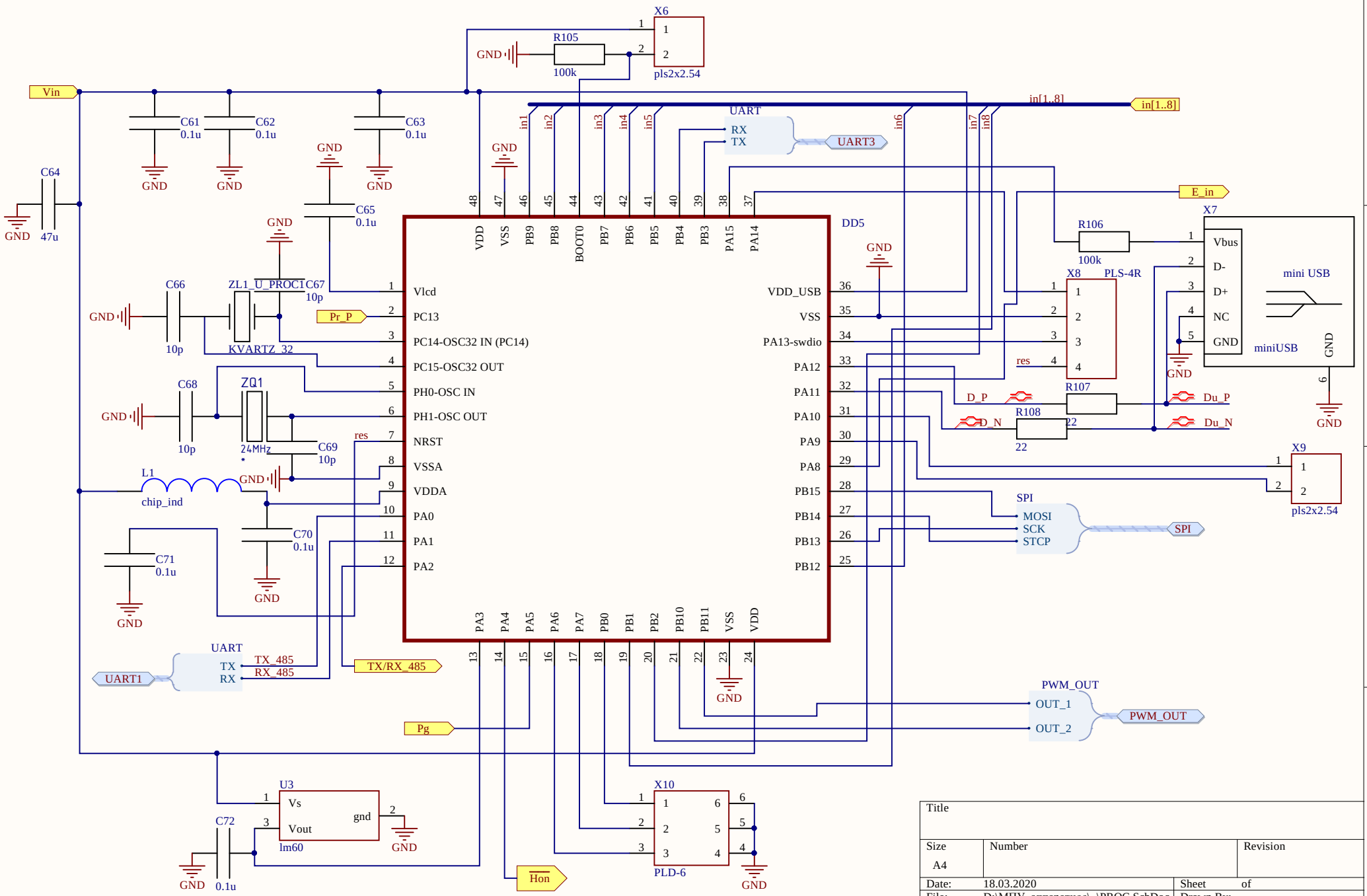
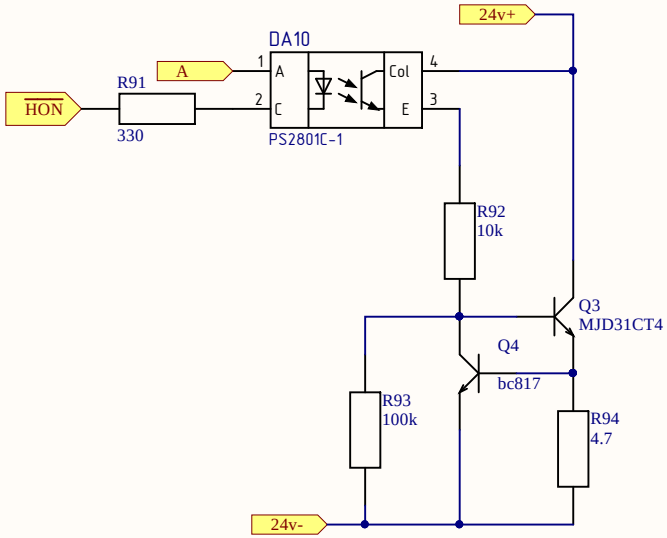
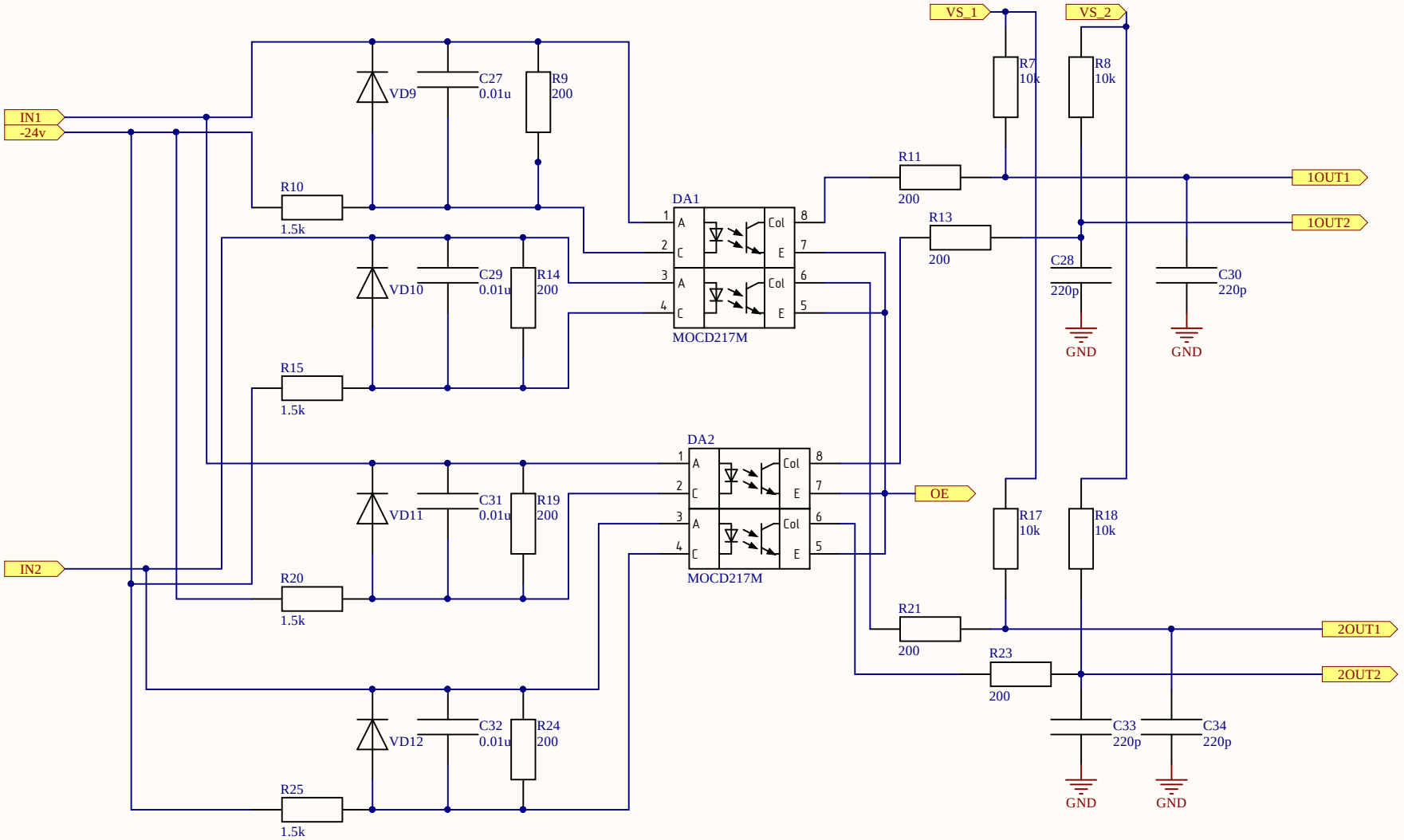
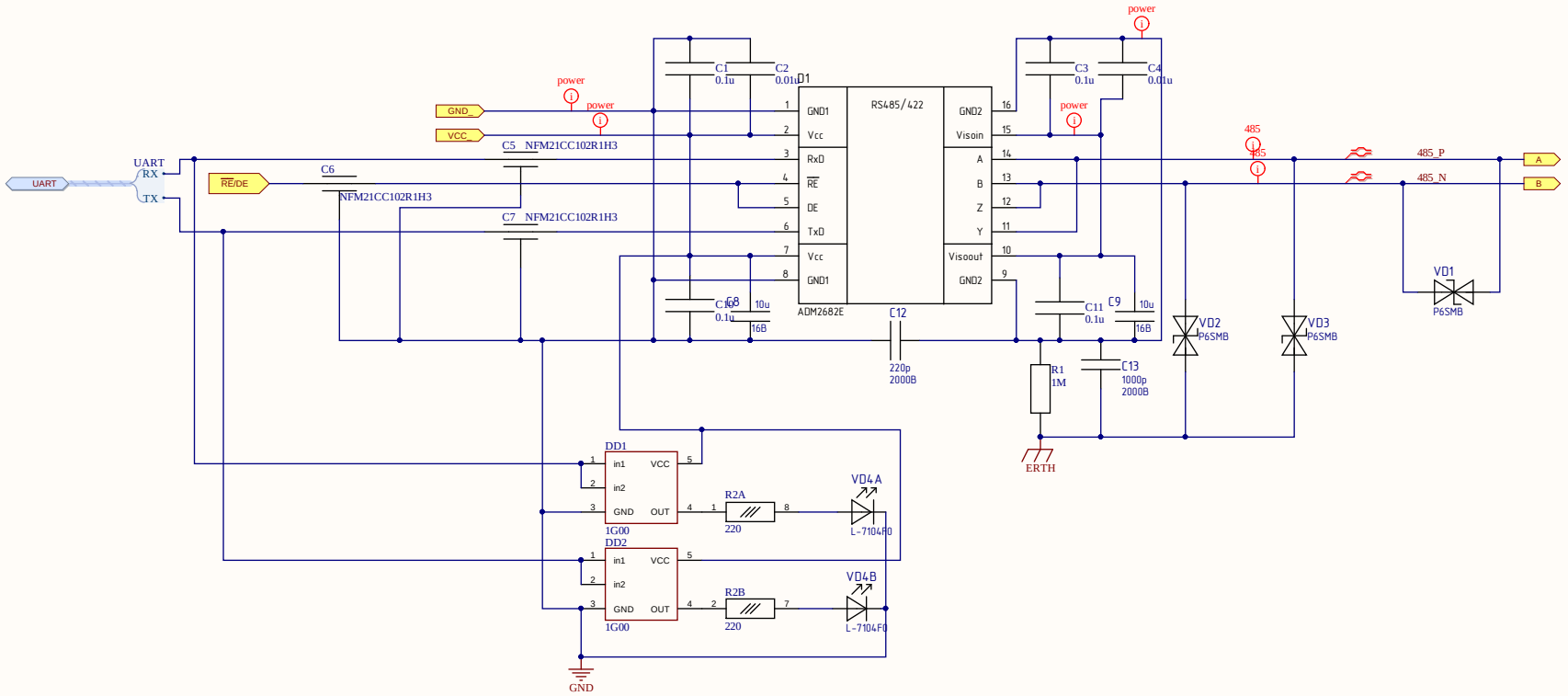

X6
R105
100k
pls2x2.54
Vin
C61 0.1u
C62 0.1u
C63 0.1u
C64
47u
C65 0.1u
C66
10p
ZL1_U_PROC1
C67 10p
KVARTZ_32
C68
10p
ZQ1
24MHz
C69 10p
L1
chip_ind
C70 0.1u
C71 0.1u
GND
UART
RX
TX
UART3
in[1..8]
DD5
VDD
VSS
PB9
PB8
BOOT0
PB7
PB6
PB5
PB4
PB3
PA15
PA14
Vlcd
PC13
PC14-OSC32 IN (PC14)
PC15-OSC32 OUT
PH0-OSC IN
PH1-OSC OUT
NRST
VSSA
VDDA
PA0
PA1
PA2
VDD_USB
VSS
PA13-swdio
PA12
PA11
PA10
PA9
PA8
PB15
PB14
PB13
PB12
PA3
PA4
PA5
PA6
PA7
PB0
PB1
PB2
PB10
PB11
VSS
VDD
Pr_P
res
TX_485
RX_485
TX/RX_485
Pg
Hon
E_in
R106
100k
X8
PLS-4R
R107
R108
22
D_P
D_N
Du_P
Du_N
X7
Vbus
D-
D+
NC
GND
mini USB
miniUSB
X9
pls2x2.54
SPI
MOSI
SCK
STCP
PWM_OUT
OUT_1
OUT_2
U3
Vs
Vout
gnd
lm60
C72
0.1u
X10
PLD-6
Title
Size
A4
Number
Revision
Date: 18.03.2020
Sheet of
File: D:\МПУ_аппаратное\..\PROC.SchDoc
Drawn By:



Title		
Size A4	Number	Revision
Date: 18.03.2020		Sheet of
File: D:\МПУ_аппаратное\..\heat.SchDoc		Drawn By:



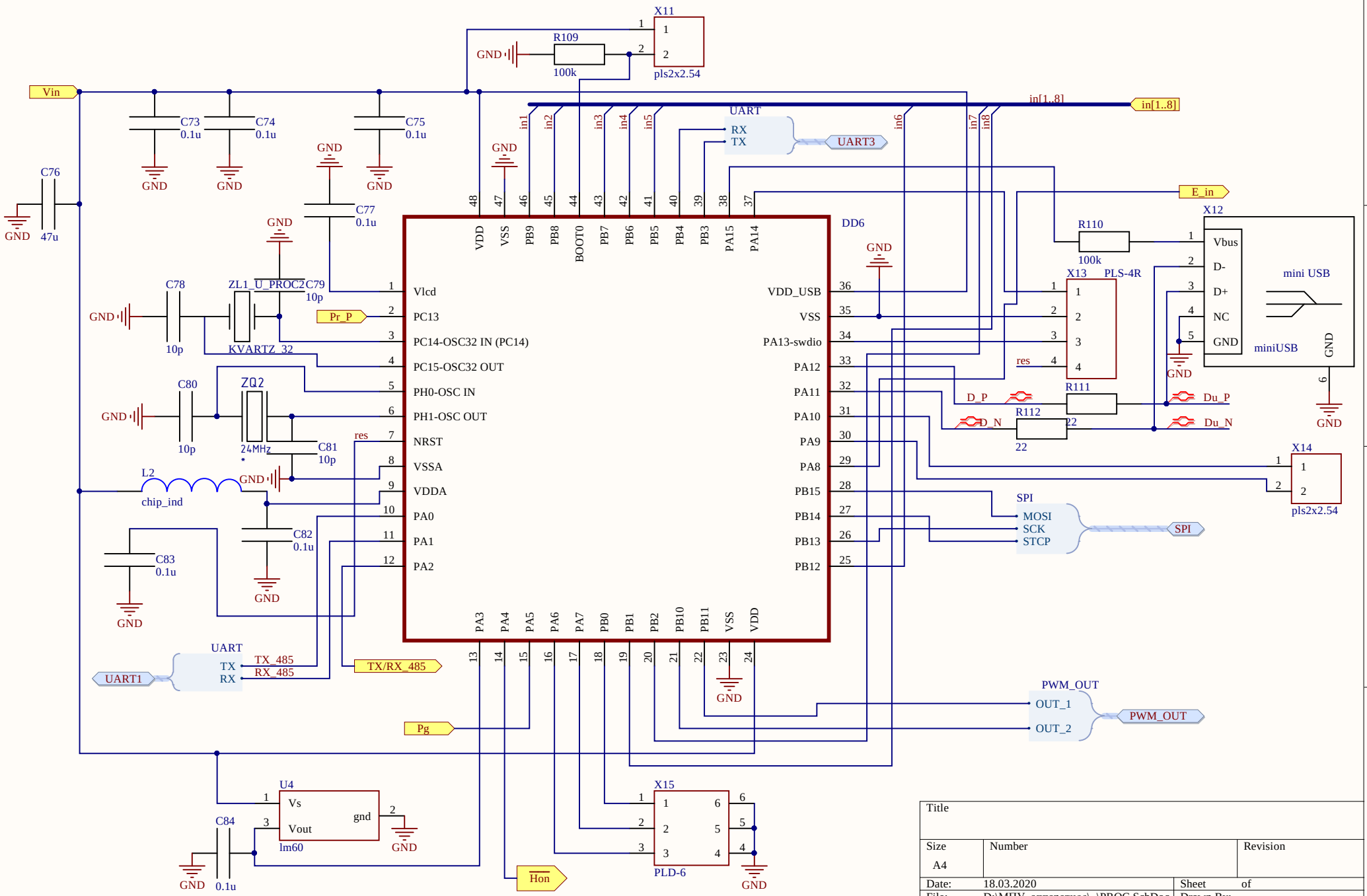
Title		
Size A4	Number	Revision
Date: 18.03.2020		Sheet of
File: D:\МПУ_аппаратное\..\DI_ch.SchDoc		Drawn By:



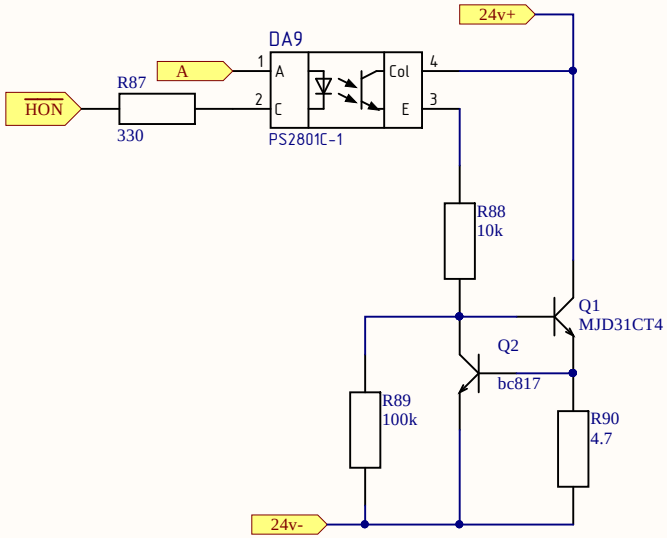
Изм.	Лист	№ докум.	Подп.	Дата	Децимальный номер	Лист
						*

Подп. и дата | Инв.№ дубл. | Взам.инв.№ | Подп.и дата | Инв.№ подл.

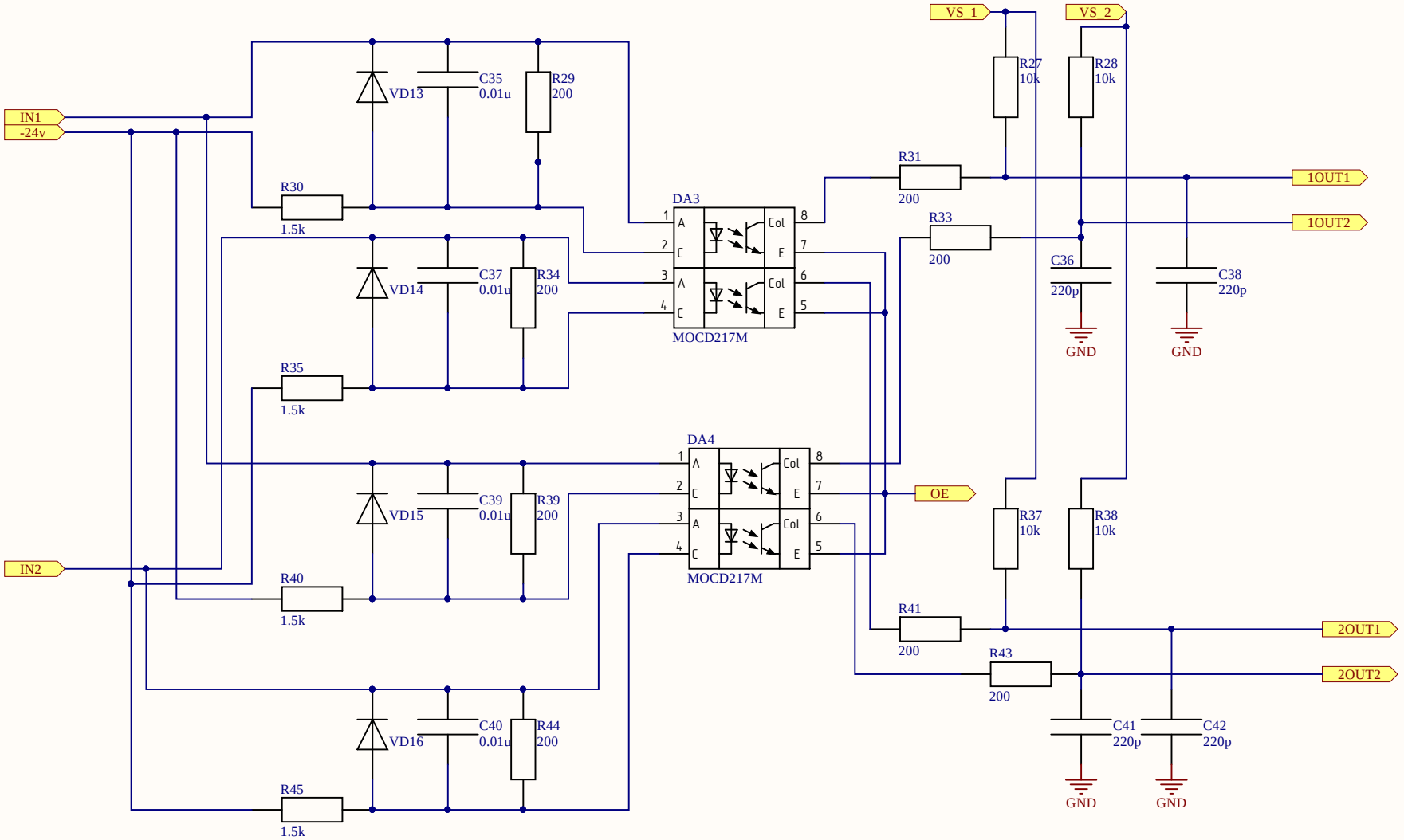
Формат А3



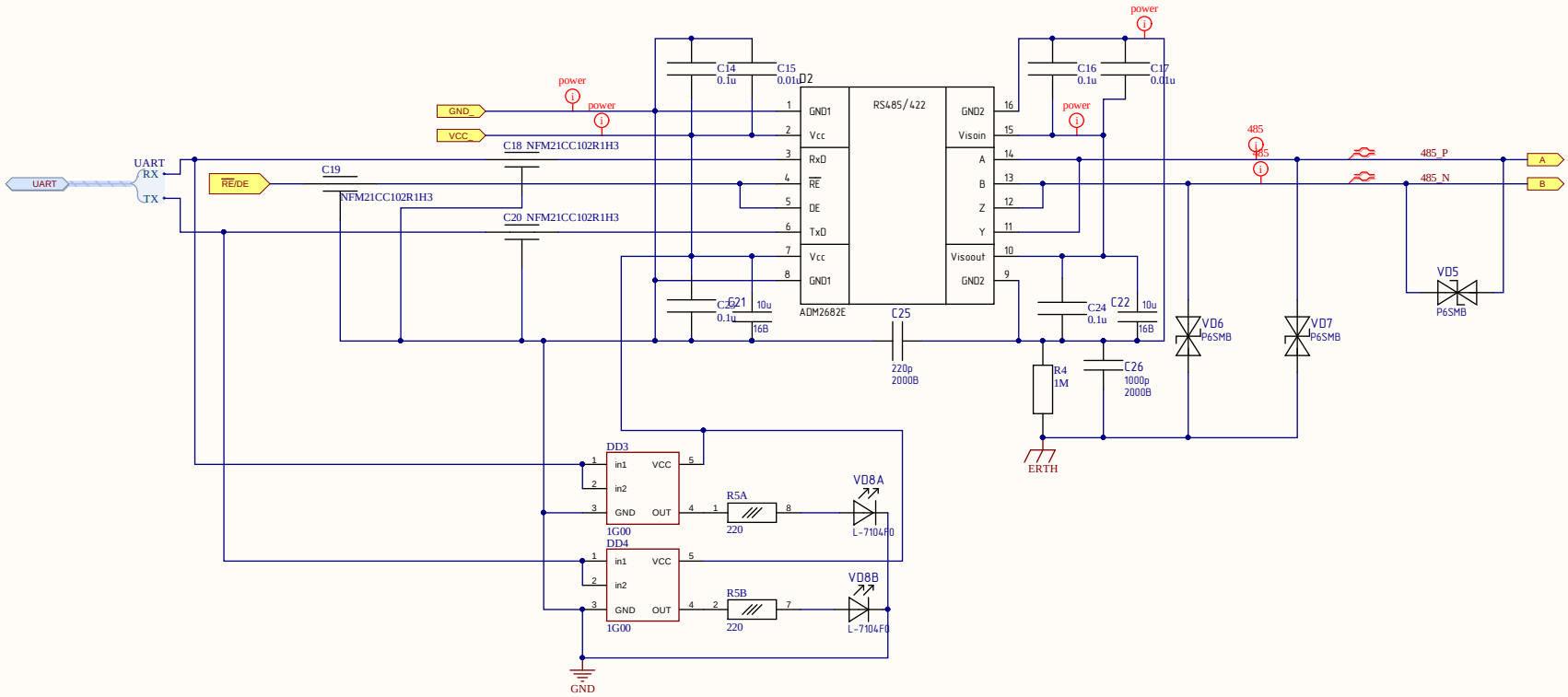
X11
pls2x2.54
R109
100k
GND
Vin
C73
0.1u
C74
0.1u
C75
0.1u
C76
47u
C77
0.1u
in[1..8]
UART
RX
TX
UART3
in1
in2
in3
in4
in5
in6
in7
in8
E_in
DD6
VDD
VSS
PB9
PB8
BOOT0
PB7
PB6
PB5
PB4
PB3
PA15
PA14
Vlcd
PC13
PC14-OSC32 IN (PC14)
PC15-OSC32 OUT
PH0-OSC IN
PH1-OSC OUT
NRST
VSSA
VDDA
PA0
PA1
PA2
VDD_USB
VSS
PA13-swdio
PA12
PA11
PA10
PA9
PA8
PB15
PB14
PB13
PB12
PA3
PA4
PA5
PA6
PA7
PB0
PB1
PB2
PB10
PB11
VSS
VDD
C78
10p
ZL1_U_PROC2
C79
10p
KVARTZ_32
Pr_P
C80
10p
ZQ2
24MHz
C81
10p
res
L2
chip_ind
C82
0.1u
C83
0.1u
UART
TX
RX
TX_485
RX_485
UART1
TX/RX_485
Pg
U4
Vs
Vout
gnd
lm60
C84
0.1u
Hon
X15
PLD-6
R110
100k
X12
Vbus
D-
D+
NC
GND
mini USB
miniUSB
X13
PLS-4R
R111
22
R112
22
D_P
D_N
Du_P
Du_N
X14
pls2x2.54
SPI
MOSI
SCK
STCP
PWM_OUT
OUT_1
OUT_2
Title
Size
A4
Number
Revision
Date:
18.03.2020
Sheet
of
File:
D:\МПУ_аппаратное\..\PROC.SchDoc
Drawn By:



Title		
Size A4	Number	Revision
Date: 18.03.2020		Sheet of
File: D:\МПУ_аппаратное\..\heat.SchDoc		Drawn By:



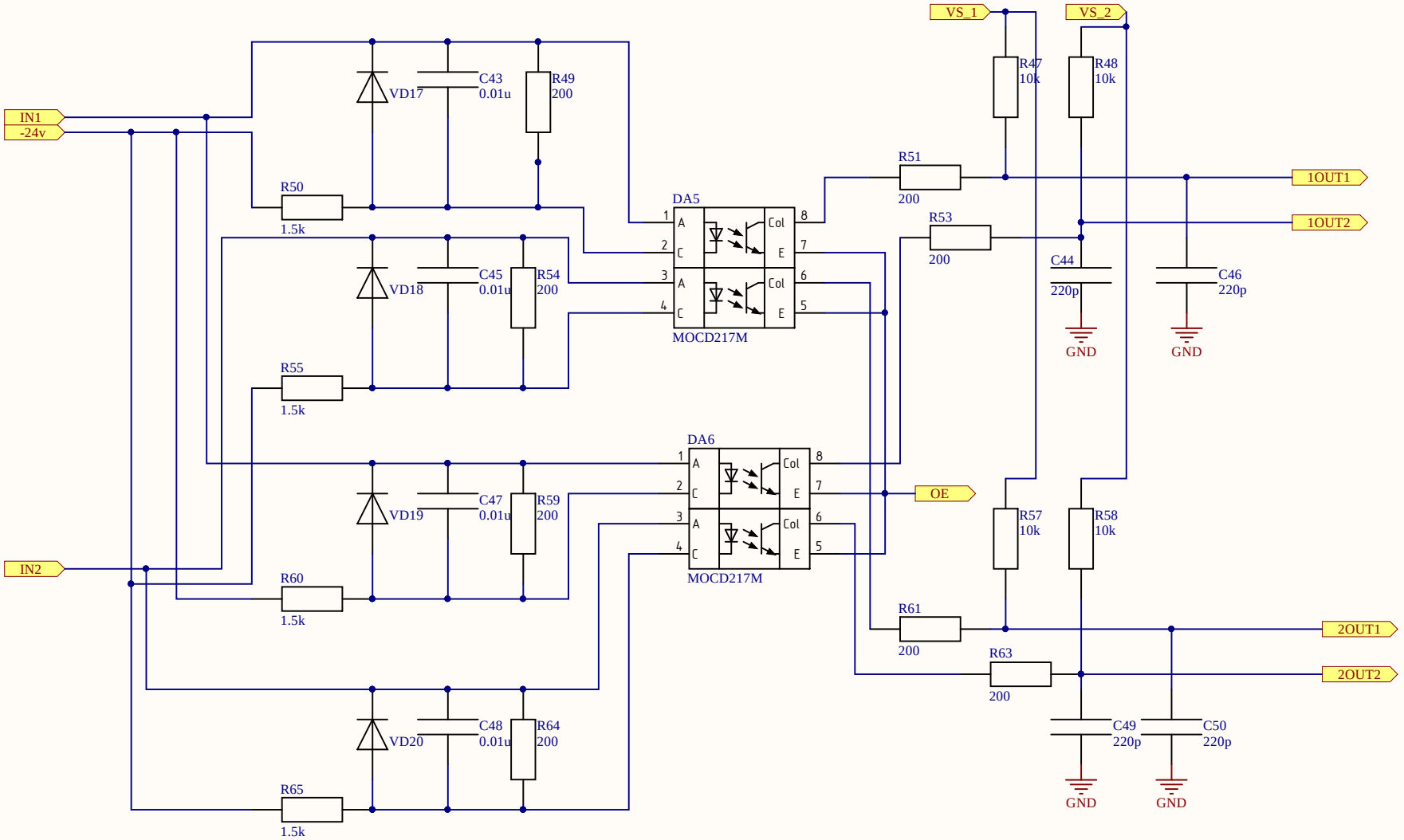
Title		
Size A4	Number	Revision
Date: 18.03.2020		Sheet of
File: D:\МПУ_аппаратное\..\DI_ch.SchDoc		Drawn By:



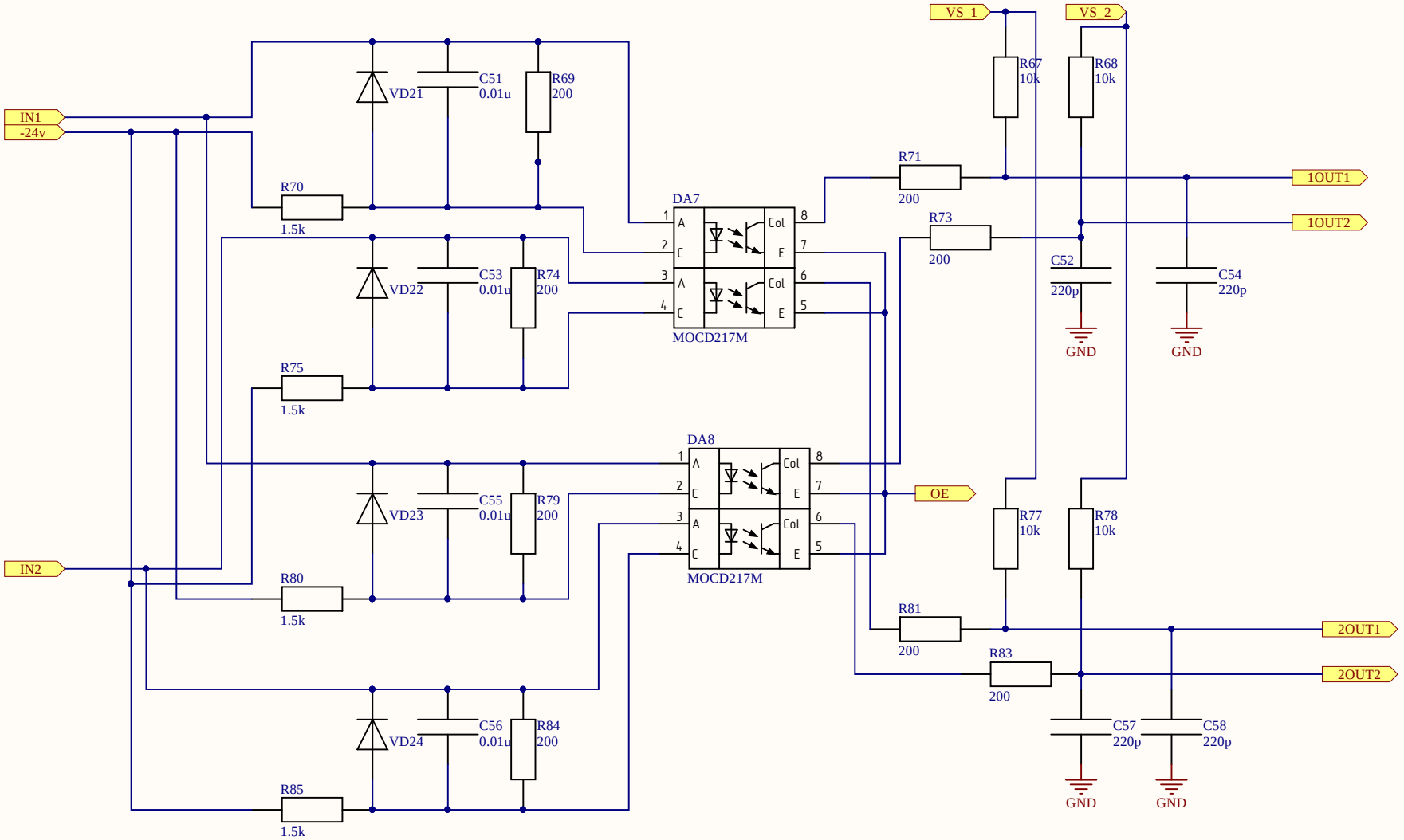
Изм.	Лист	№ докум.	Подп.	Дата	Десятичный номер	Лист
						*

Подп. и дата | Инв.№ дубл. | Взам.инв.№ | Подп.и дата | Инв.№ подл.

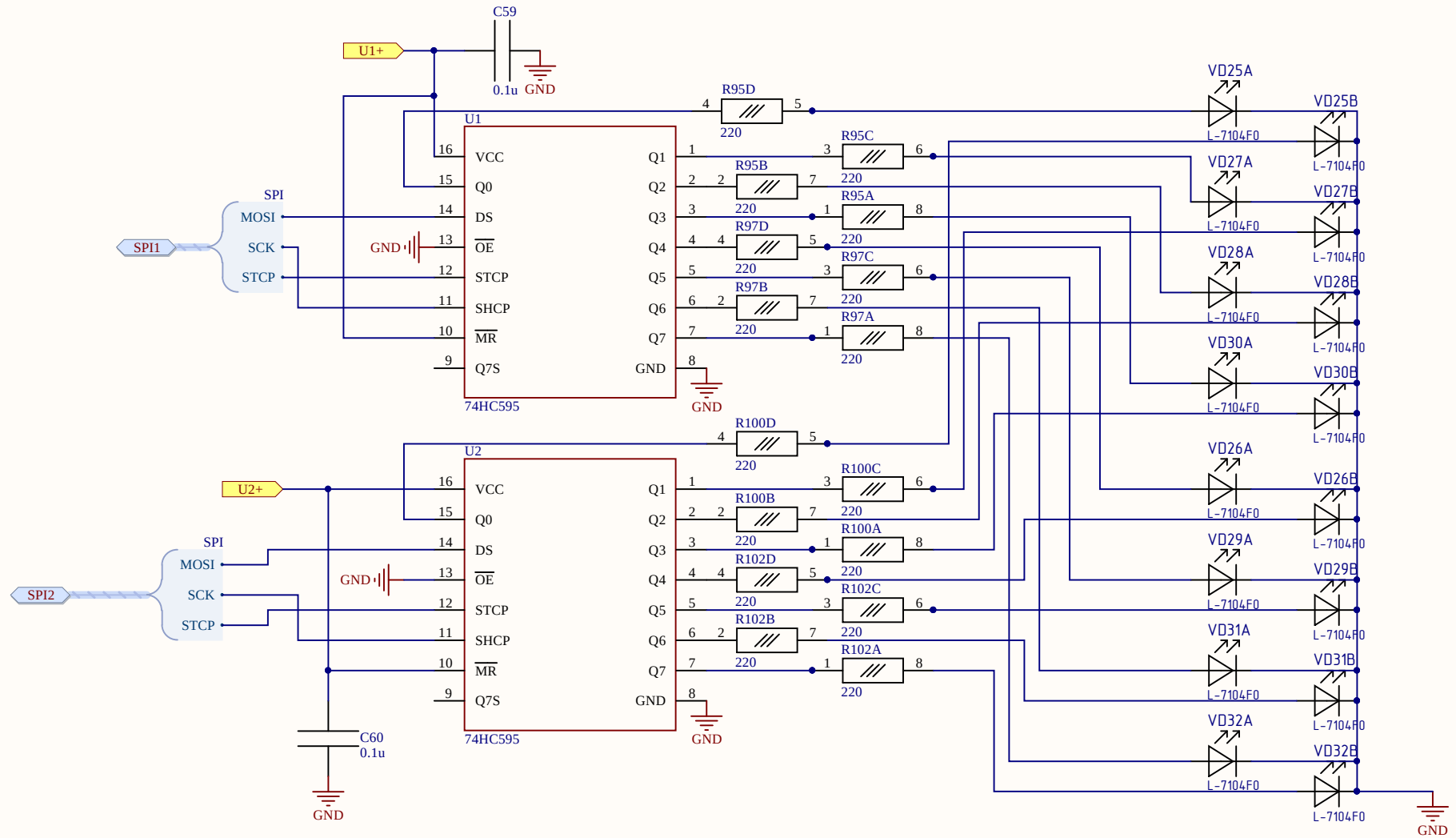
Формат А3



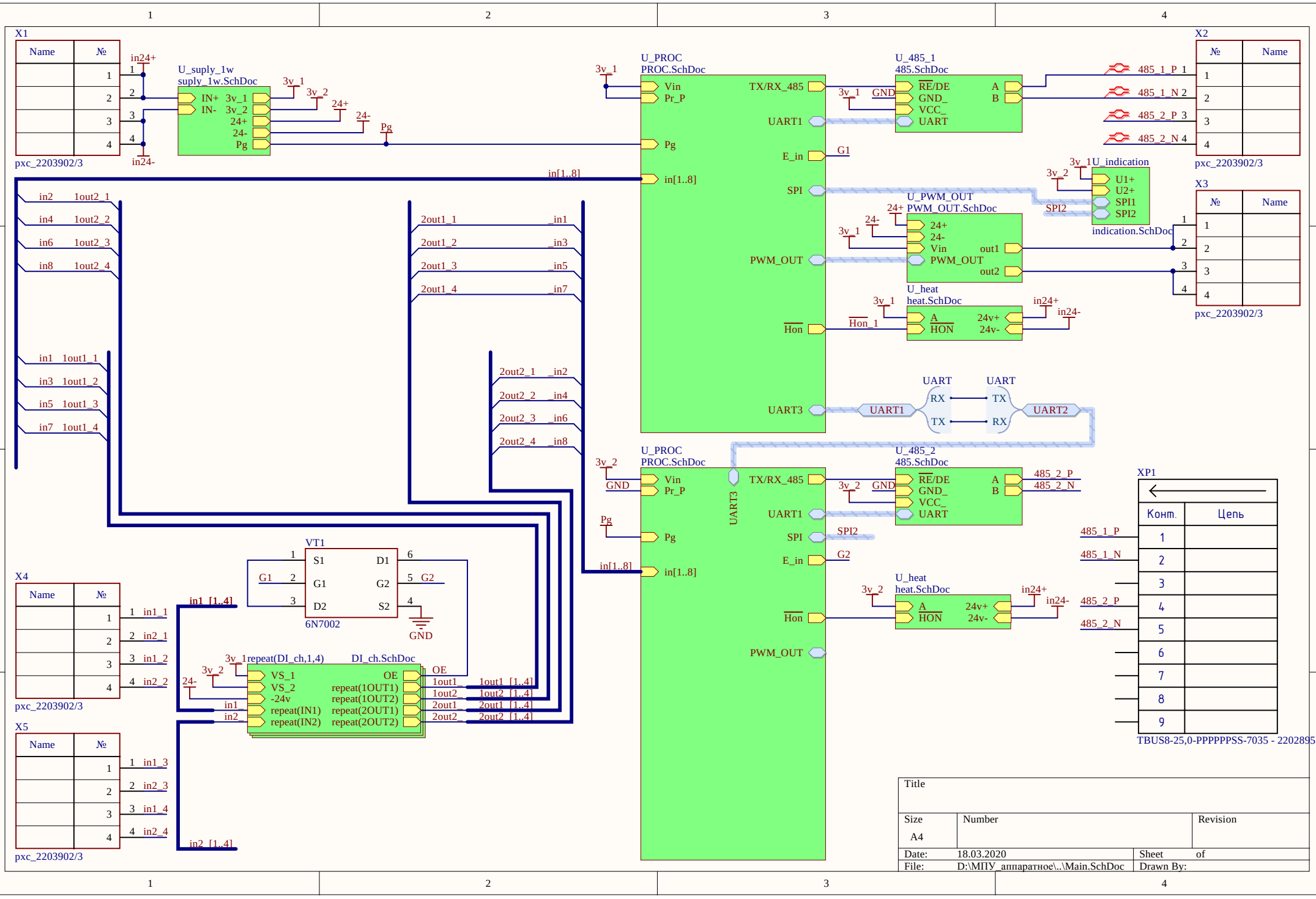
Title		
Size A4	Number	Revision
Date: 18.03.2020		Sheet of
File: D:\МПУ_аппаратное\..\DI_ch.SchDoc		Drawn By:

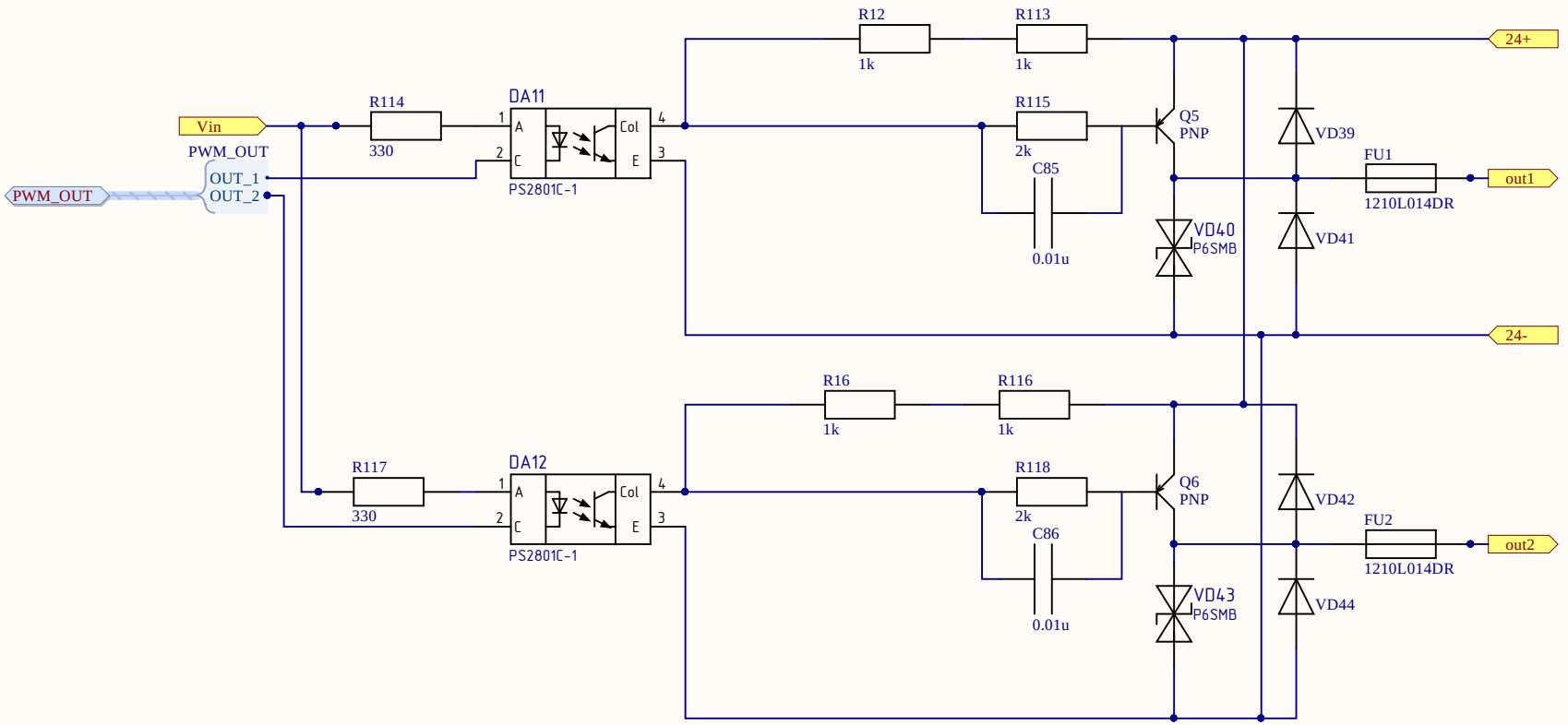


Title		
Size A4	Number	Revision
Date: 18.03.2020		Sheet of
File: D:\МПУ_аппаратное\..\DI_ch.SchDoc		Drawn By:

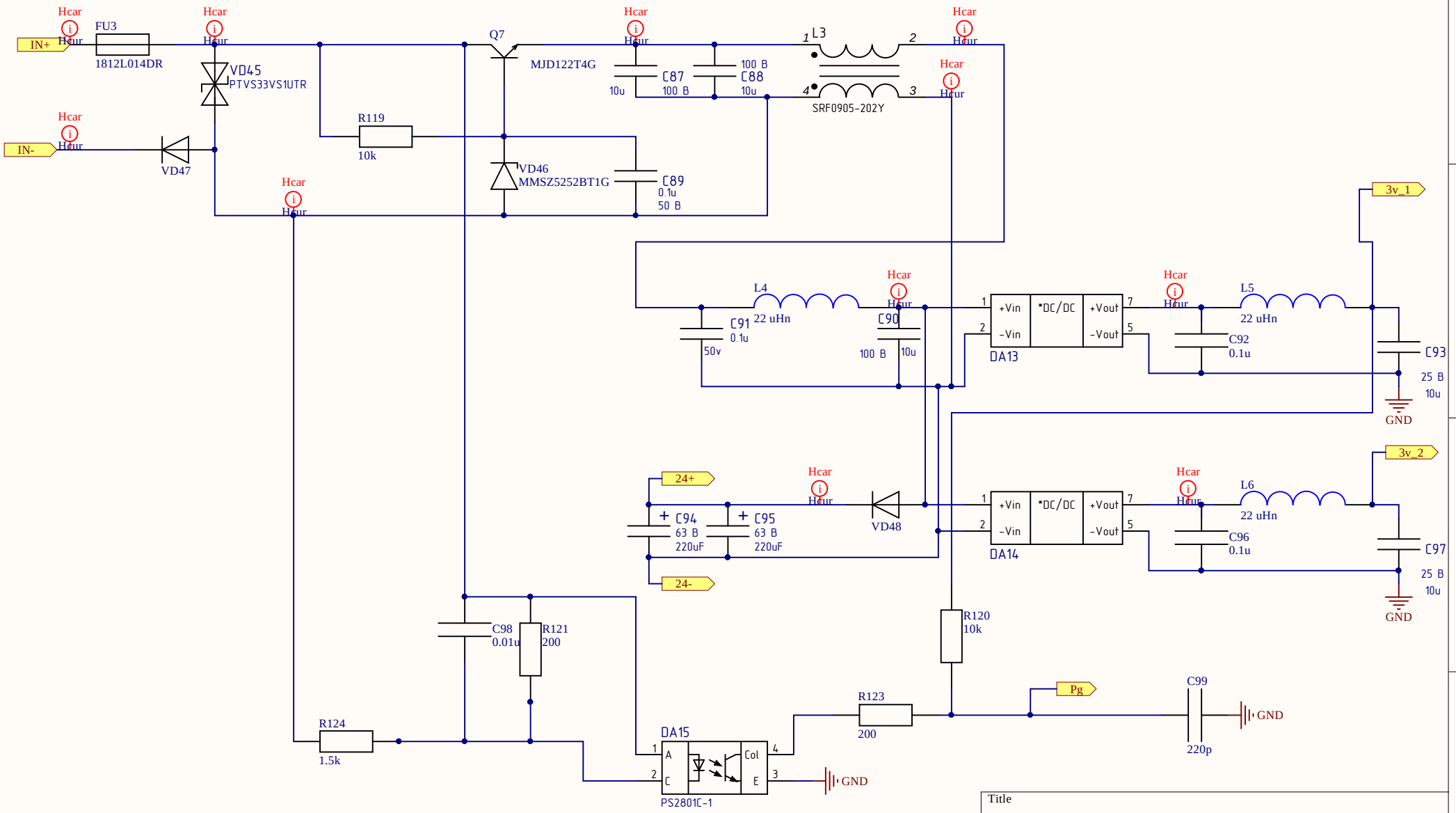


Title		
Size A4	Number	Revision
Date: 18.03.2020		Sheet of
File: D:\МПУ_аппаратное\..\indication.SchDoc		Drawn By:

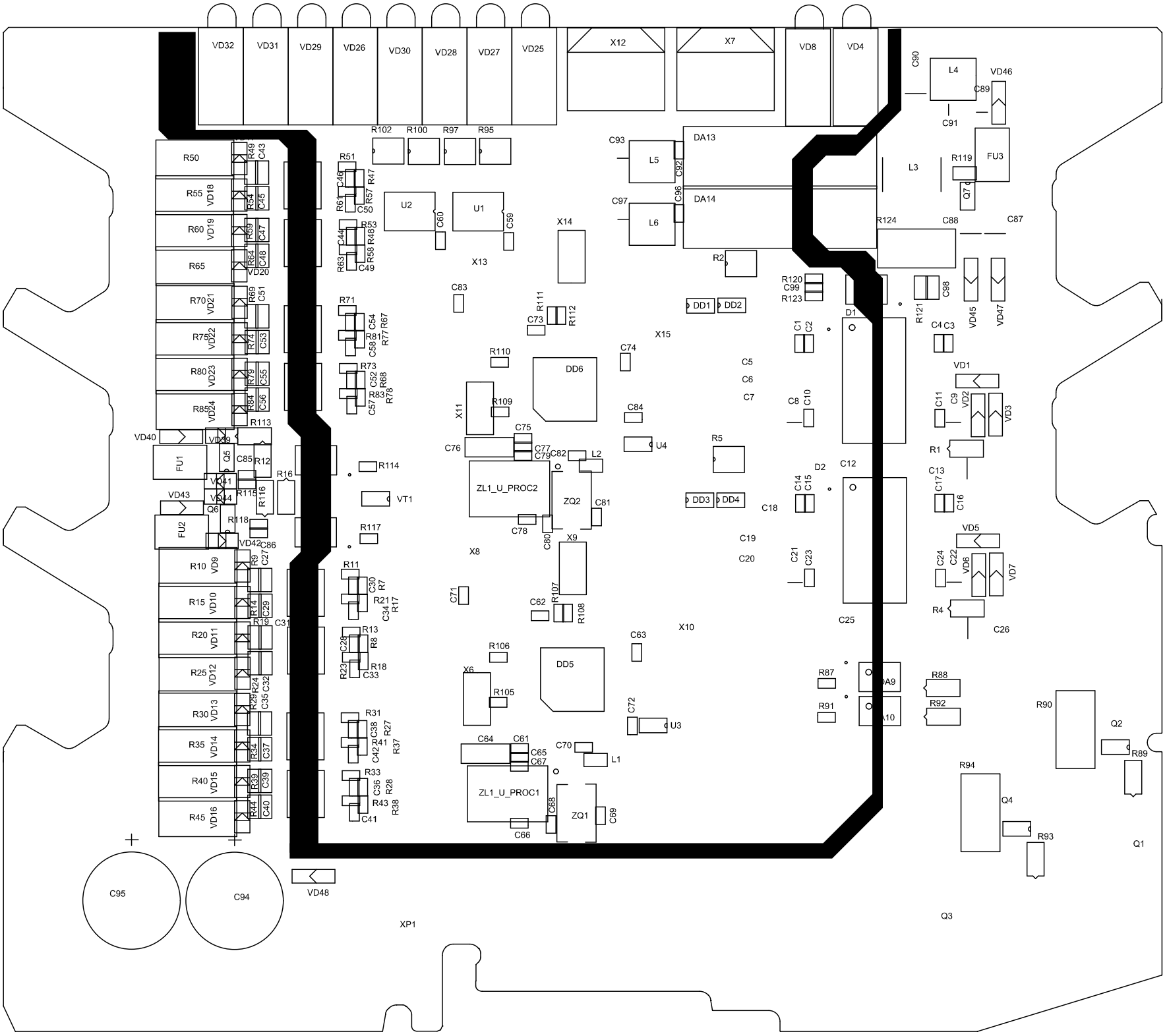

X1
Name
№
pxc_2203902/3
U_suply_1w
suply_1w.SchDoc
IN+
IN-
3v_1
3v_2
24+
24-
Pg
in24+
in24-
U_PROC
PROC.SchDoc
Vin
Pr_P
Pg
in[1..8]
TX/RX_485
UART1
E_in
SPI
PWM_OUT
Hon
UART3
U_485_1
485.SchDoc
RE/DE
GND_
VCC_
UART
A
B
GND
G1
485_1_P
485_1_N
485_2_P
485_2_N
X2
U_indication
U1+
U2+
SPI1
SPI2
indication.SchDoc
X3
U_PWM_OUT
PWM_OUT.SchDoc
out1
out2
U_heat
heat.SchDoc
24v+
24v-
Hon_1
UART
RX
TX
UART2
U_485_2
485.SchDoc
G2
XP1
Конт.
Цепь
TBUS8-25,0-PPPPPPSS-7035 - 2202895
VT1
S1
G1
D2
D1
G2
S2
6N7002
GND
X4
in1_1
in2_1
in1_2
in2_2
X5
in1_3
in2_3
in1_4
in2_4
in1_[1..4]
in2_[1..4]
repeat(DI_ch,1,4)
DI_ch.SchDoc
VS_1
VS_2
-24v
repeat(IN1)
repeat(IN2)
OE
repeat(1OUT1)
repeat(1OUT2)
repeat(2OUT1)
repeat(2OUT2)
1out1_[1..4]
1out2_[1..4]
2out1_[1..4]
2out2_[1..4]
Title
Size
A4
Number
Revision
Date:
18.03.2020
Sheet
of
File:
D:\МПУ_аппаратное\..\Main.SchDoc
Drawn By:



Title		
Size A4	Number	Revision
Date: 18.03.2020		Sheet of
File: D:\МПУ_аппаратное\..\PWM_OUT.SchDoc		Drawn By:



Title		
Size A4	Number	Revision
Date: 18.03.2020		Sheet of
File: D:\МПУ_аппаратное\..\suply_1w.SchDoc		Drawn By:


VD32
VD31
VD29
VD26
VD30
VD28
VD27
VD25
X12
X7
VD8
VD4
C90
L4
VD46
C89
C91
R102
R100
R97
R95
C93
DA13
L5
C92
L3
R119
FU3
Q7
R50
R49
C43
R51
C46
R47
R61
R57
C50
U2
U1
C60
C59
C97
C96
DA14
L6
R124
C88
C87
R55
VD18
R54
C45
R60
VD19
R59
C47
R53
C44
R48
R58
R63
C49
X14
X13
R2
R65
VD20
R64
C48
R120
C99
R123
R70
VD21
R69
C51
R71
C83
R111
C73
R112
DD1
DD2
D1
R121
C98
VD45
VD47
R75
VD22
R74
C53
C54
R81
R67
R77
C58
X15
C1
C2
C4
C3
R80
VD23
R79
C55
R73
C52
R68
R83
R78
C57
R110
DD6
C74
C5
C6
C7
VD1
R85
VD24
R84
C56
X11
R109
C84
C8
C10
C11
C9
VD2
VD3
R113
VD40
VD39
C75
C76
C77
C79
C82
L2
U4
R5
R1
FU1
Q5
C85
R12
R114
D2
C12
C13
VD41
R16
VD44
R115
R116
ZL1_U_PROC2
ZQ2
C81
C14
C15
C17
C16
VD43
Q6
VT1
DD3
DD4
C18
R118
FU2
VD42
C86
R117
C78
C80
X9
C19
VD5
X8
C20
C21
C23
C24
C22
VD6
VD7
R10
VD9
R9
C27
R11
C30
R7
R21
R17
C34
C71
C62
R107
R108
R4
C26
R15
VD10
R14
C29
R19
C31
C25
R20
VD11
R13
R8
C28
R23
R18
C33
C63
X10
R106
DD5
R25
VD12
R24
C32
R29
C35
X6
R105
R87
DA9
R88
R30
VD13
R31
C38
R27
R41
C42
R37
C72
U3
R91
A10
R92
R90
Q2
R35
VD14
R34
C37
C64
C61
C65
C67
C70
L1
R89
R40
VD15
R39
C39
R33
C36
R28
R43
R38
C41
ZL1_U_PROC1
C68
ZQ1
C69
R94
Q4
R45
VD16
R44
C40
C66
R93
Q1
C95
C94
VD48
XP1
Q3

Board Stack Report