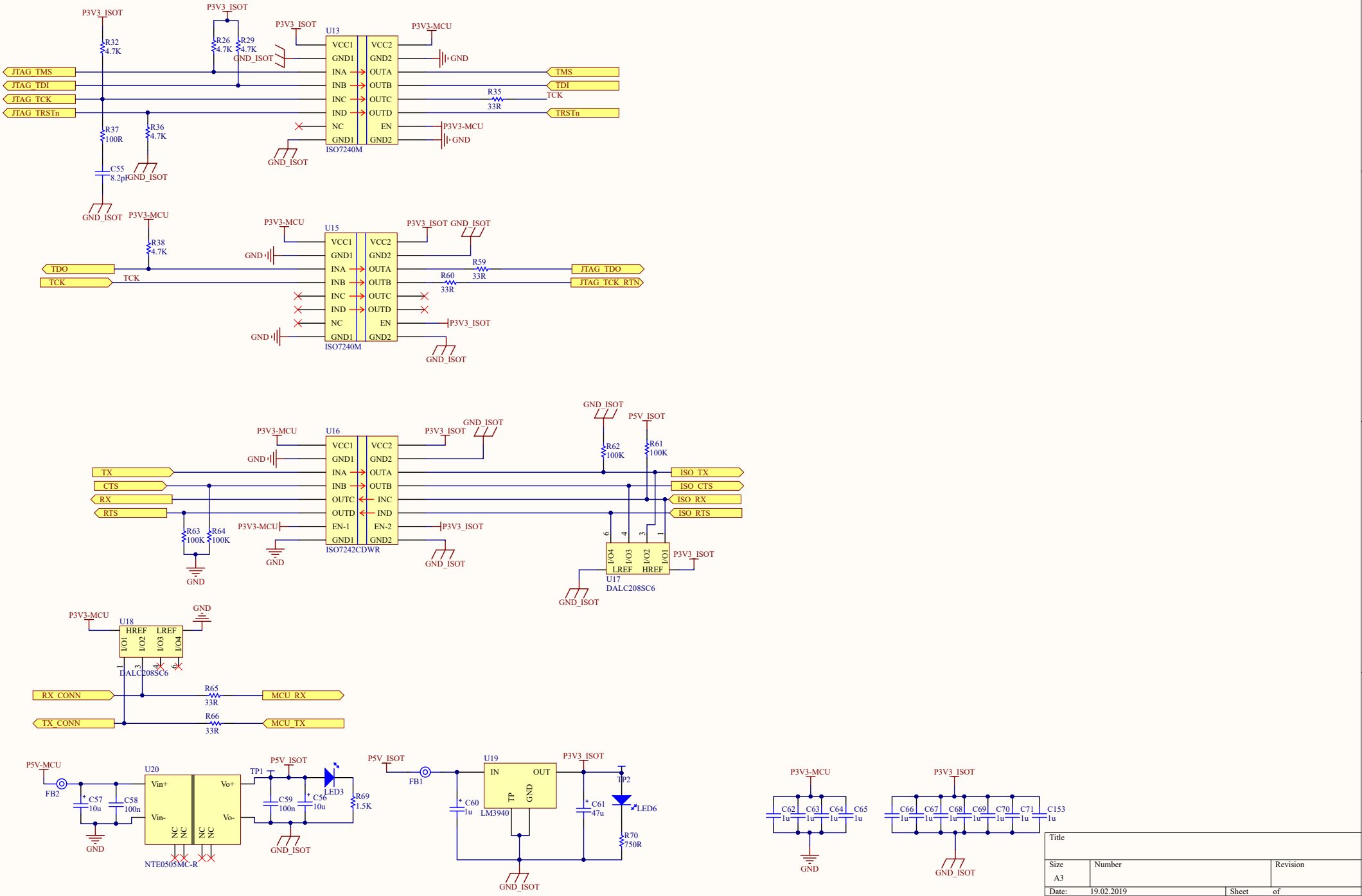
P3V3_ISOT
R32 4.7K
R26 4.7K
R29 4.7K
GND_ISOT
U13
VCC1
GND1
INA
INB
INC
IND
NC
GND1
VCC2
GND2
OUTA
OUTB
OUTC
OUTD
EN
GND2
P3V3-MCU
GND
JTAG_TMS
JTAG_TDI
JTAG_TCK
JTAG_TRSTn
TMS
TDI
TCK
TRSTn
R35 33R
R37 100R
R36 4.7K
C55 8.2pF
ISO7240M
R38 4.7K
TDO
U15
R59 33R
R60 33R
JTAG_TDO
JTAG_TCK_RTN
U16
TX
CTS
RX
RTS
OUTC
OUTD
EN-1
EN-2
ISO_TX
ISO_CTS
ISO_RX
ISO_RTS
R62 100K
R61 100K
R63 100K
R64 100K
ISO7242CDWR
P5V_ISOT
U17
DALC208SC6
LREF
HREF
U18
RX_CONN
TX_CONN
R65 33R
R66 33R
MCU_RX
MCU_TX
P5V-MCU
FB2
U20
Vin+
Vin-
Vo+
Vo-
NC
C57 10u
C58 100n
C59 100n
C56 10u
LED3
R69 1.5K
TP1
NTE0505MC-R
FB1
U19
IN
OUT
TP
LM3940
C60 1u
C61 47u
TP2
LED6
R70 750R
C62 1u
C63 1u
C64 1u
C65 1u
C66 1u
C67 1u
C68 1u
C69 1u
C70 1u
C71 1u
C153 1u
Title
Size A3
Number
Revision
Date: 19.02.2019
Sheet of
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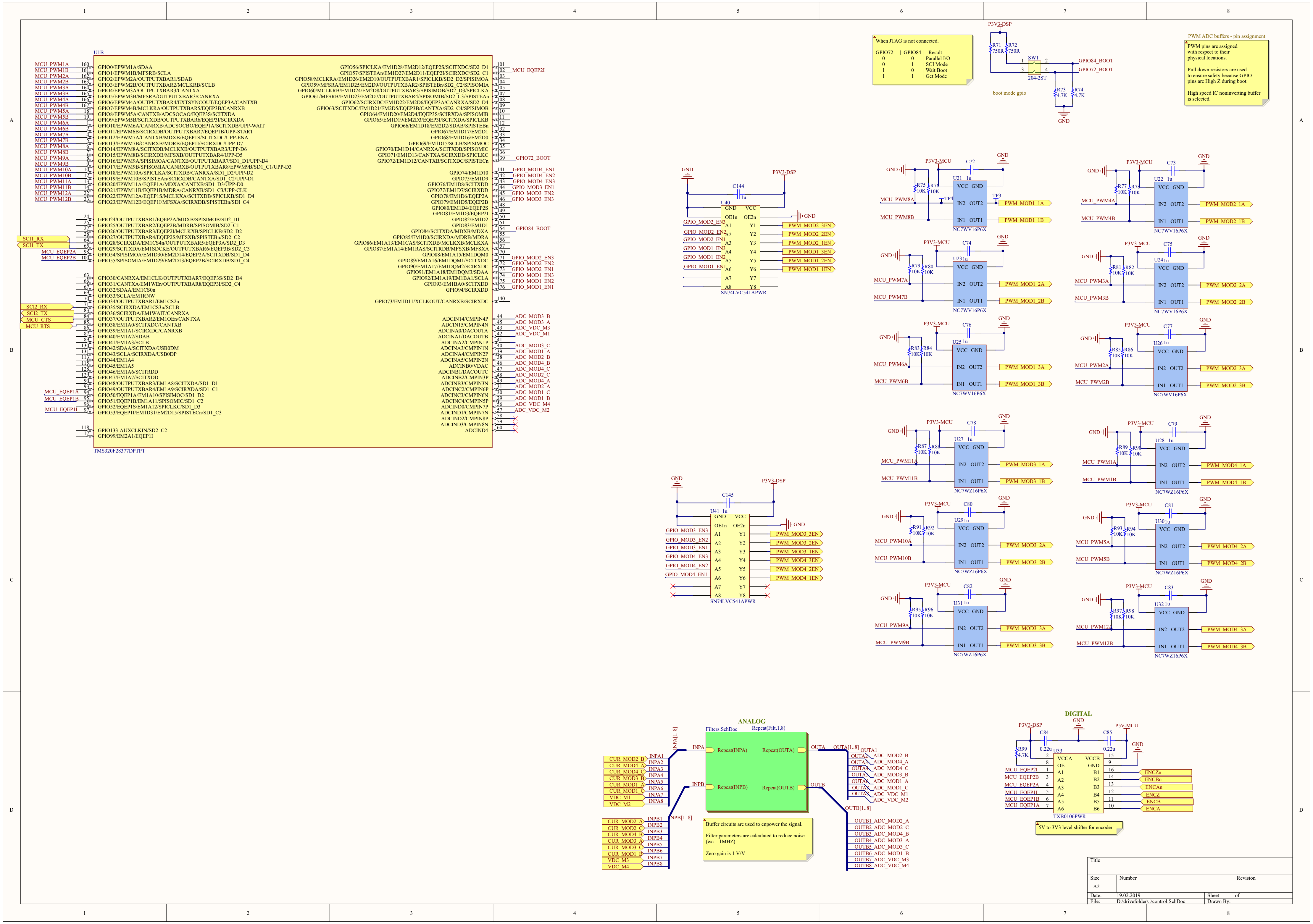
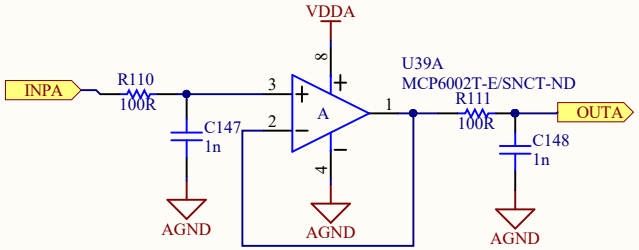
Drawn By:


U1B
TMS320F28377DPTPT
When JTAG is not connected.
GPIO72 | GPIO84 | Result
0 | 0 | Parallel I/O
0 | 1 | SCI Mode
1 | 0 | Wait Boot
1 | 1 | Get Mode
P3V3-DSP
SW1
204-2ST
GPIO84_BOOT
GPIO72_BOOT
boot mode gpio
PWM ADC buffers - pin assignment
PWM pins are assigned with respect to their physical locations.
Pull down resistors are used to ensure safety because GPIO pins are High Z during boot.
High speed IC noninverting buffer is selected.
SN74LVC541APWR
NC7WV16P6X
NC7WZ16P6X
ANALOG
Filters.SchDoc
Repeat(Filt,1,8)
Buffer circuits are used to empower the signal.
Filter parameters are calculated to reduce noise (wc = 1MHZ).
Zero gain is 1 V/V
DIGITAL
TXB0106PWR
5V to 3V3 level shifter for encoder
Title
Size A2
Number
Revision
Date: 19.02.2019
Sheet of
File: D:\drivefolder\..\control.SchDoc
Drawn By:



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Size A4	Number		Revision
Date:	19.02.2019	Sheet	of
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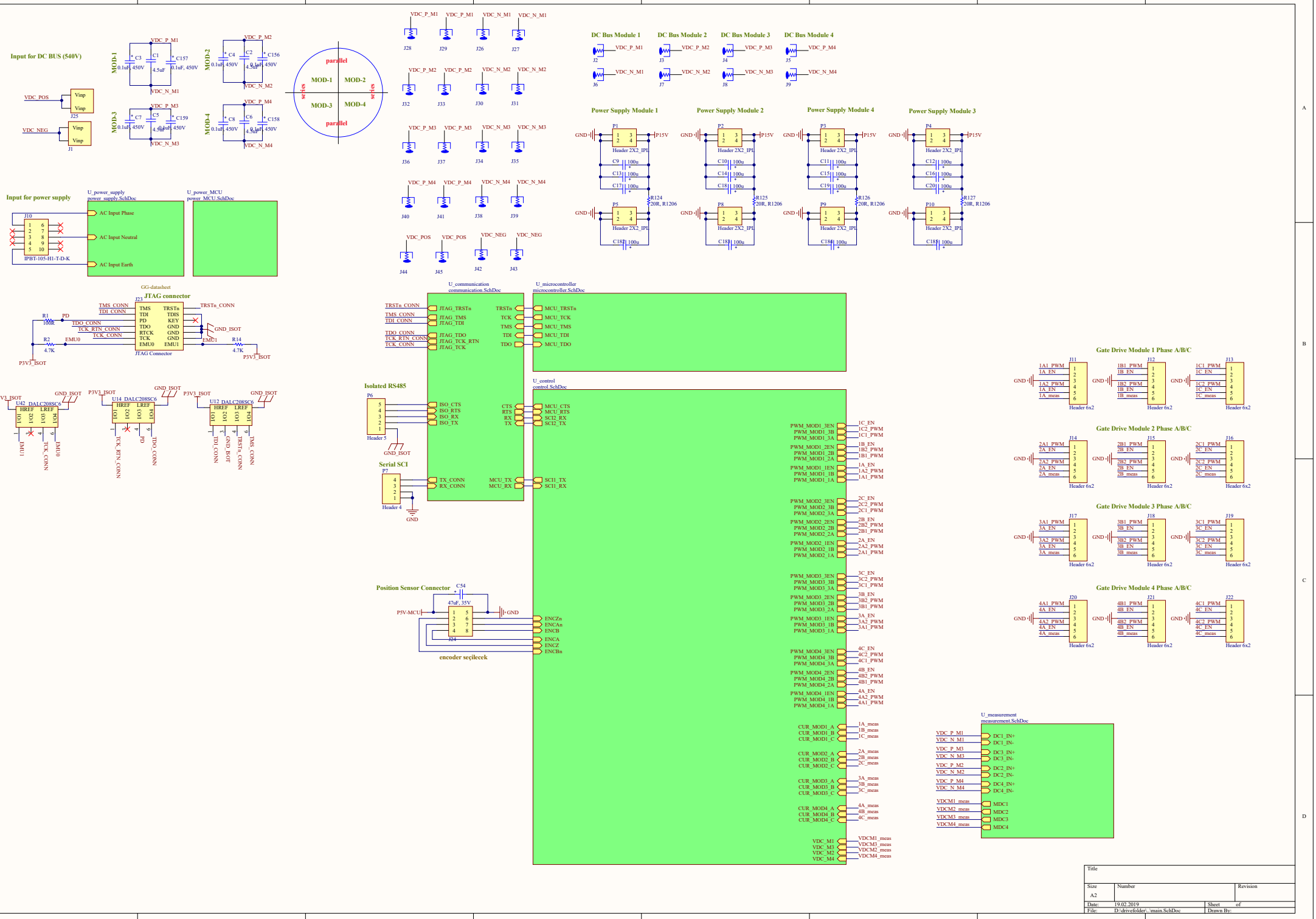
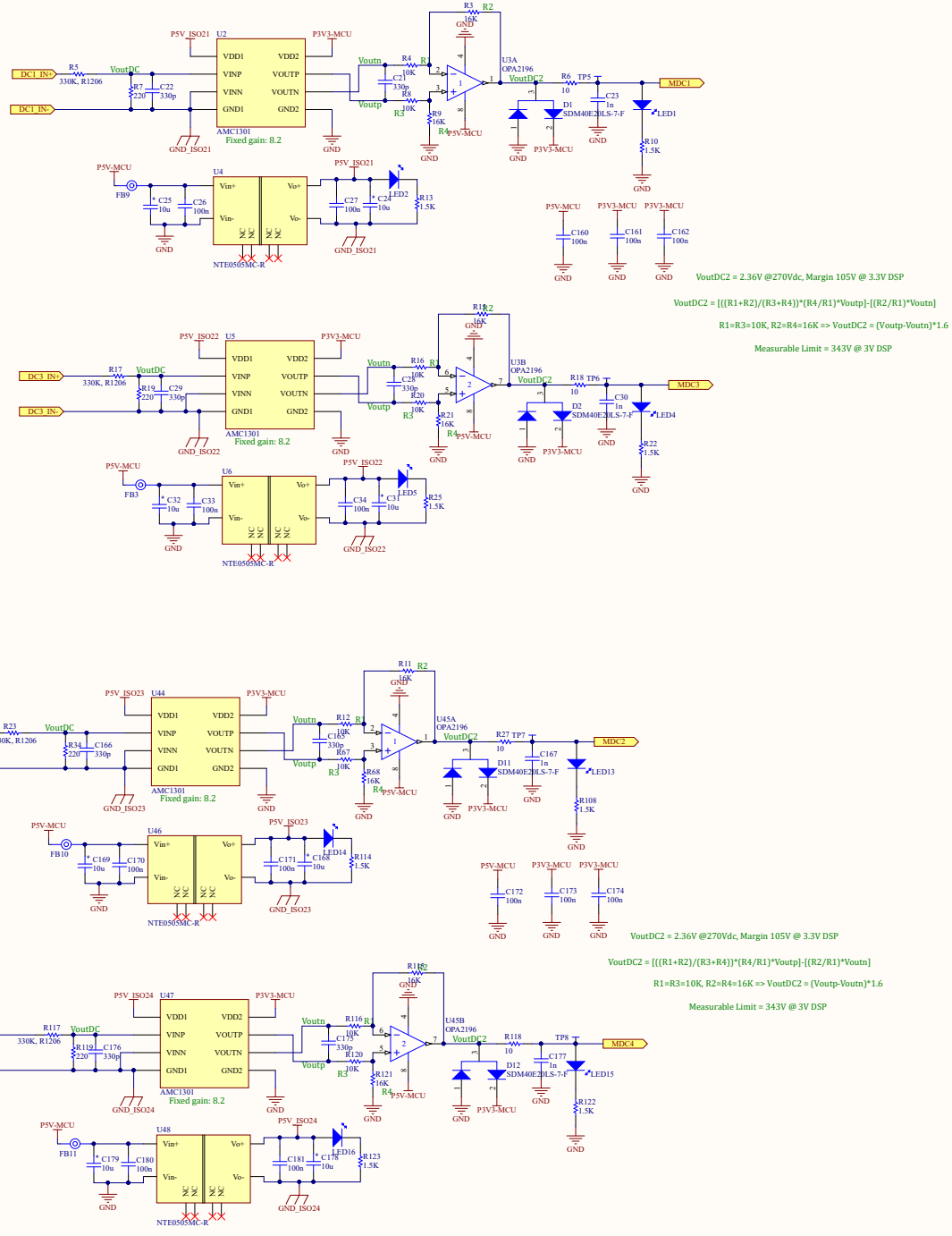

Input for DC BUS (540V)
VDC_POS
VDC_NEG
J25
J1
MOD-1
MOD-2
MOD-3
MOD-4
C1
C2
C3
C4
C5
C6
C7
C8
C156
C157
C158
C159
4.5uF
0.1uF, 450V
VDC_P_M1
VDC_N_M1
VDC_P_M2
VDC_N_M2
VDC_P_M3
VDC_N_M3
VDC_P_M4
VDC_N_M4
parallel
series
J28
J29
J26
J27
J32
J33
J30
J31
J36
J37
J34
J35
J40
J41
J38
J39
J44
J45
J42
J43
DC Bus Module 1
DC Bus Module 2
DC Bus Module 3
DC Bus Module 4
J2
J3
J4
J5
J6
J7
J8
J9
Power Supply Module 1
Power Supply Module 2
Power Supply Module 3
Power Supply Module 4
P1
P2
P3
P4
P5
P8
P9
P10
Header 2X2_IPL
GND
P15V
C9
C10
C11
C12
C13
C14
C15
C16
C17
C18
C19
C20
C182
C183
C184
C185
100u
R124
R125
R126
R127
20R, R1206
Input for power supply
J10
IPBT-105-H1-T-D-K
AC Input Phase
AC Input Neutral
AC Input Earth
U_power_supply
power_supply.SchDoc
U_power_MCU
power_MCU.SchDoc
GG-datasheet
JTAG connector
J23
JTAG Connector
TMS_CONN
TDI_CONN
TDO_CONN
TCK_RTN_CONN
TCK_CONN
TRSTn_CONN
GND_ISOT
R1
100K
PD
R2
4.7K
EMU0
EMU1
R14
P3V3_ISOT
U_communication
communication.SchDoc
U_microcontroller
microcontroller.SchDoc
JTAG_TRSTn
JTAG_TMS
JTAG_TDI
JTAG_TDO
JTAG_TCK_RTN
JTAG_TCK
TRSTn
TCK
TMS
TDI
TDO
MCU_TRSTn
MCU_TCK
MCU_TMS
MCU_TDI
MCU_TDO
Isolated RS485
P6
Header 5
ISO_CTS
ISO_RTS
ISO_RX
ISO_TX
CTS
RTS
RX
TX
MCU_CTS
MCU_RTS
SCI2_RX
SCI2_TX
Serial SCI
P7
Header 4
TX_CONN
RX_CONN
MCU_TX
MCU_RX
SCI1_TX
SCI1_RX
U_control
control.SchDoc
Position Sensor Connector
C54
47uF, 35V
P5V-MCU
J24
encoder seçilecek
ENCZn
ENCAn
ENCB
ENCA
ENCZ
ENCBn
U42 DALC208SC6
U14 DALC208SC6
U12 DALC208SC6
HREF
LREF
IO1
IO2
IO3
IO4
Gate Drive Module 1 Phase A/B/C
Gate Drive Module 2 Phase A/B/C
Gate Drive Module 3 Phase A/B/C
Gate Drive Module 4 Phase A/B/C
J11
J12
J13
J14
J15
J16
J17
J18
J19
J20
J21
J22
Header 6x2
PWM_MOD1_3EN
PWM_MOD1_3B
PWM_MOD1_3A
PWM_MOD1_2EN
PWM_MOD1_2B
PWM_MOD1_2A
PWM_MOD1_1EN
PWM_MOD1_1B
PWM_MOD1_1A
PWM_MOD2_3EN
PWM_MOD2_3B
PWM_MOD2_3A
PWM_MOD2_2EN
PWM_MOD2_2B
PWM_MOD2_2A
PWM_MOD2_1EN
PWM_MOD2_1B
PWM_MOD2_1A
PWM_MOD3_3EN
PWM_MOD3_3B
PWM_MOD3_3A
PWM_MOD3_2EN
PWM_MOD3_2B
PWM_MOD3_2A
PWM_MOD3_1EN
PWM_MOD3_1B
PWM_MOD3_1A
PWM_MOD4_3EN
PWM_MOD4_3B
PWM_MOD4_3A
PWM_MOD4_2EN
PWM_MOD4_2B
PWM_MOD4_2A
PWM_MOD4_1EN
PWM_MOD4_1B
PWM_MOD4_1A
CUR_MOD1_A
CUR_MOD1_B
CUR_MOD1_C
CUR_MOD2_A
CUR_MOD2_B
CUR_MOD2_C
CUR_MOD3_A
CUR_MOD3_B
CUR_MOD3_C
CUR_MOD4_A
CUR_MOD4_B
CUR_MOD4_C
VDC_M1
VDC_M3
VDC_M2
VDC_M4
VDCM1_meas
VDCM3_meas
VDCM2_meas
VDCM4_meas
U_measurement
measurement.SchDoc
DC1_IN+
DC1_IN-
DC3_IN+
DC3_IN-
DC2_IN+
DC2_IN-
DC4_IN+
DC4_IN-
MDC1
MDC2
MDC3
MDC4
Title
Size
A2
Number
Revision
Date:
19.02.2019
Sheet
of
File:
D:\drivefolder\...\main.SchDoc
Drawn By:



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Size: A2	Number:*	Revision:*	
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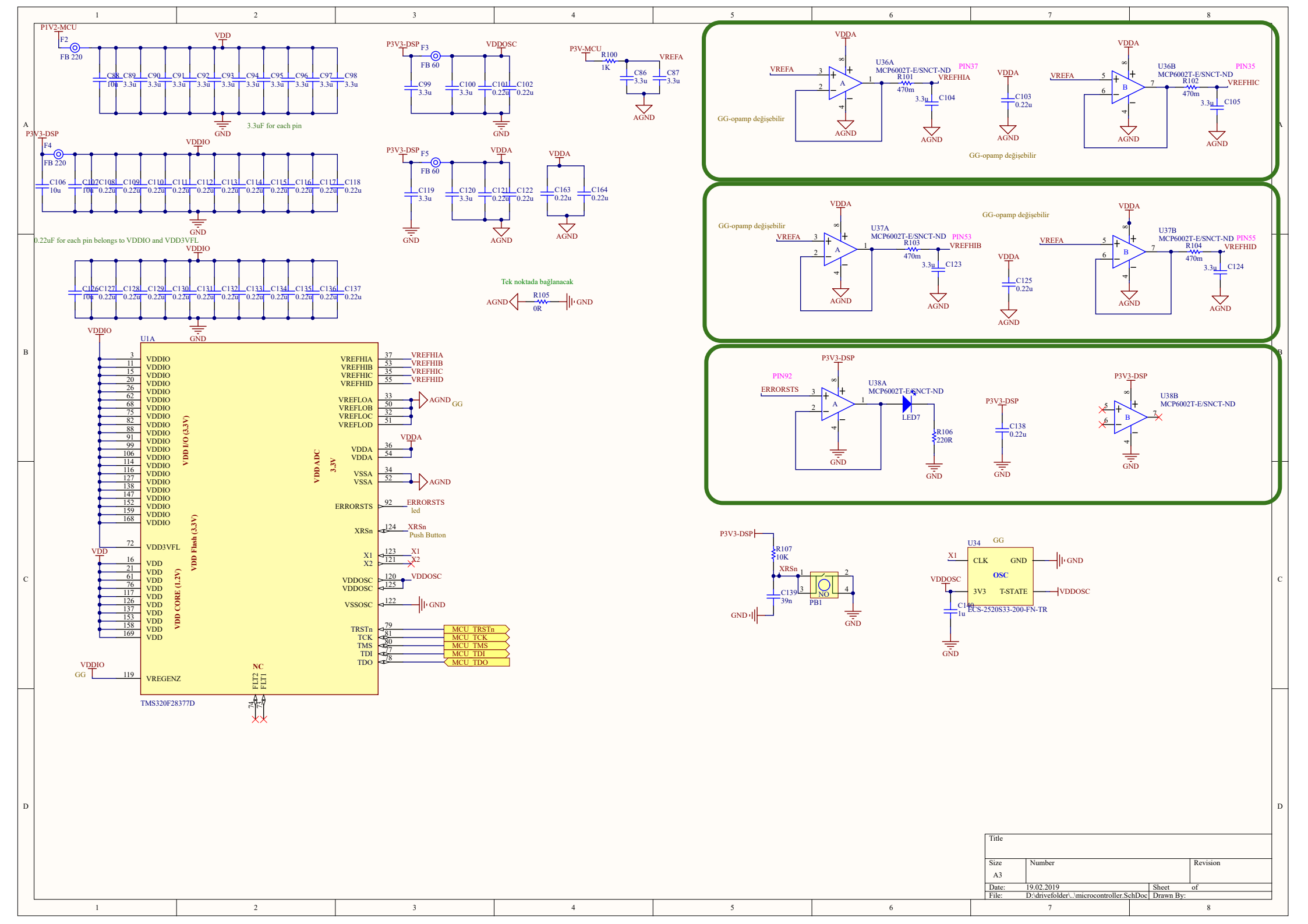

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Size A3	Number	Revision
Date: 19.02.2019	Sheet of	
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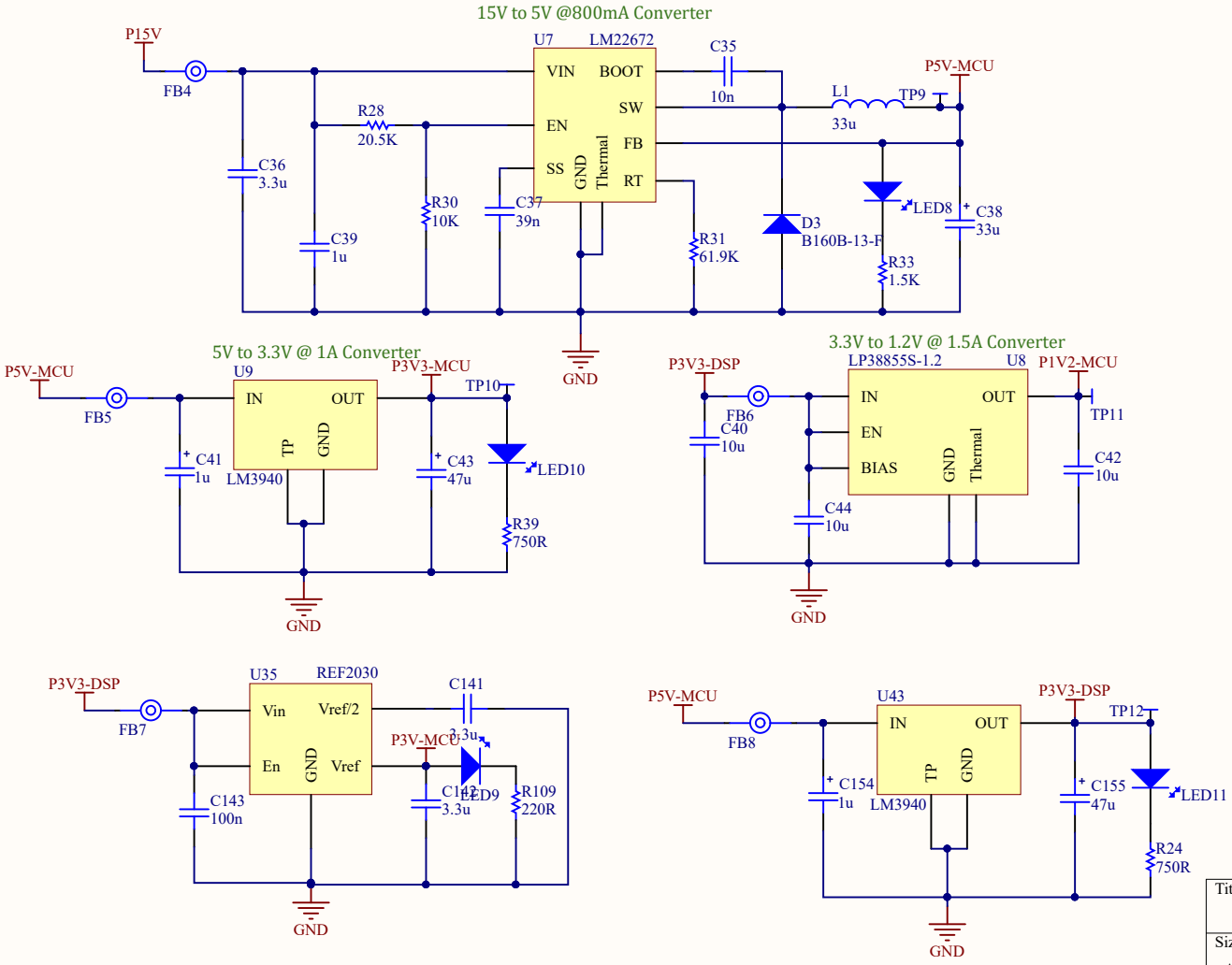

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Size A4	Number	Revision
Date: 19.02.2019		Sheet of
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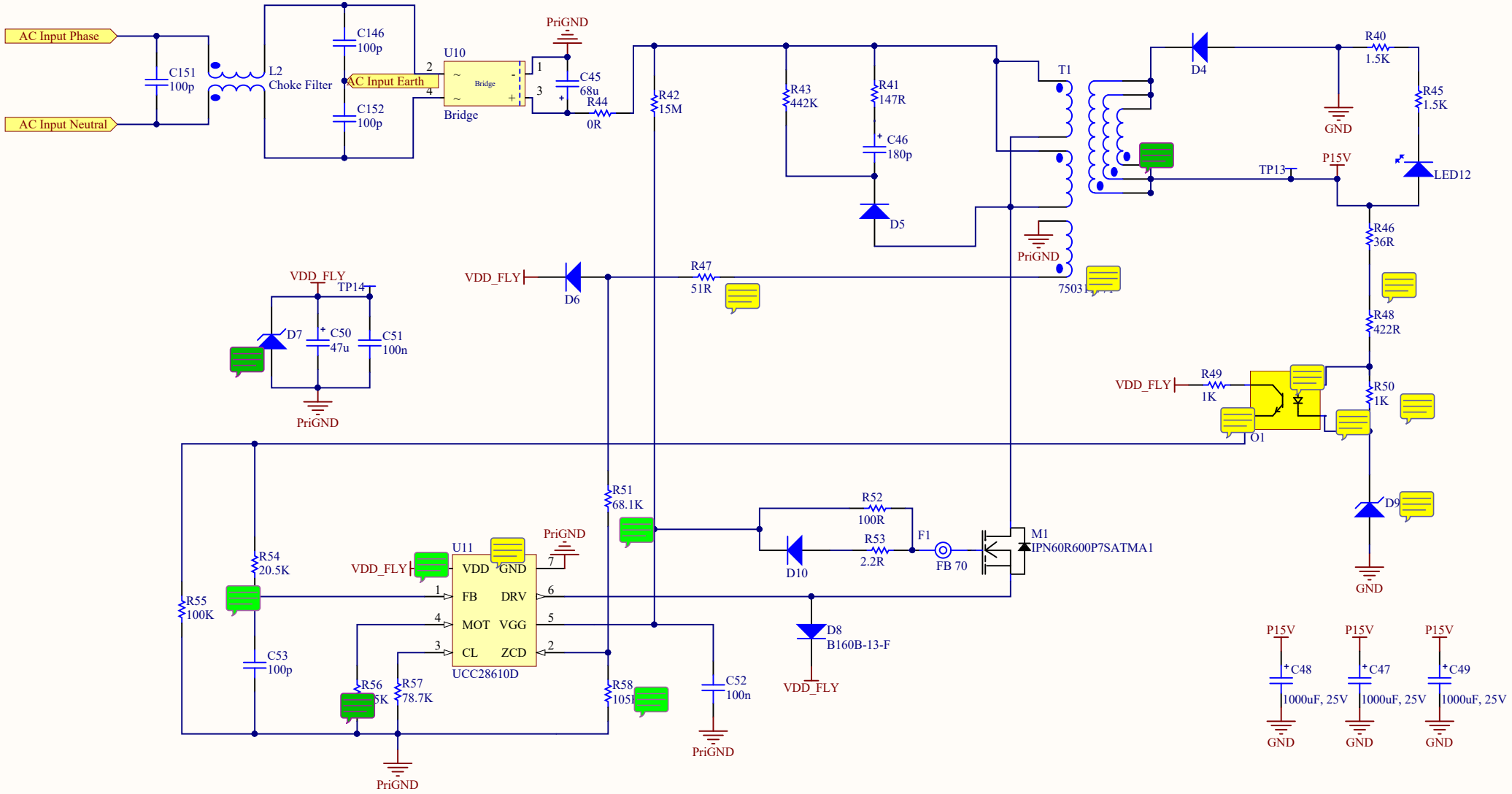

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Size A4	Number	Revision
Date: 19.02.2019		Sheet of
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