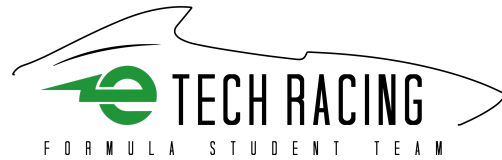ETR CELLMETER MASTER

LEGEND
- Supply
- MCU
- Device
- Connector

eTECH RACING
FORMULA STUDENT TEAM

Supply —24 VDC→ Pre-regulator buck (MPQ4323) —12 VDC→ Buck (MPQ4323) —5V→ LDO —3V3→

24 VDC

Pre-regulator buck (MPQ4371) —12 VDC→ eFuse 1 (MPQ5069) → Slaves supply (1..4)
Pre-regulator buck (MPQ4371) —12 VDC→ eFuse 2 (MPQ5069) → Slaves supply (5..8)

Power data to MCU
Power data to MCU

24 VDC

FAN 1
FAN 2
Debug LEDs (1..4)
CAN
Transceiver (ATA6561)

PWM1
RPM_FB1
PWM2
RPM_FB2
GPIO
CAN1

XTAL
NTC —ADC1→

Main MCU (STM32F750V8T6)

SPI to slaves (x8 CS)
2xADC1
2xGPIO

Power data from eFuse 1&2

Slave (1..8)
SW debug