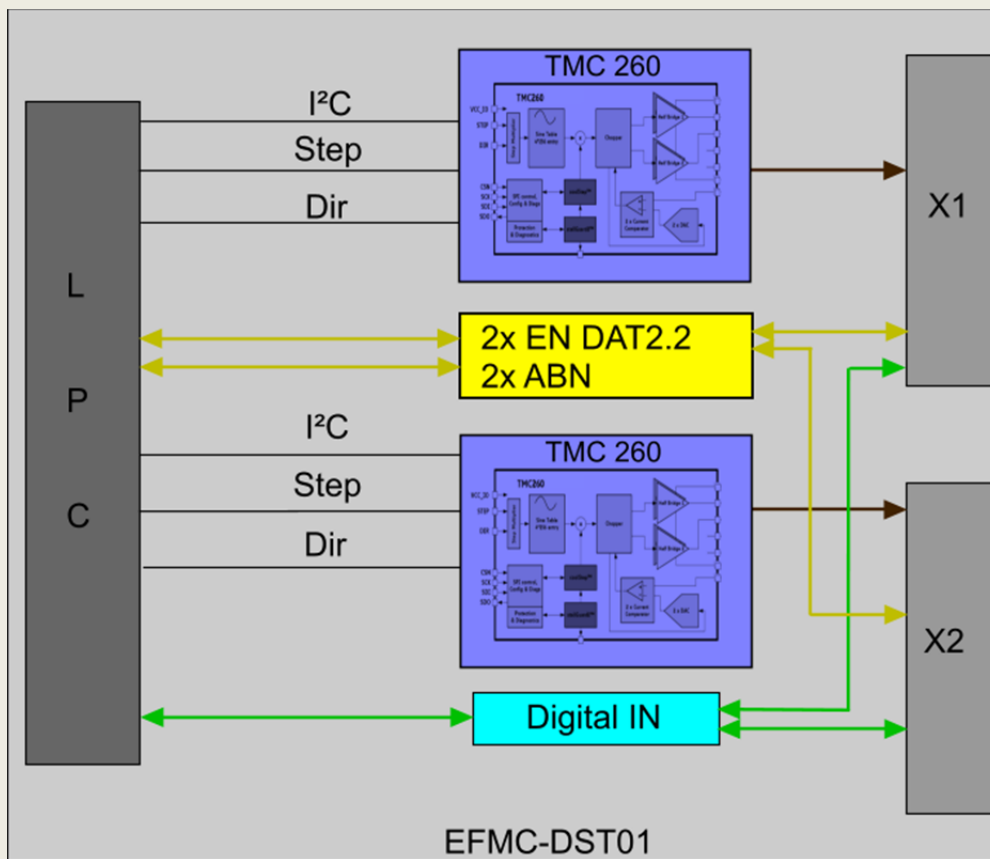


EFMC-DST01

General Description:

The EFMC-DST01 microstepping driver board is based on advanced digital current control technology, with continuous monitoring of output to give smooth and reliable microsteps. The module has versatile input power capability: internal 12V or an external input operating voltage range is 5VDC-24VDC. Driver can be used with two-phase step motors and provide current up to 2.0A with highest resolution of 256 microsteps per full step. The driving current has EMI optimized programmable slope. The module provides digital interface for EnDat2.2 and incremental encoder, digital inputs for switches, and auxiliary power.

Block diagram:



| | |
|---|---|
| Features: <ul style="list-style-type: none"> ➤ Standard FMC module ➤ ANSI/VITA 57.1 LPC compliant ➤ Supports up to 2A peak current motor coil ➤ Supports up to 256 micro-steps per full step | <ul style="list-style-type: none"> ➤ Programmable current slopes ➤ one power monitor per channel ➤ Each channel supports switchable EnDat2.2 and ABN-encoder readout ➤ RoHS compliant |
| Application: | <ul style="list-style-type: none"> ➤ Industrial Automation ➤ Control system ➤ Accelerators ➤ Research & development |

| Description | | |
|------------------------------|--|--|
| Architecture | | |
| Physical | Dimensions | FPGA Mezzanine Card Single-width 10 mm stacking height Regions 1, 2 and 3 occupied Size: 84 x 69 mm |
| Standard | ANSI/VITA 57.1MTCA.4 | FPGA mezzanine card (FMC) |
| Compatibility | FMC classification I/O voltage (VADJ) Compatible products | Low Pin Count (LPC) FMC-Connector 1.8V – 3.3V EAMC-FMC500 EAMC-FMC400 |
| Configuration | | |
| Electrical Properties | Number of channels Power Consumption Step Motor Max. motor supply with external supply Max. motor supply standard (power over AMC) | 2 Max. 12W (over FMC Connector) Max. 24 W (only with ext. supply) 2 phase bipolar stepper motor 12V / 2.0A peak per coil 12V / 0.5A peak per coil |
| Connectivity | | |
| Input/output | Connectors | Motor End switch Encoder 2 phase bipolar stepper motor EnDat2.2 incremental and switch |
| Other features | | |
| Environmental | Operating temperature Storage temperature Relative humidity Weight | 0 – 70°C -40 – 90°C 5 to 90%, non-condensing 0.2 kg |
| Order Information | EFMC-DST01 | |

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Developed by: **eicSys**

Specification is subject to change without further notice

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