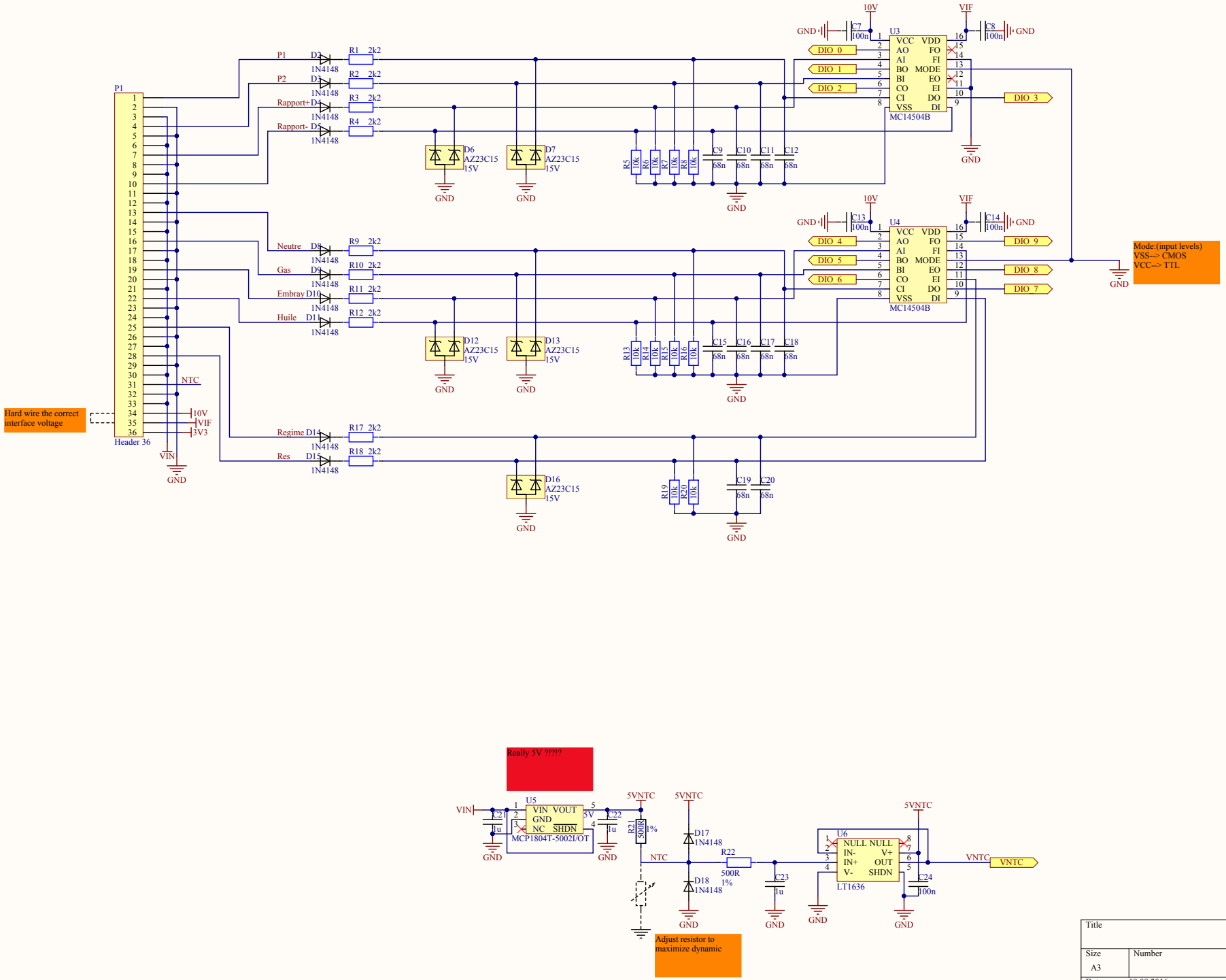

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Date: 19.08.2016		Sheet of
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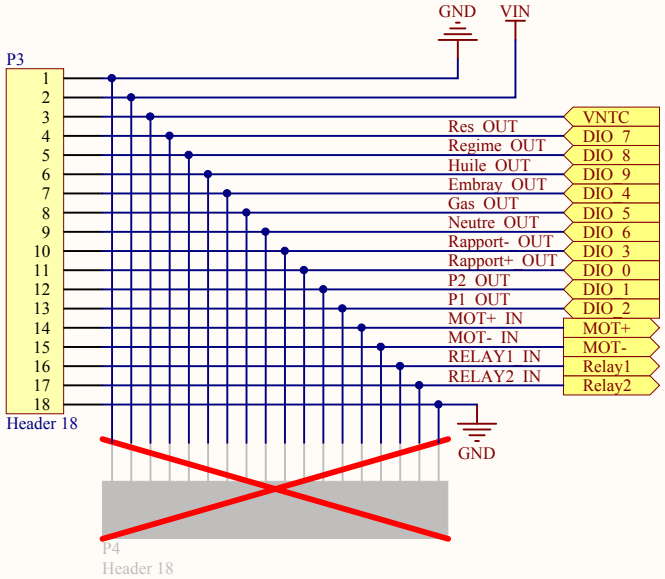

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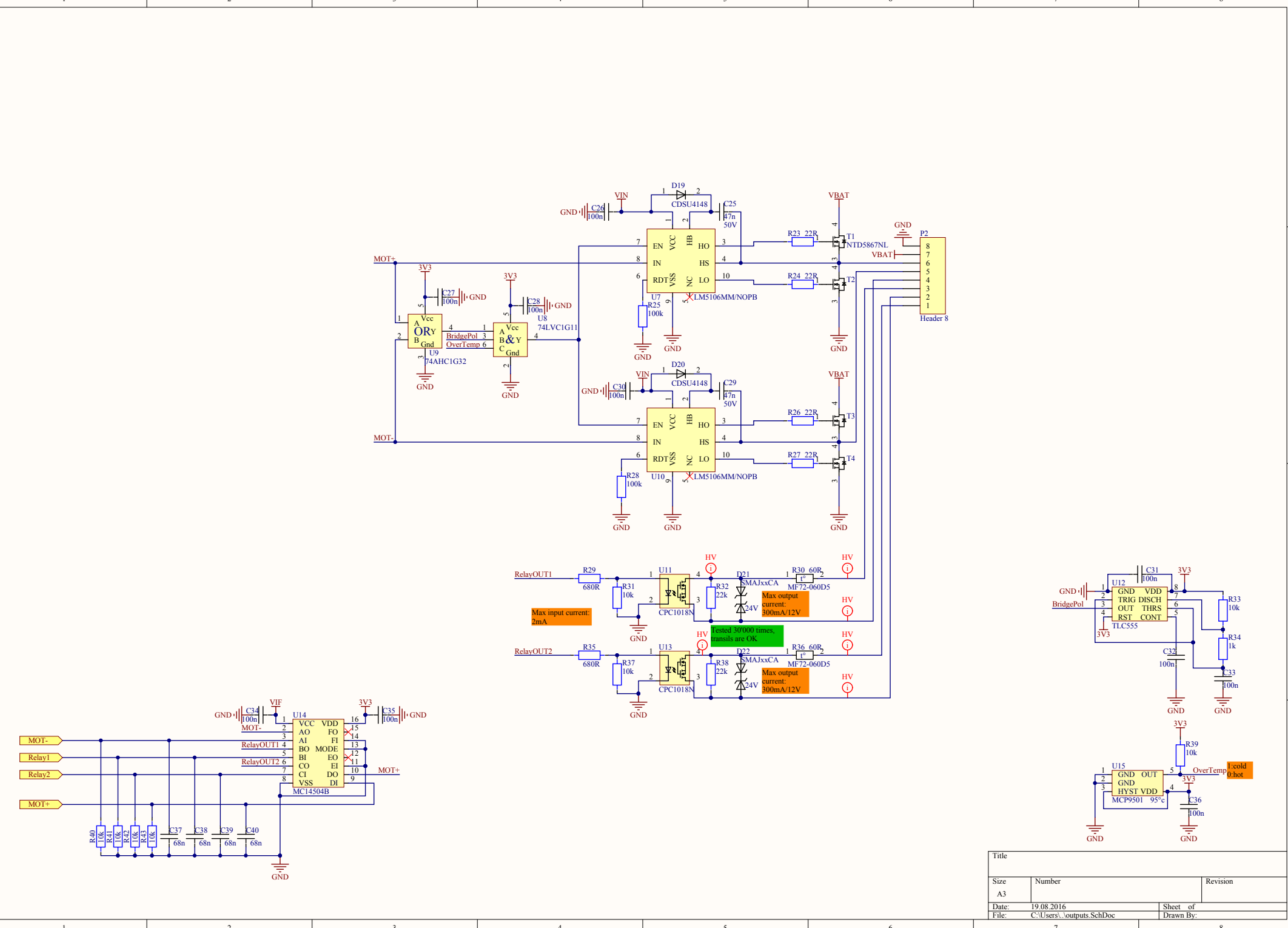


Title		
Size A3	Number	Revision
Date: 19.08.2016		Sheet of
File: C:\Users\..\outputs.SchDoc		Drawn By:

TODO:

Zener (D1) footprint pads too small

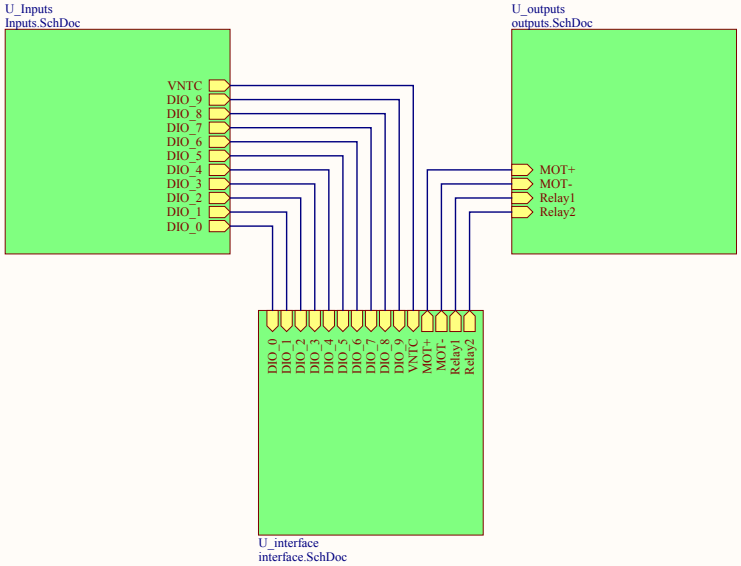
U9 footprint too big but OK for soldering
R33 & R39 reference overgraded? (0.5%)

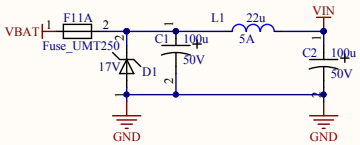
Open questions:

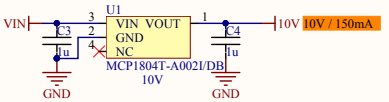
1)asked:
-provide speed-sensor reference and wiring -->omron e2a s08ks02
-temperature sensor output type --> ohmic, NTC. range of interest: 50-10ohm around
-confirm input number

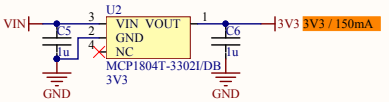
Infos:

- Compteur tours: Il y aura 3 cames au lieu d'une seule
- Antirebonds sur entrées, notamment sur selecteur de vitesse
- LED temperature--> Hystérèse
- Tempos programmables: a) durée coupe-circuit , b) délai coupe-circuit
- mode test 1--> afficher état des entrées sur les LEDS
- mode test 2--> controler les sorties avec interrupteurs
- Changer diodes sur inputs pour des plus robustes?



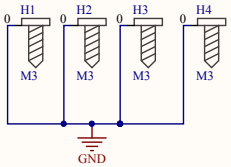






Omron speed sensor
omron e2a s08ks02
No detect: High-Z
detect: VCC

Temp sensor: 10-200 ohm



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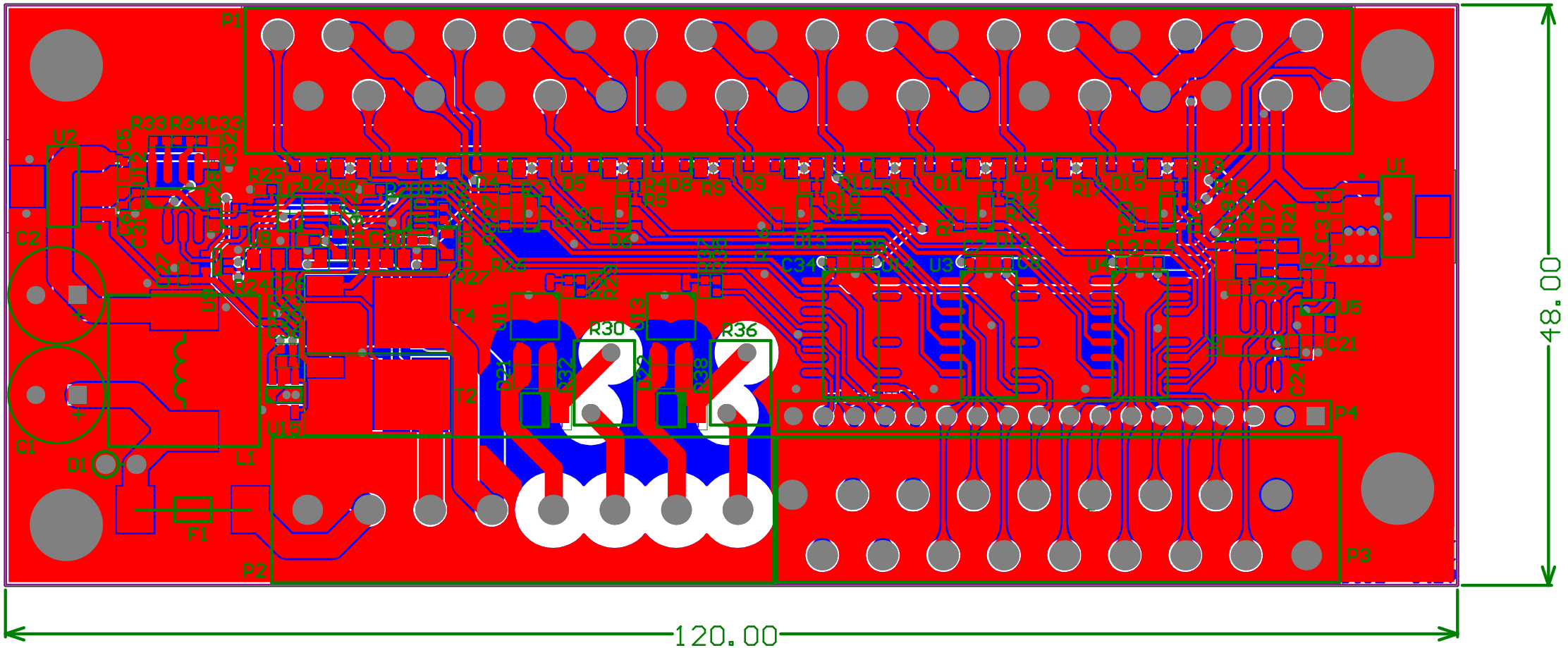
P1
P2
P3
P4
U1
U2
U3
U4
U5
R30
R36
C1
C2
C21
C22
C23
C24
D1
F1
L1
T2
T4
120.00
48.00

Designator	Description	Manufacturer	Manufacturer PartNum	Digikey ref	Quantity
C1, C2		Nichicon	UVR1H101MPD1TD	493-5916-1-ND	2
C3, C4, C5, C6, C21, C22, C23		Murata	GRM155R61E105MA12D	490-10018-1-ND	7
C7, C8, C13, C14, C24, C26, C27, C28, C30, C31, C32, C33, C34, C35, C36		TDK Corp.	C1005X5R1E104K050BC	445-4964-1-ND	15
C9, C10, C11, C12, C15, C16, C17, C18, C19, C20, C37, C38, C39, C40		Samsung	CL10B683KB8NNNC	1276-1814-1-ND	14
C25, C29		Murata	GRM155R71H473KE14D	490-10702-1-ND	2
D1		ON Semi	1N5354BG	1N5354BGOS-ND	1
D2, D3, D4, D5, D8, D9, D10, D11, D14, D15, D17, D18		Micro Commercial Co	1N4148WX-TP	1N4148WXTPMSCT-ND	12
D6, D7, D12, D13, D16	DIODE ZENER ARRAY 15V SOT23-3	Diodes Inc.	AZ23C15-7-F	AZ23C15-FDICT-ND	5
D19, D20		Comchip Tech.	CDSU4148	641-1001-1-ND	2
D21, D22	SMAJ Transient Voltage Suppressor Diode Series	Littelfuse Inc	SMAJ24CA	SMAJ24CALFCT-ND	2
F1		Schurter Inc	3403.0166.11	486-1247-ND	1
L1		Wurth Electronics Inc	7447709220	732-1243-1-ND	1
P1	Header, 36-Pin	Phoenix Contact	1990164	277-1810-ND	1
P2	Header, 8-Pin	Phoenix	1869279	277-5855-ND	1
P3	Header, 10-Pin	Phoenix	1990164	277-1810-ND	1
R1, R2, R3, R4, R9, R10, R11, R12, R17, R18		Yageo	RC0805JR-072K2L	311-2.2KARCT-ND	10
R5, R6, R7, R8, R13, R14, R15, R16, R19, R20, R31, R37, R40, R41, R42, R43		Panasonic	ERJ-2RKF1002X	P10.0KLCT-ND	16
R21, R22		Yageo	RC0805FR-07510RL	311-510CRCT-ND	2
R23, R24, R26, R27		Panasonic	ERJ-6ENF22R0V	P22.0CCT-ND	4
R25, R28		Susumu	RR0510P-104-D	RR05P100KDCT-ND	2
R29, R35		Panasonic	ERJ-2RKF6800X	P680LCT-ND	2
R30, R36		Cantherm	MF72-060D5	317-1146-ND	2
R32, R38		Rohm Semi	ESR10EZPJ223	RHM22KKCT-ND	2
R33, R39		Susumu	RR0510P-103-D	RR05P10.0KDCT-ND	2
R34		Rohm Semi	MCR01MRTF1001	RHM1.00KCDCT-ND	1
T1, T2, T3, T4		On Semi	NTD5867NLT4G	NTD5867NLT4GOSCT-ND	4
U1	IC REG LDO 10V 0.15A SOT223-3	Microchip	MCP1804T-A002I/DB	MCP1804T-A002I/DBCT-ND	1
U2	IC REG LDO 3.3V 0.15A SOT223-3	Microchip	MCP1804T-3302I/DB	MCP1804T-3302I/DBCT-ND	1
U3, U4, U14	IC LEVEL SHIFTER HEX 16-SOIC	On Semi	MC14504BDG	MC14504BDGOS-ND	3
U5	IC REG LDO 5V 0.15A SOT23-5	Microchip	MCP1804T-5002I/OT	MCP1804T-5002I/OTCT-ND	1
U6	IC OPAMP GP 220KHZ RRO 8SO SHTDN	Linear Technology	LT1636CS8#PBF	LT1636CS8#PBF-ND	1
U7, U10		Texas Intruments	LM5106MM/NOPB	LM5106MM/NOPBCT-ND	2
U8	IC GATE AND 1CH 3-INP SOT-363	Diodes Inc.	74LVC1G11DW-7	74LVC1G11DW-7CT-ND	1
U9		Diodes Inc.	74AHC1G32SE-7	74AHC1G32SE-7DICT-ND	1
U11, U13		IXYS Integrated	CPC1018NTR	CLA225CT-ND	2
U12	IC OSC SGL TIMER 2.1MHZ 8-SOIC	Texas Intruments	TLC555CDR	296-1336-1-ND	1
U15		Microchip	MCP9501PT-095E/OT	MCP9501PT-095E/OTCT-I	1