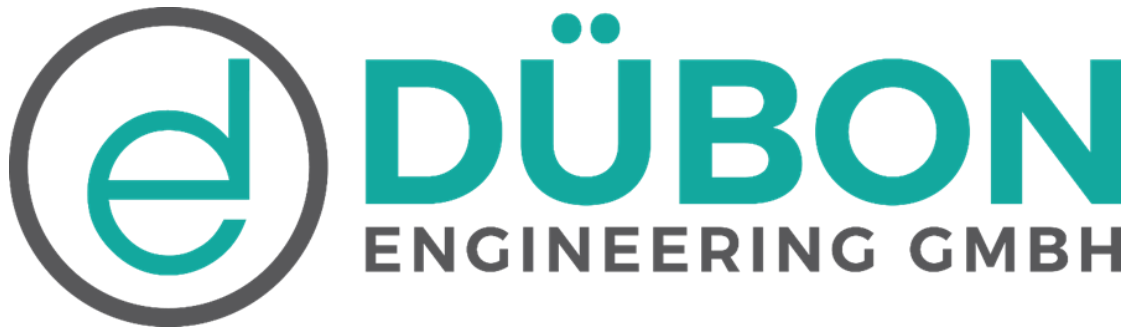
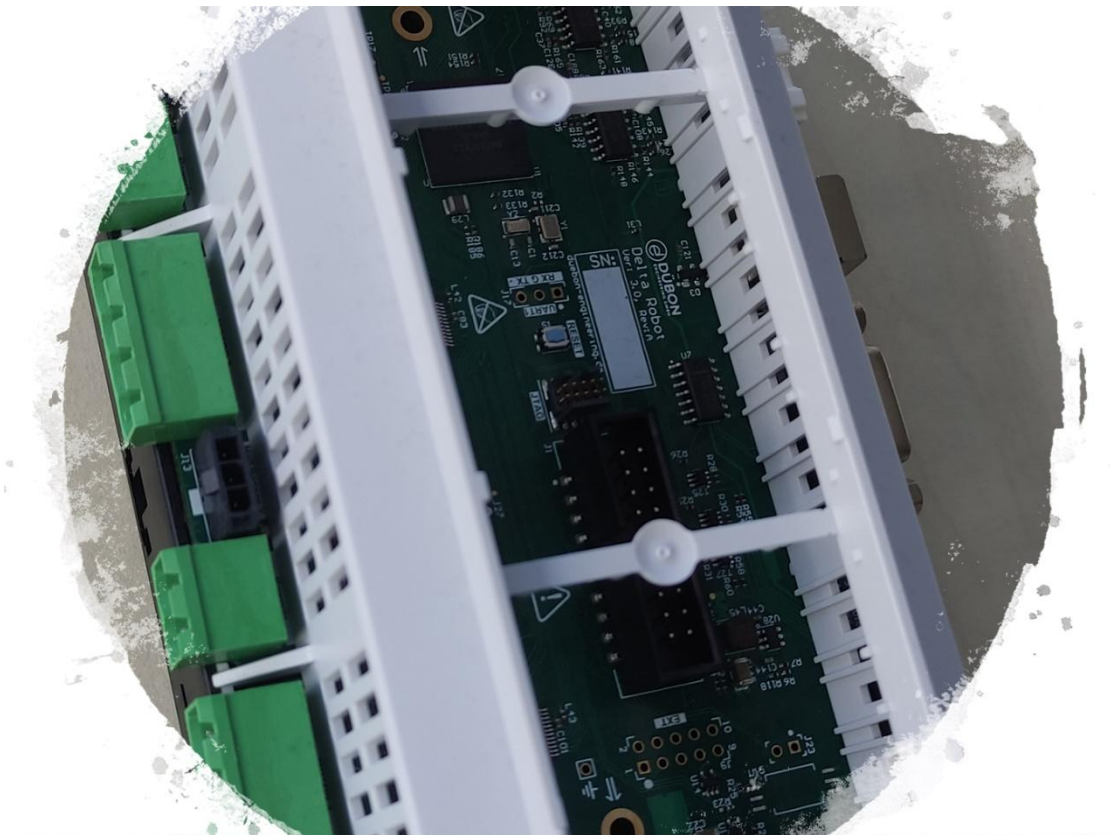




MotionA RevC

Universal Motioncontroller by Dübon
Engineering GmbH

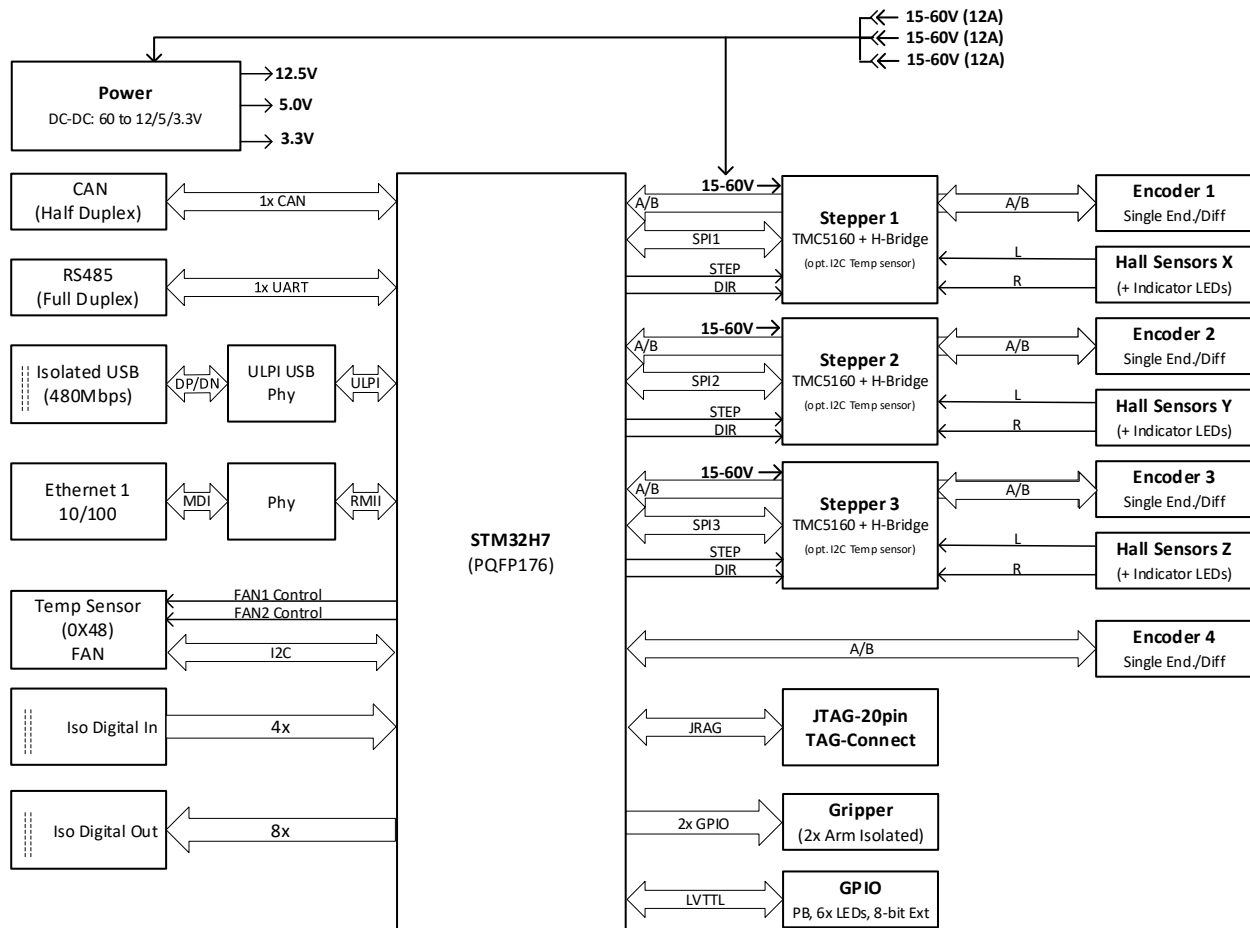


Block diagram.....	3
Key Features	3



Figure 1, MotionA, RevC

Block diagram



Key Features

Temperature range:

- -40 to +60 °C

CPU:

- STM32H7 ARM Cortex-M7 @480MHz, 2MB FLASH/1MB RAM
- 20-pin JTAG Debug Port
- TAG-Connect
- UART Debug

Stepper:

- 3x Independent
- Stepper Power: 4A per phase, 8A per Motor
- Stepper Driver: TMC5160
- Stepper Accuracy: 256 Micro-steps

Encoder:

- 4x Independent,
- Single-ended or Differential Encoder

DC Motor:

- 1x, Independent and Non-isolated
- DC Motor Power: 2A per Motor
- DC Motor Driver: TB67H450

Gripper:

- 2x, Independent and Isolated

Hall Sensor:

- 3x Left and Right Sensor, Independent and Isolated
- 3x Left and Right indicator LED

Interface:

- 1x RJ45 10/100 Ethernet
- RS485, Full-duplex
- CAN, Half-duplex
- 1x USB, Isolated Full-speed 480Mbps
- 4x 24V Isolated & Independent AC Inputs
- 8x 24V Isolated Outputs

GPIO:

- 1x PB,
- 6x LEDs
- 8-bit Extension Header
- ESD Protected

Power:

- Main Input Voltage: 15-60V
- 3x Parallel Power Input
- On-board DC-DC converters
- 2x 4-wire cooling FAN

Temp Sensor:

- 1x Digital Temp. sensor (optional)
- 1x NTC 10K temp. sensor (optional)

Storage:

- I2C EEPROM (optional)

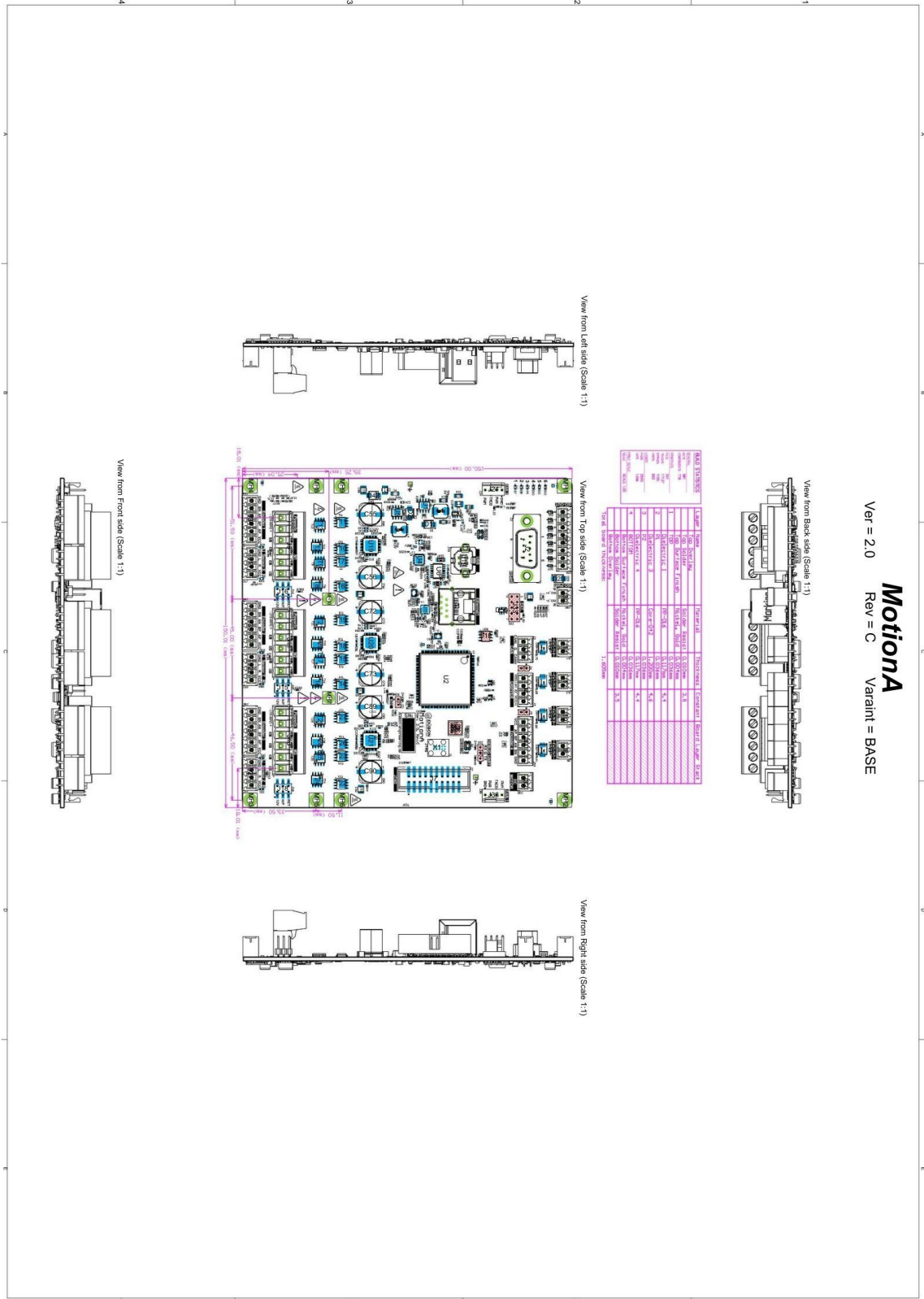
Board Size:

- 184mm x 184mm x 45.5mm

Board Weight

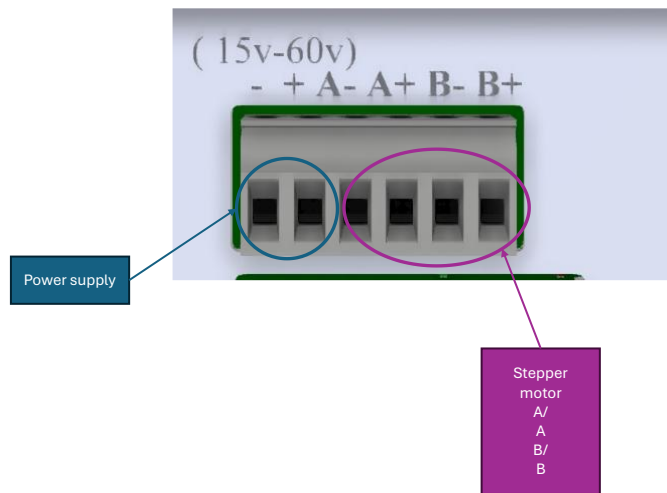
- 456g

Dimensions

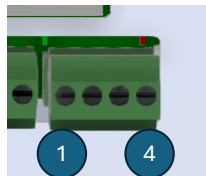


Setup instructions

Power and stepper motor



Homing



Pin	Function
1	Homing VCC
2	Homing left
3	Homing right
4	GND