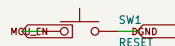
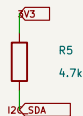
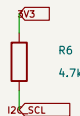
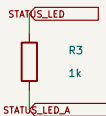
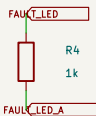
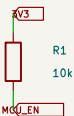
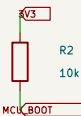
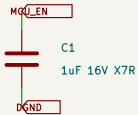
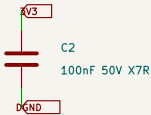
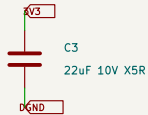
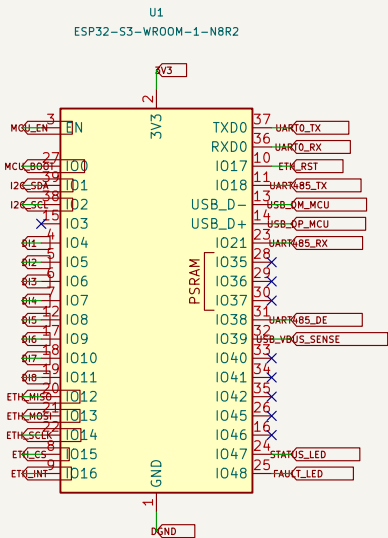


	1	2	3	4	5	6	7	8	
A	24V DC / 8 independent DI / Ethernet / isolated RS485 Manufacturing release requires native ERC/DRC, CAM review and prototype verification.								A
B	MCU File: MCU.kicad_sch	DEBUG File: DEBUG.kicad_sch	ETHERNET File: ETHERNET.kicad_sch	DL_1 File: DL_1.kicad_sch					B
C	DI_2 File: DI_2.kicad_sch	DI_3 File: DI_3.kicad_sch	DI_4 File: DI_4.kicad_sch	POWER File: POWER.kicad_sch					C
D	RS485 File: RS485.kicad_sch							D	
E								E	
F	Engineering prototype – hardware validation required Machine Status Collector Sheet: / File: machine-status-collector-v1.kicad_sch Title: Machine Status Collector – EVT1 Size: A3Date: 2026-10-03Rev: EVT1 KiCad E.D.A. 10.0.6Id: 1/10							F	
	1	2	3	4	5	6	7	8	

Engineering prototype – hardware validation required		
Machine Status Collector		
Sheet: /		
File: machine-status-collector-v1.kicad_sch		
Title: Machine Status Collector – EVT1		
Size: A3	Date: 2026-10-03	Rev: EVT1
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MCU / Global net labels connect the circuit across pages



#FLG200

PWR_FLAG

#FLG201

PWR_FLAG

Engineering candidate – not released for mass production

Machine Status Collector

Sheet: /MCU/

File: MCU.kicad_sch

Title: Machine Status Collector / MCU

Size: A3

Date: 2026-10-03

Rev: EVT1

KiCad E.D.A. 10.0.6

Id: 2/10



Engineering candidate – not released for mass production

Machine Status Collector

Sheet: /DEBUG/
File: DEBUG.kicad_sch

Title: Machine Status Collector / DEBUG

Size: A3	Date: 2026-10-03	Rev: EVT1
KiCad E.D.A. 10.0.6		Id: 3/10

[illegible]

DI_1 / Global net labels connect the circuit across pages

The schematic diagram illustrates the internal circuitry of the Machine Status Collector / DI_1. It features two identical comparator sections, each centered around an IS01211DR (U2 and U3). Each section has a SENSE input, a SUB input, and an OUT output. The SENSE inputs are connected to DI1_SENSE and DI2_SENSE respectively. The SUB inputs are connected to DI1_SUB_FLOAT and DI2_SUB_FLOAT. The OUT outputs are connected to DI1_OUT and DI2_OUT. Various passive components are used throughout the circuit, including resistors R13, R14, R15, and R16, capacitors C5, C6, C7, and C8, and connectors J4 and J5. The circuit also includes floating copper islands TP7 and TP8. A legend at the bottom left identifies symbols for #FLG500, #FLG501, PWR_FLAG, and GND_DI1/GND_DI2.

Engineering candidate – not released for mass production
Machine Status Collector
Sheet: /DI_1/
File: DI_1.kicad_sch
Title: Machine Status Collector / DI_1

Size: A3	Date: 2026-10-03	Rev: EVT1
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Machine Status Collector

Title: Machine Status Collector / DI_1

Rev: EVT1

Id: 5/10

DI_2 / Global net labels connect the circuit across pages

U4 ISO1211DR

U5 ISO1211DR

C10 100nF 50V X7R

C9 10nF 100V X7R

J6 DI+ / DI- 5.08mm

R18 562R 1% 0.125W

R17 1k 1% 0.25W MELF

R19 1k 1% 0.25W MELF

R20 562R 1% 0.125W

DI3_SENSE

DI4_SENSE

DI3_IN

DI4_IN

DI3_OUT

DI4_OUT

DI3_FIELD_P

DI4_FIELD_P

DI3_FIELD_N

DI4_FIELD_N

DI3_FLOAT

DI4_FLOAT

TP9 SUB floating copper island

TP10 SUB floating copper island

#FLG600

#FLG601

GND_DI3

GND_DI4

PWR_FLAG

Engineering candidate – not released for mass production

Machine Status Collector

Sheet: /DI_2/
File: DI_2.kicad_sch

Title: Machine Status Collector / DI_2

Size: A3	Date: 2026-10-03	Rev: EVT1
KiCad E.D.A. 10.0.6		Id: 6/10

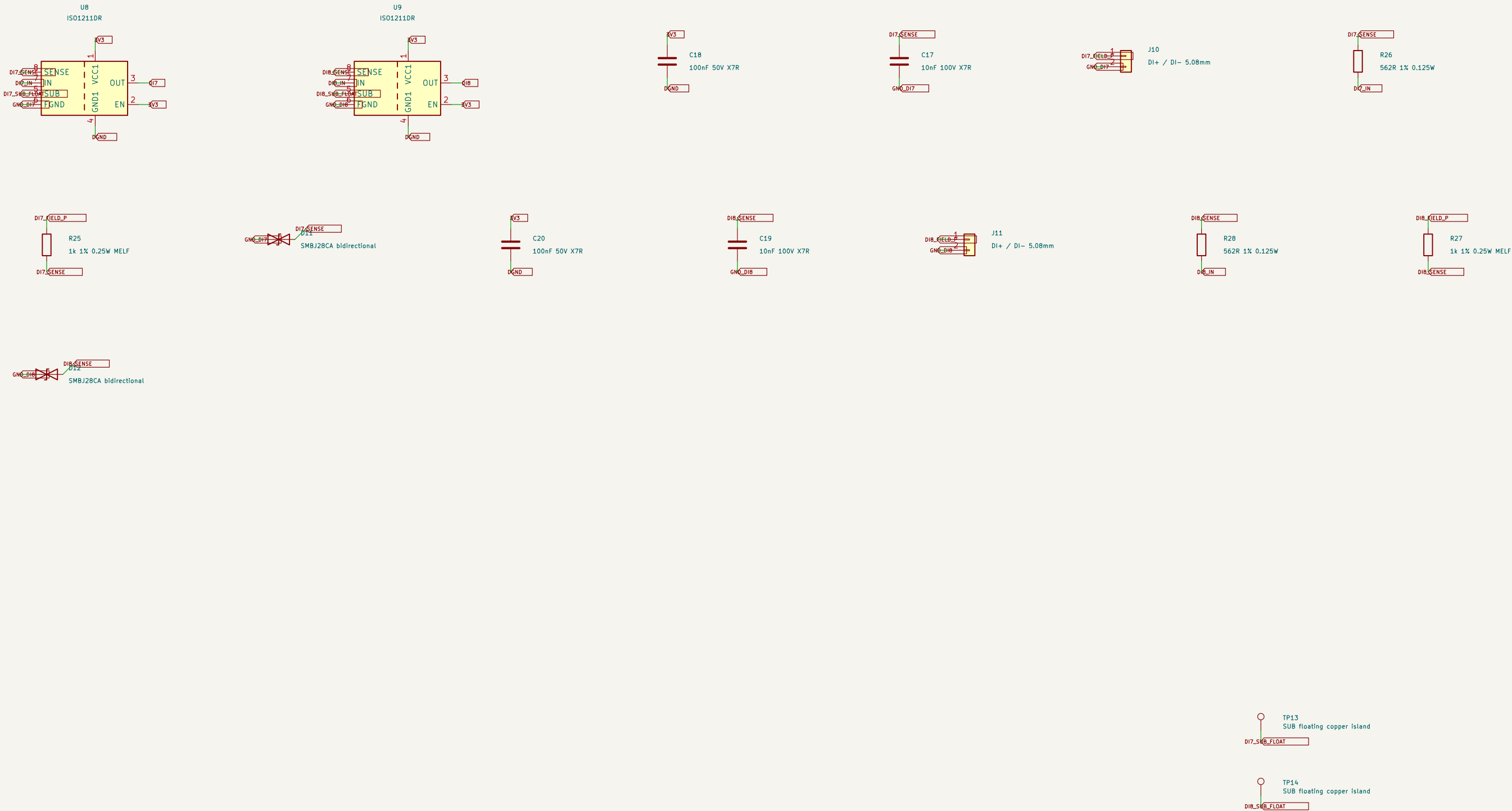
Machine Status Collector

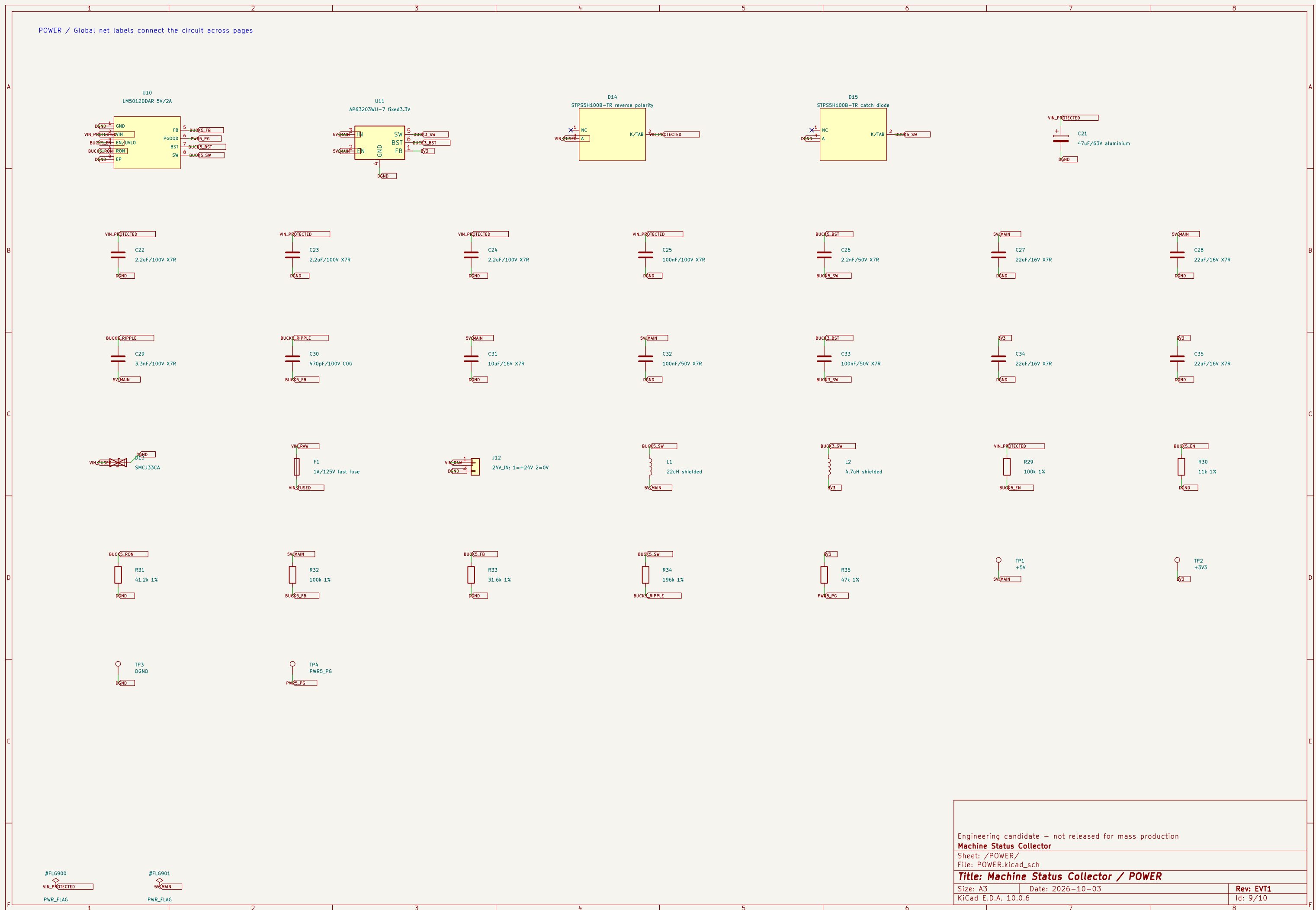
Title: Machine Status Collector / DI_2

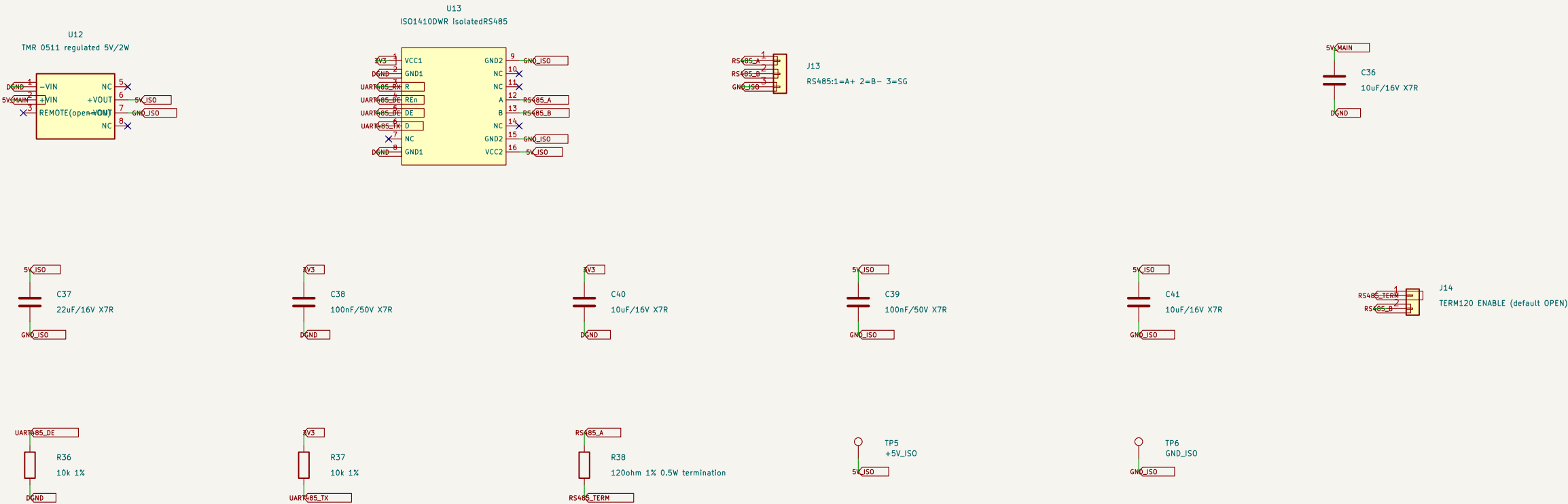
Rev: EVT1

Id: 6/10

DL_4 / Global net labels connect the circuit across pages







Engineering candidate – not released for mass production

Machine Status Collector

Sheet: /RS485/
File: RS485.kicad_sch

Title: Machine Status Collector / RS485

Size: A3	Date: 2026-10-03	Rev: EVT1
KiCad E.D.A. 10.0.6		Id: 10/10