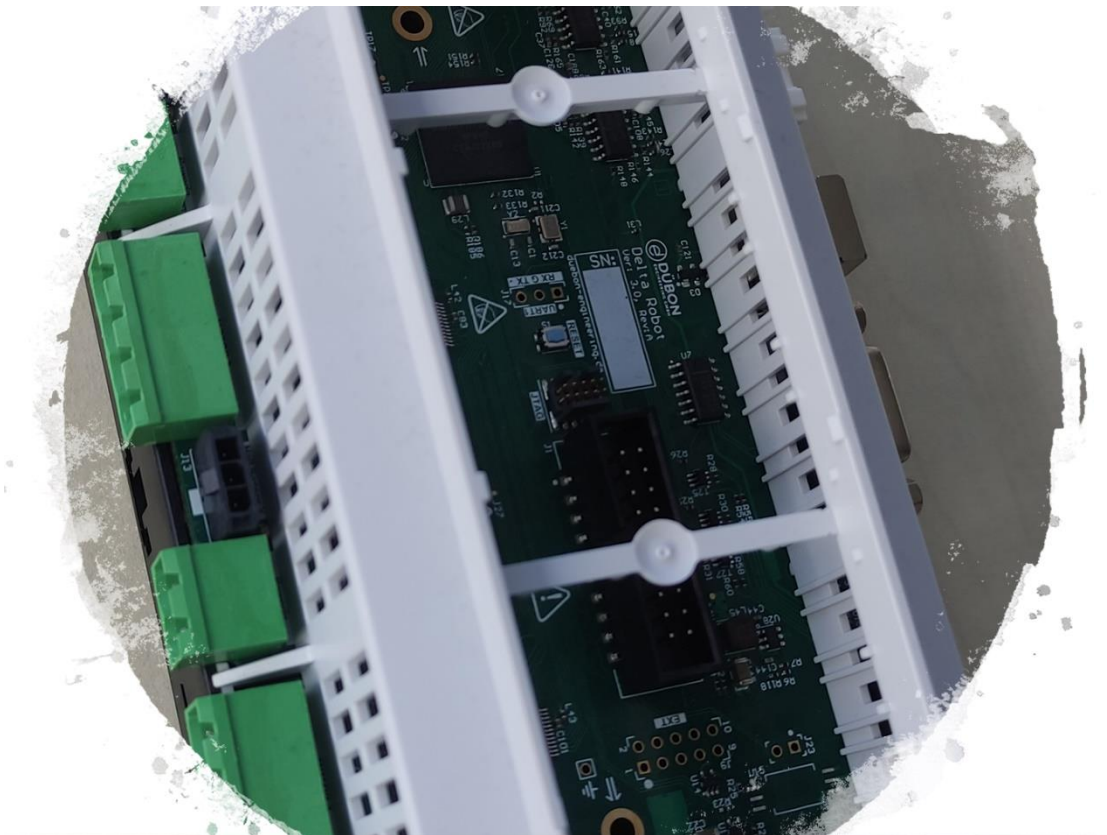




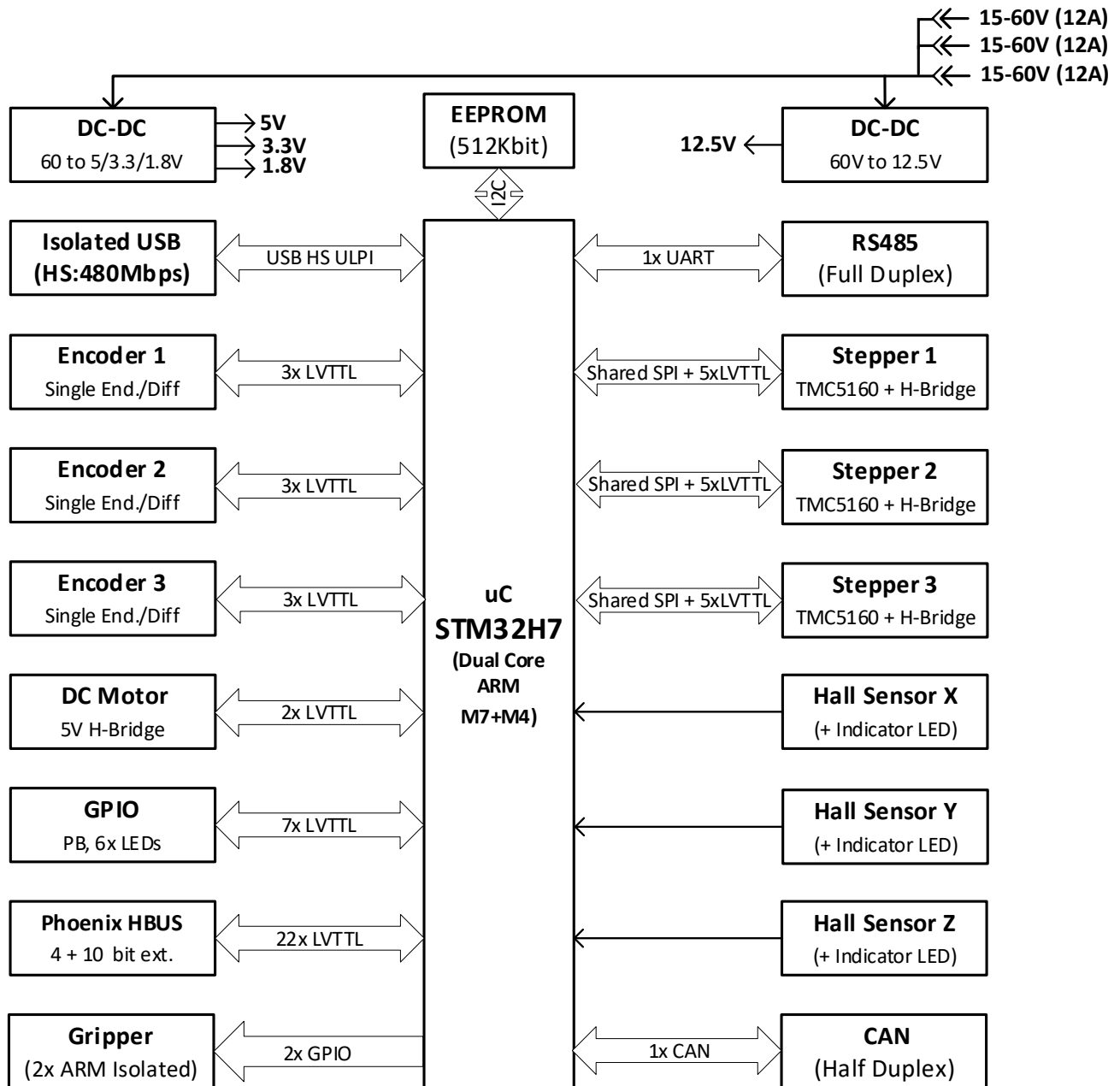
DÜBON
ENGINEERING GMBH

MotionA 1.0

Universal Motioncontroller by Dübon Engineering GmbH



Block diagram



MCU:

- STM32H735,
- Dual Core ARM, Cortex-M7+CortexM4, 480MHz + 240MHz,
- 2MB FLASH,
- 1MB SRAM

Storage:

- 512KB E2PROM, Non-Volatile

Stepper:

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

Encoder:

- 3x Independent,
- Single Ended or Differential

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, Independent and Isolated

Interface:

- RS485, Full-duplex
- CAN, Half-duplex
- USB, Isolated 480Mbps
- Phoenix HBUS, 10+4 bit GPIO
- ESD Protected

GPIO:

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

Power:

- Main Input Voltage: 15-60V
- 3x Parallel Input Power Connector, Molex
- On-board DC-DC converters

Mechanical dimensions

Based on Phoenix DIN rail standard, without housing

