Preliminary Datasheet

SSM1ST2420HC

RoHS COMPLIANT 2002/95/EC

SSM1ST2420HC, Motion Controller Module

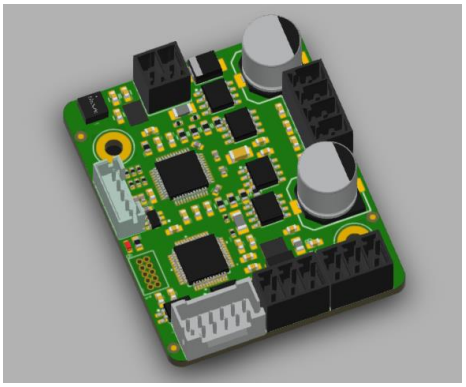
Features

Electrical Properties

Parameter:	Description
Rated Voltage:	**24V DC (25V Max.)**
Rated Current:	**2A (2.5A Peak)**
Microprocessor:	**STM32 Cortex M0**
Sensors:	**Hall Sensor (Backside of PCB)**
Interfaces:	**CAN** **Step / Dir** **Encoder** **SWD / JTAG (for STM MCU)**
I/O's:	**2x Isolated Digital Input (24V Max. / 50 mA)** **2x Digital Output (24V Max. / 200 mA)** **1x Analog I/O (5V Max.)**

Mechanical Properties

Parameter:	Description
Operating Temperature:	**TBD**
Dimensions:	**52.3 x 42.3 x 15 mm**
Supported NEMA size:	**NEMA 17**



Typical applications

- Compact Stepper Motor Driver
- Handling & Automation
- Stand-alone and multi Axis operation

Description

The SSM1ST2420HC is an one axis small form factor Motion Controller Module and 2-phase bipolar stepper motor with a high torque and has sophisticated features like an ultra-low-noise chopper mode, a way to drive the motor with very high efficiency, and a programmable stall guard. The SSM1ST2420HC can be controlled and configured by the onboard STM32-Cortex M0x microcontroller. On the back of the PCB a Hall sensor is placed to allow for a closed loop system without the need for an encoder. If an encoder is preferred, this can also be used and connected to the encoder connector on the PCB. To allow for versatile use cases , the SSM1ST2420HC board features a CAN bus with 2 connectors making the board suitable for "daisy chaining", Further it offers 2 isolated 24V tolerant Inputs, outputs and 1 analog port for connecting external electronics.

Ordering information

Order your modules via www.summit-electronics.com or info@summit-electronics.com. Please contact us for more information. Customisation of the product is available on request.

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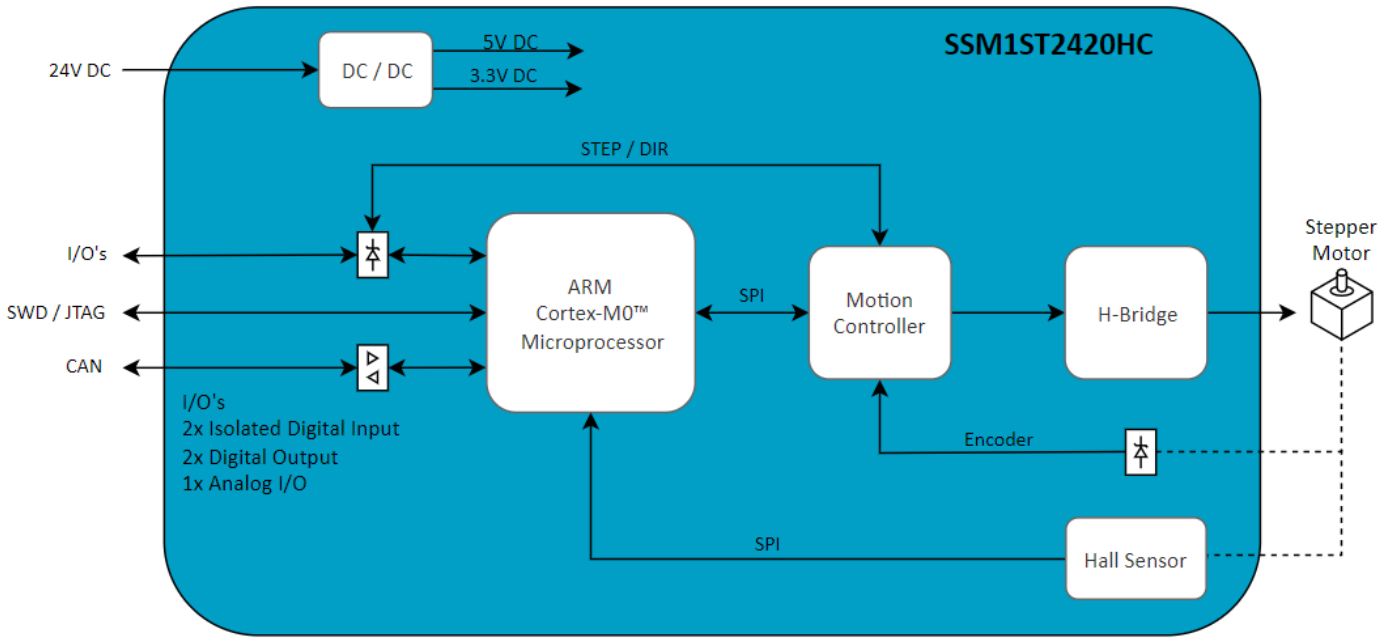
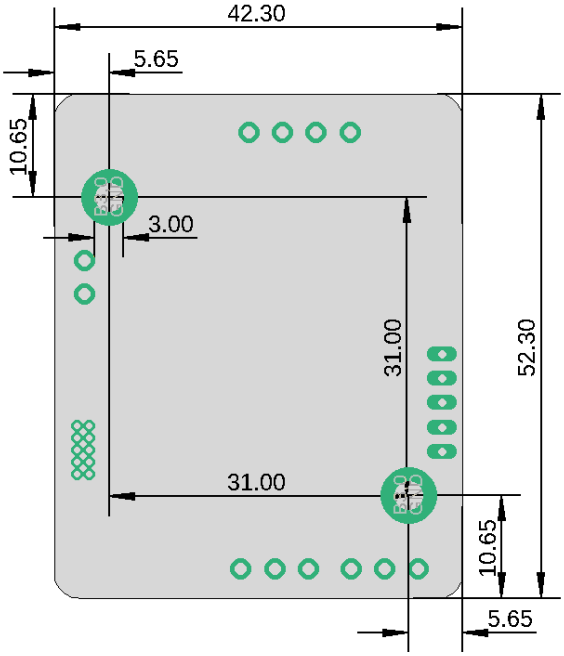
Block Diagram



Mounting



Technical support

For all product questions please contact us via info@summit-electronics.com