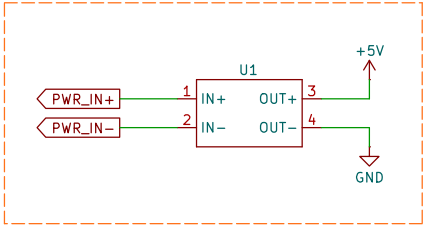
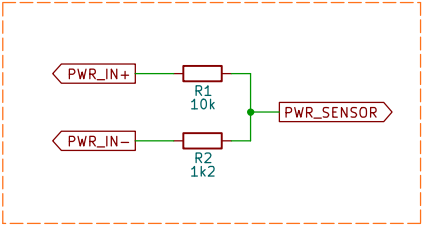


Power Supply
Input: +5V ~ +30V (DC)
Output: +0.8V ~ +24V (DC) – adjustable
Current: +2.5A / +5A (with heat sink)
Conversion efficiency: >90%
Switching Frequency: 300kHz
Maximum Output Power: 80W
Maximum Voltage Fluctuation: ±30mV

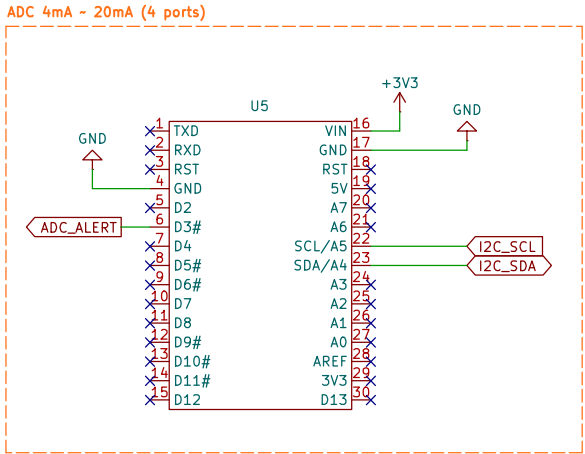
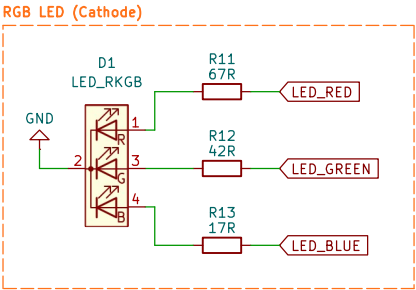
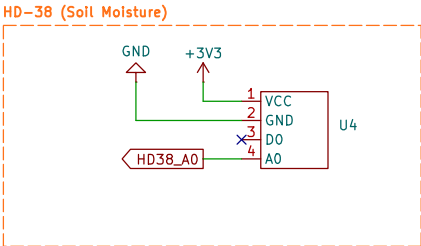
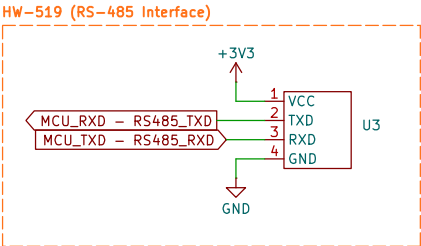
XL4005 Module



Voltage Sensor



Power Supply (Max. Supply Current: ?? mA)		
Author: Robson Costa (robson.costa@ifsc.edu.br)		
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IFSC/Lages (Instituto Federal de Santa Catarina)		
AgroTechLab (Laboratório de Desenvolvimento de Tecnologias para o Agronegócio)		
Sheet: /Power Supply/		
File: atl100_power_supply.kicad_sch		
Title: ATL100 (Multiparametric Station) – THT Based		
Size: A4	Date: 2024-09-06	Rev: v0.1.0-alpha
KiCad E.D.A. 8.0.4		Id: 3/5



BME280
Air Temperature: -40°C ~ 85°C (0.01°C / ±1°C)
Air Humidity: 0% ~ 100% (0.008% / ±3%)
Atmospheric Pressure: 300hPa ~ 1100hPa (0.18hPa / ±1hPa)
I2C Addr: 0x76 (SDO Low)
0x77 (SDO High)
DS18B20
Soil Temperature: -55°C ~ 125°C (0.01°C / ±0.5°C)
Resolution: 9 ~ 12 (adjustable)
HD-38
Soil Moisture: 0% ~ 100%

Modules		
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AgroTechLab (Laboratório de Desenvolvimento de Tecnologias para o Agronegócio)		
Sheet: /Modules/		
File: atl100_modules.kicad_sch		
Title: ATL100 (Multiparametric Station) – THT Based		
Size: A4	Date: 2024-09-06	Rev: v0.1.0-alpha
KiCad E.D.A. 8.0.4		Id: 5/5