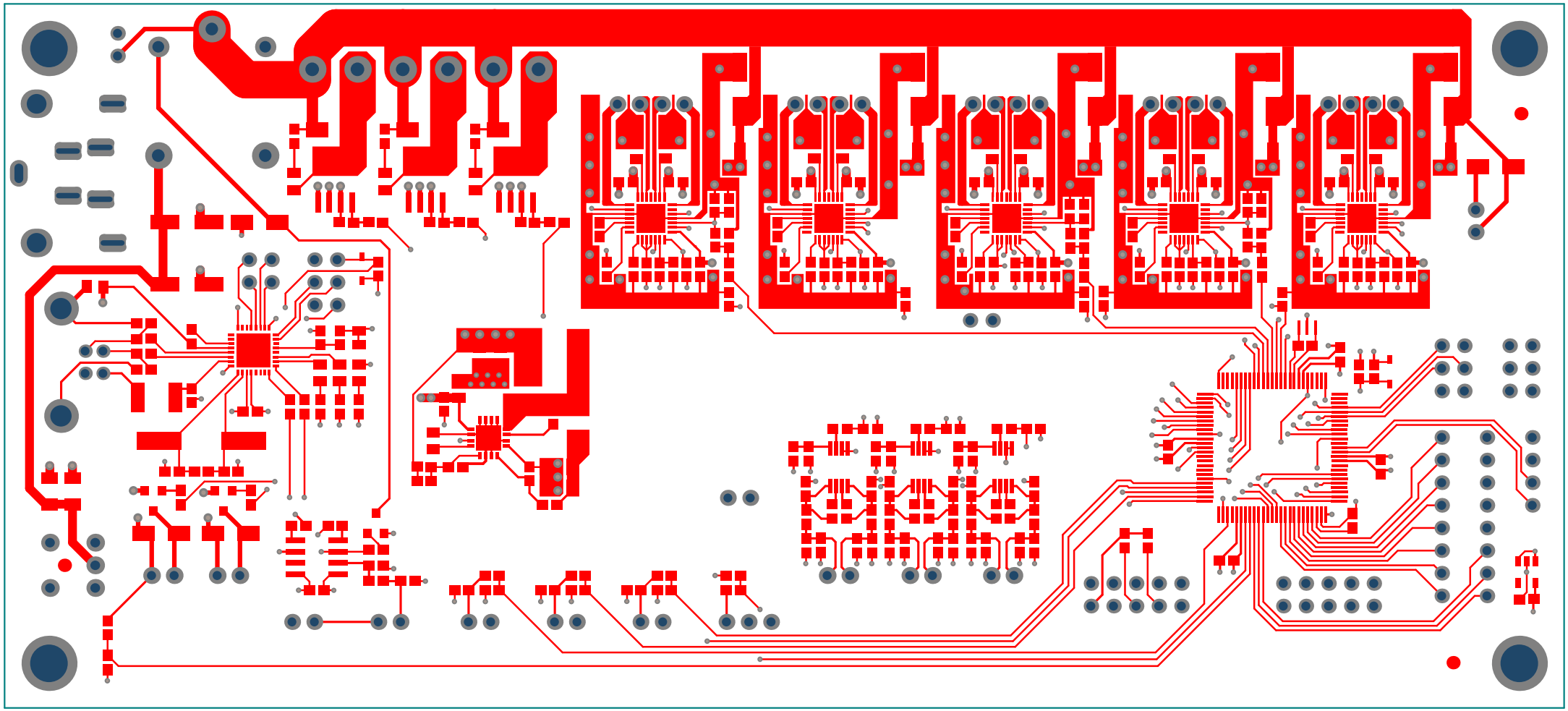
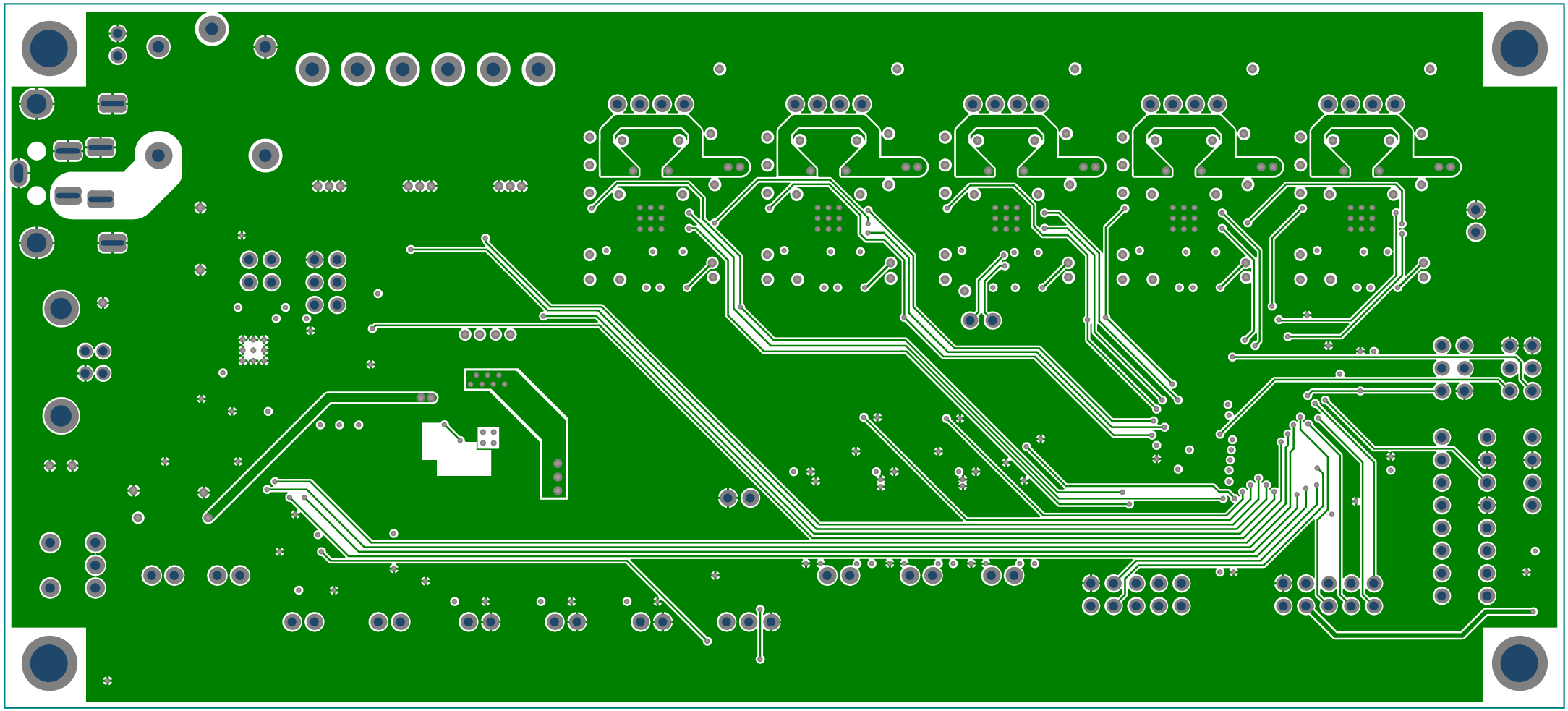
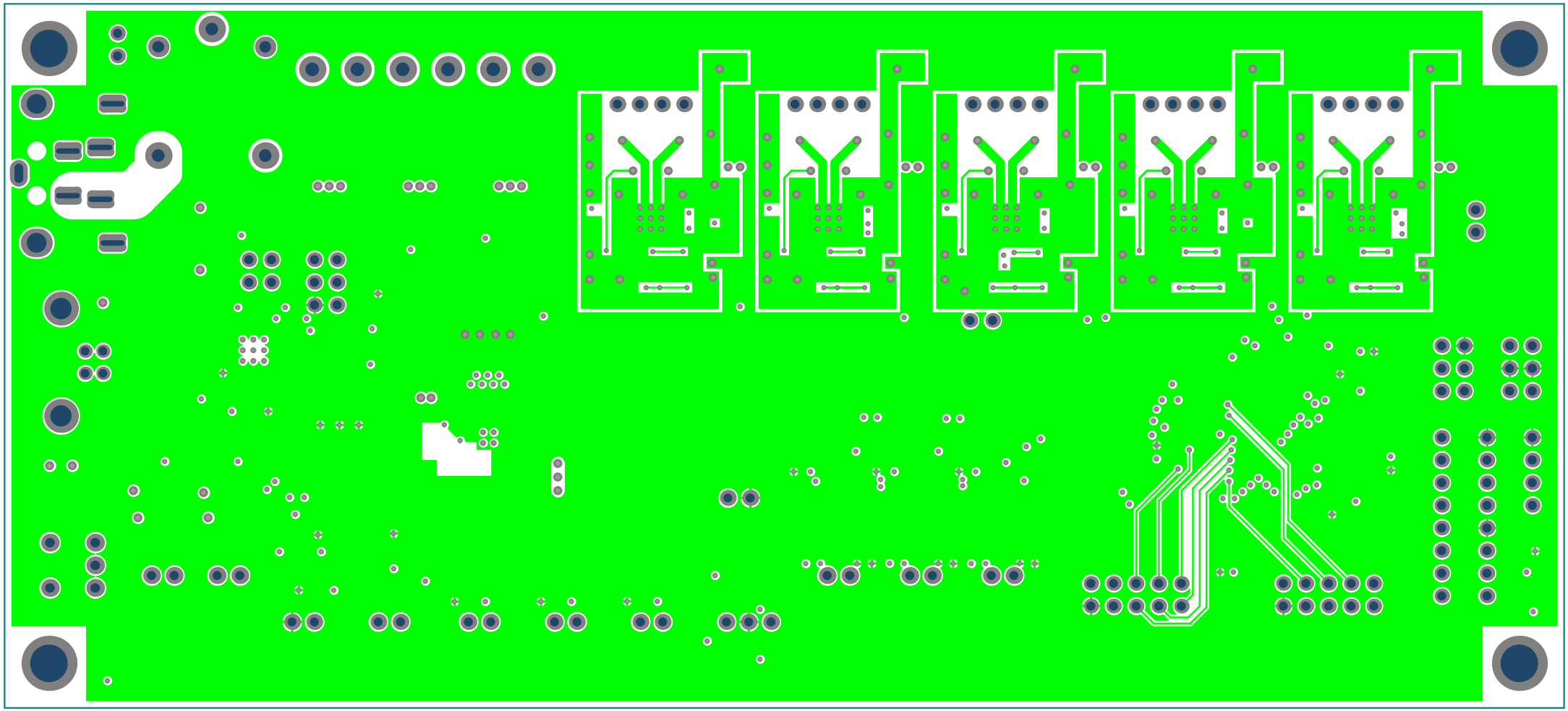
Copper top 70u



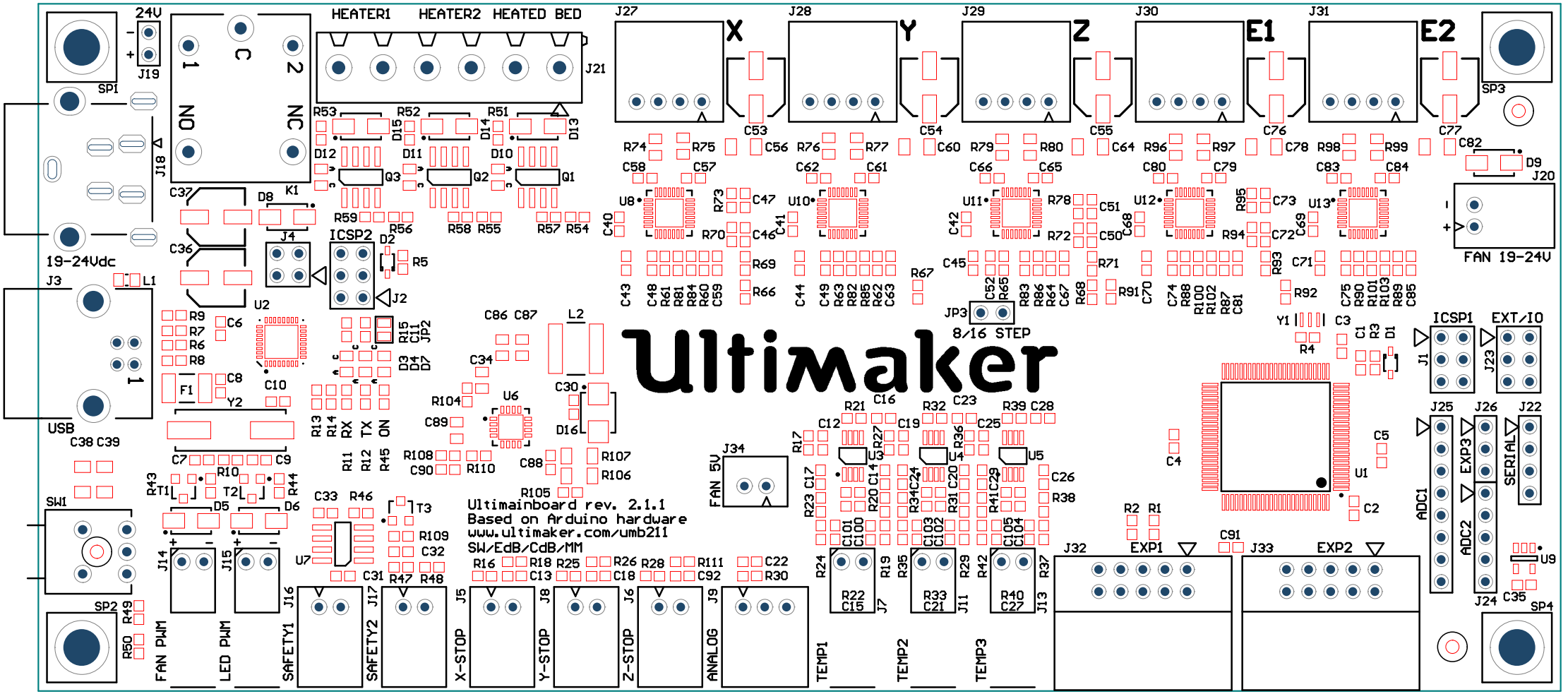
Copper inner1 35u

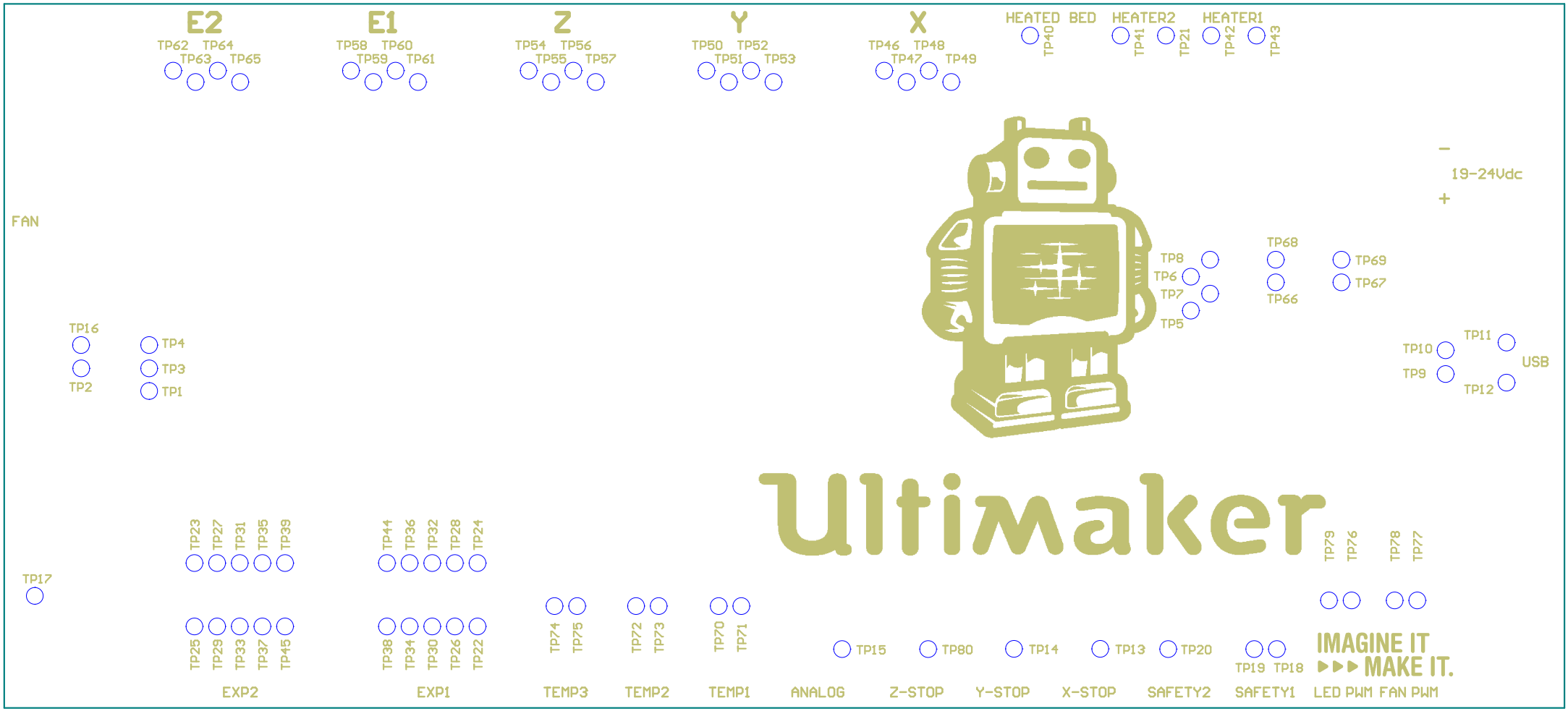


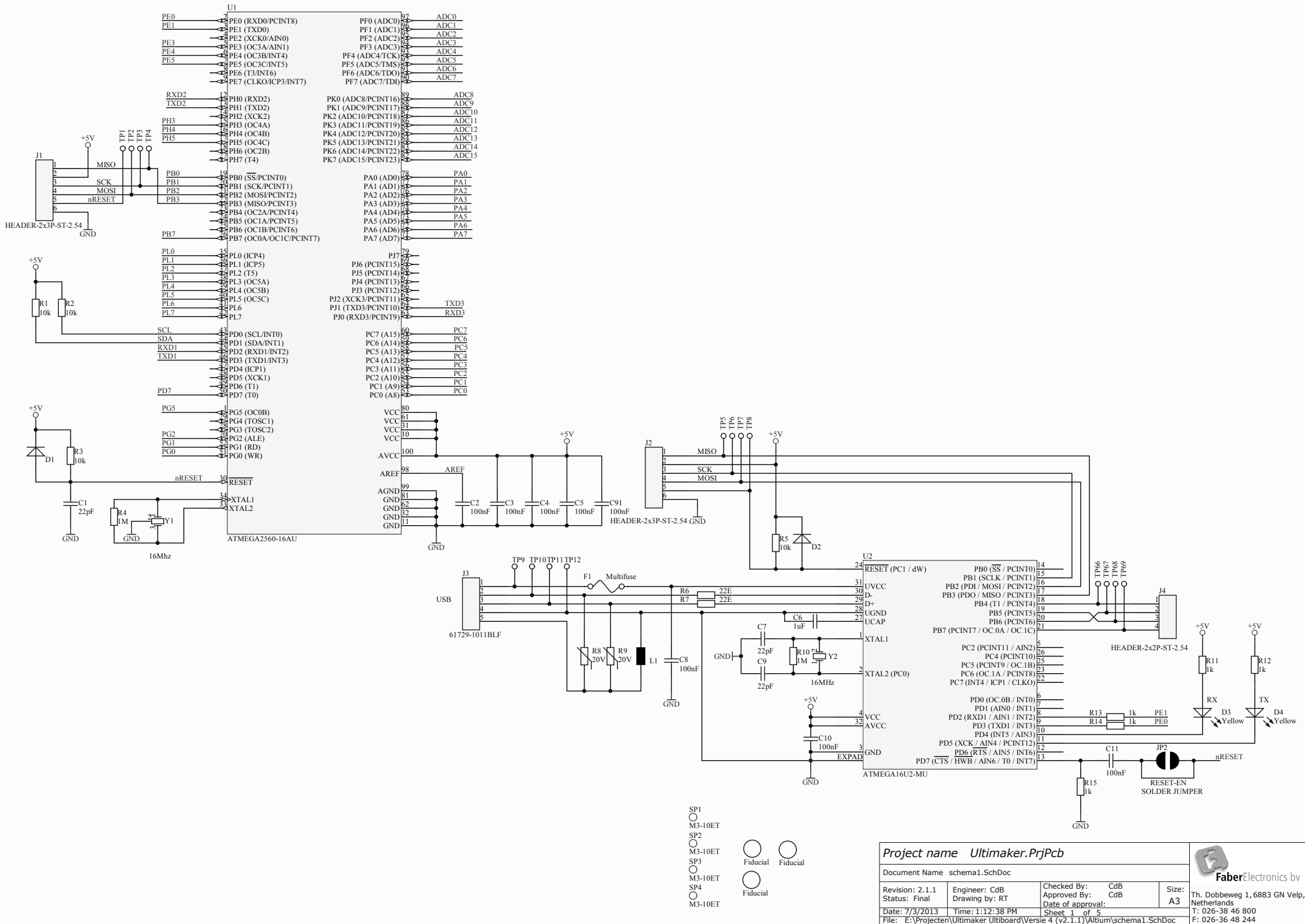
Copper inner2 35u

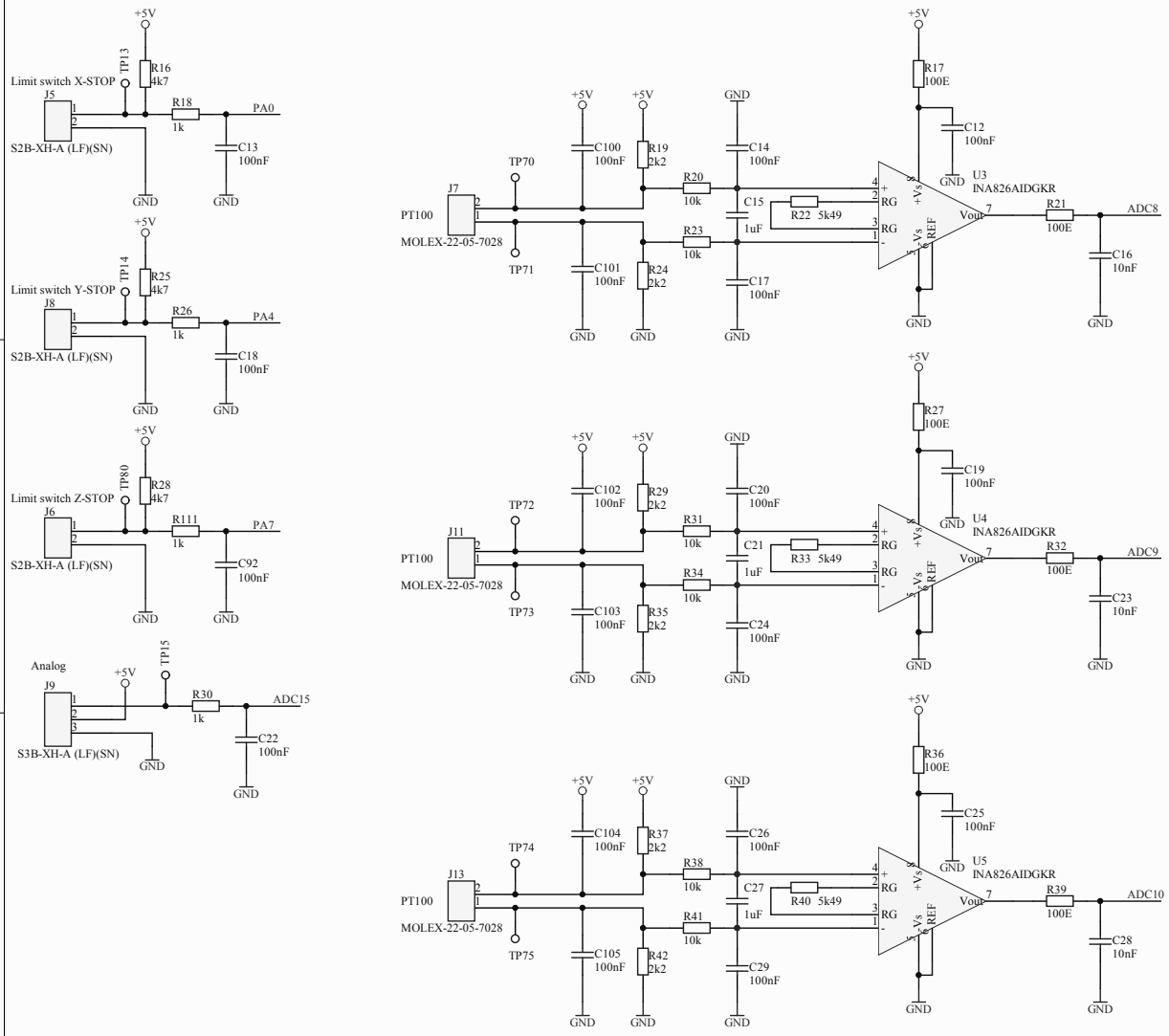


Copper bot 70u


Ultimaker
Ultimainboard rev. 2.1.1
Based on Arduino hardware
www.ultimaker.com/umb211
SW/EdB/CdB/MM
HEATER1 HEATER2 HEATED BED
24V
19-24Vdc
USB
ICSP2
ICSP1
EXT/IO
8/16 STEP
FAN 19-24V
FAN 5V
FAN PWM
LED PWM
SAFETY1
SAFETY2
X-STOP
Y-STOP
Z-STOP
ANALOG
TEMP1
TEMP2
TEMP3
EXP1
EXP2
ADC1
ADC2
SERIAL
EXP3
X
Y
Z
E1
E2
ON
RX
TX
ON


E2
TP62 TP64
TP63 TP65
E1
TP58 TP60
TP59 TP61
Z
TP54 TP56
TP55 TP57
Y
TP50 TP52
TP51 TP53
X
TP46 TP48
TP47 TP49
HEATED BED
TP40
HEATER2
TP41
TP21
HEATER1
TP42
TP43
FAN
19-24Vdc
TP16
TP2
TP4
TP3
TP1
TP8
TP6
TP7
TP5
TP68
TP66
TP69
TP67
TP10
TP9
TP11
TP12
USB
Ultimaker
TP17
TP23 TP27 TP31 TP35 TP39
TP25 TP29 TP33 TP37 TP45
TP44 TP36 TP32 TP28 TP24
TP38 TP34 TP30 TP26 TP22
TP74 TP75
TP72 TP73
TP70 TP71
TP79 TP76
TP78 TP77
TP15
TP80
TP14
TP13
TP20
TP19 TP18
IMAGINE IT
MAKE IT.
EXP2
EXP1
TEMP3
TEMP2
TEMP1
ANALOG
Z-STOP
Y-STOP
X-STOP
SAFETY2
SAFETY1
LED PWM FAN PWM


U1
ATMEGA2560-16AU
J1
HEADER-2x3P-ST-2.54
J2
HEADER-2x3P-ST-2.54
J3
61729-1011BLF
J4
HEADER-2x2P-ST-2.54
U2
ATMEGA16U2-MU
16Mhz
16MHz
F1
Multifuse
JP2
RESET-EN
SOLDER JUMPER
D1
D2
D3
Yellow
D4
Yellow
SP1
SP2
SP3
SP4
M3-10ET
Fiducial
Fiducial
Fiducial
Project name Ultimaker.PrjPcb
Document Name schema1.SchDoc
Revision: 2.1.1
Status: Final
Engineer: CdB
Drawing by: RT
Checked By: CdB
Approved By: CdB
Date of approval:
Size: A3
Date: 7/3/2013
Time: 1:12:38 PM
Sheet 1 of 5
File: E:\Projecten\Ultimaker Ultiboard\Versie 4 (v2.1.1)\Altium\schema1.SchDoc
FaberElectronics bv
Th. Dobbeweg 1, 6883 GN Velp, Netherlands
T: 026-38 46 800
F: 026-36 48 244



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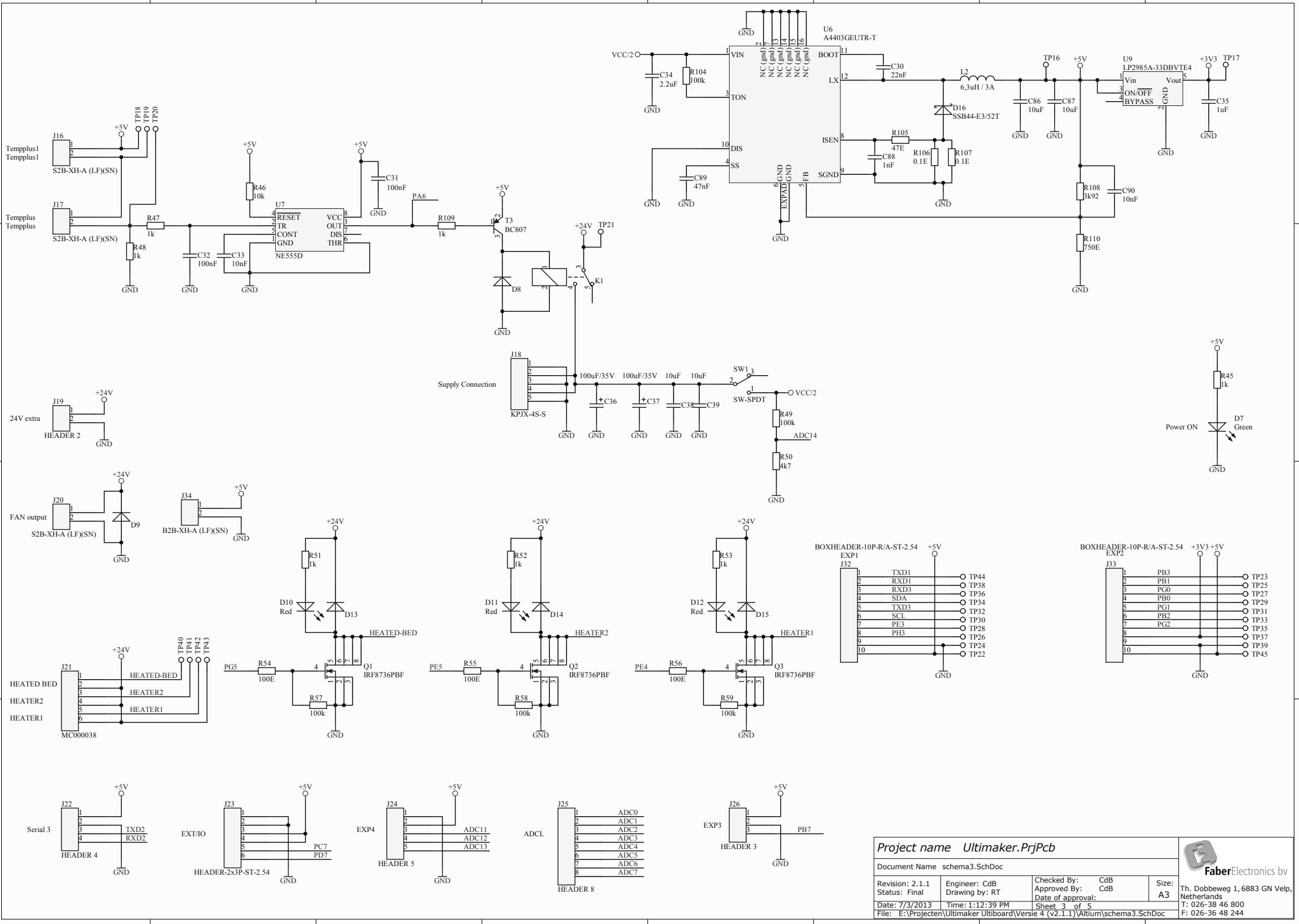
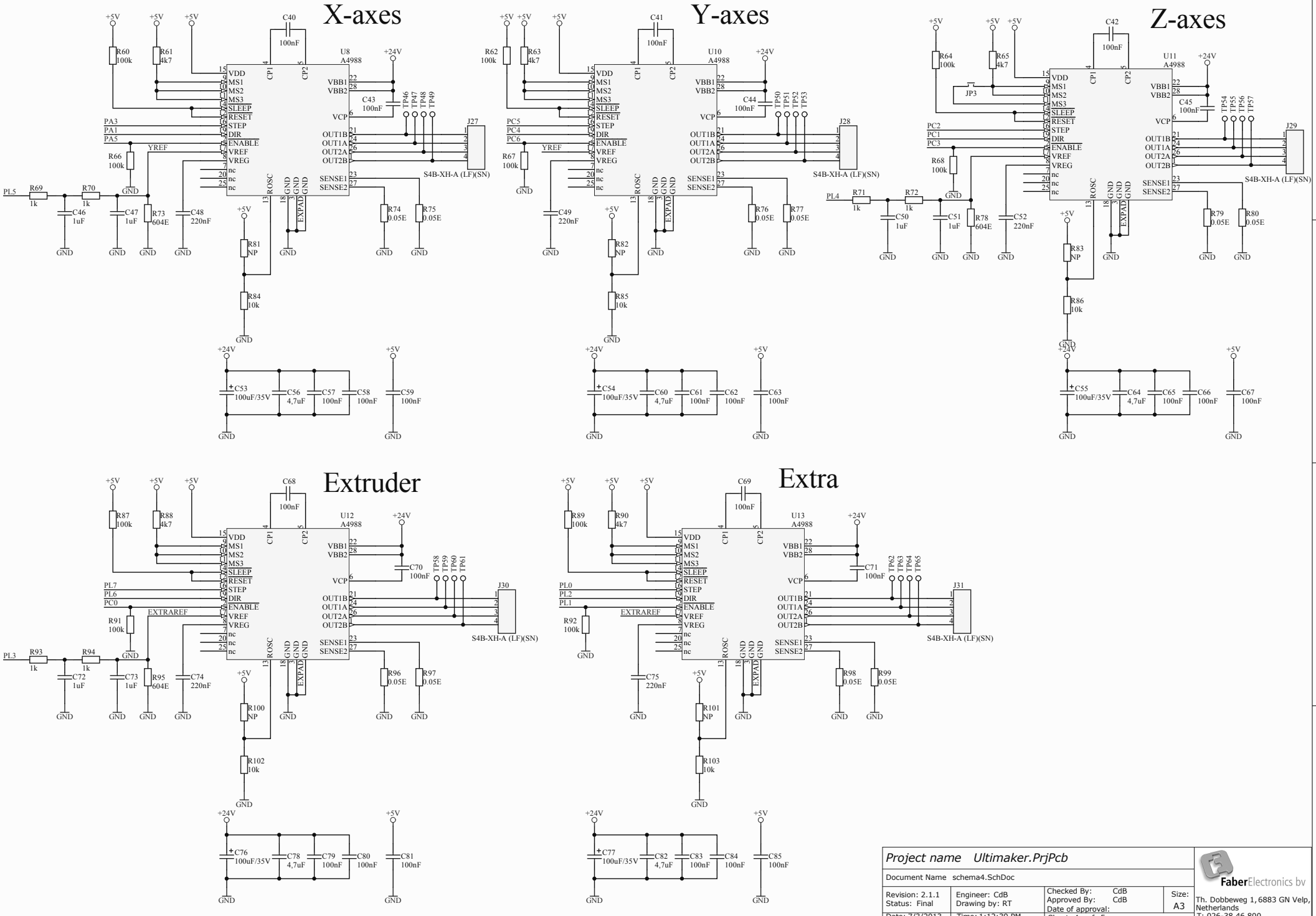
Document Name schema2.SchDoc			
Revision: 2.1.1 Status: Final	Engineer: CdB Drawing by: RT	Checked By: CdB Approved By: CdB Date of approval:	Size: A3
Date: 7/3/2013	Time: 1:12:38 PM	Sheet 2 of 5	
File: E:\Projecten\Ultimaker Ultiboard\Versie 4 (v2.1.1)\Altium\schema2.SchDoc			

FaberElectronics bv
Th. Dobbeweg 1, 6883 GN Velp, Netherlands
T: 026-38 46 800
F: 026-36 48 244



Project name *Ultimaker.PrjPcb*			
Document Name schema3.SchDoc			
Revision: 2.1.1 Status: Final	Engineer: CdB Drawing by: RT	Checked By: CdB Approved By: CdB Date of approval:	Size: A3
Date: 7/3/2013	Time: 1:12:39 PM	Sheet 3 of 5	
File: E:\Projecten\Ultimaker Ultiboard\Versie 4 (v2.1.1)\Altium\schema3.SchDoc			

FaberElectronics bv
Th. Dobbeweg 1, 6883 GN Velp, Netherlands
T: 026-38 46 800
F: 026-36 48 244


X-axes
Y-axes
Z-axes
Extruder
Extra
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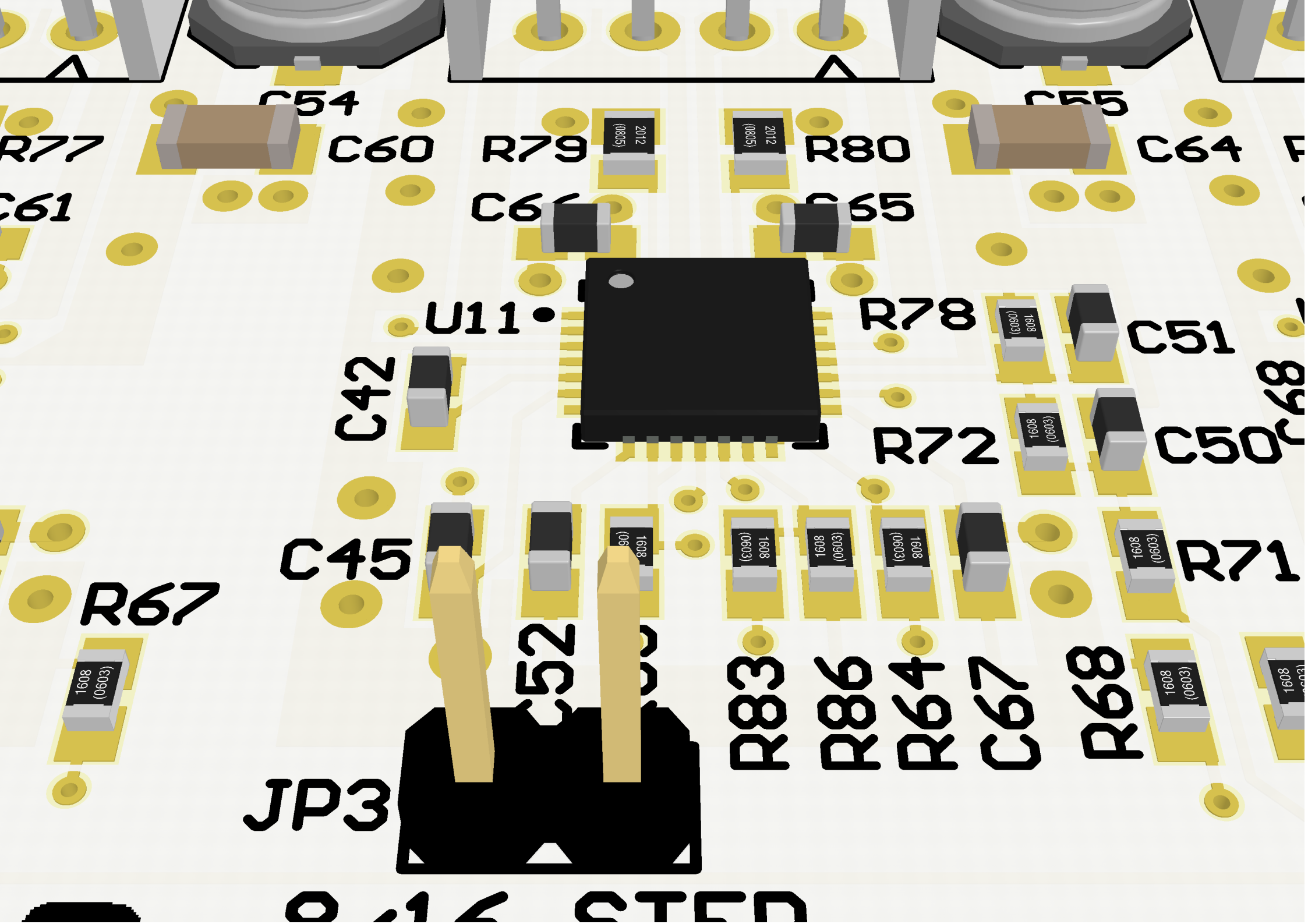
U10 A4988
U11 A4988
U12 A4988
U13 A4988
S4B-XH-A (LF)(SN)
Project name Ultimaker.PrjPcb
Document Name schema4.SchDoc
Revision: 2.1.1
Status: Final
Engineer: CdB
Drawing by: RT
Checked By: CdB
Approved By: CdB
Date of approval:
Size: A3
Date: 7/3/2013
Time: 1:12:39 PM
Sheet 4 of 5
File: E:\Projecten\Ultimaker Ultiboard\Versie 4 (v2.1.1)\Altium\schema4.SchDoc
FaberElectronics bv
Th. Dobbeweg 1, 6883 GN Velp, Netherlands
T: 026-38 46 800
F: 026-36 48 244

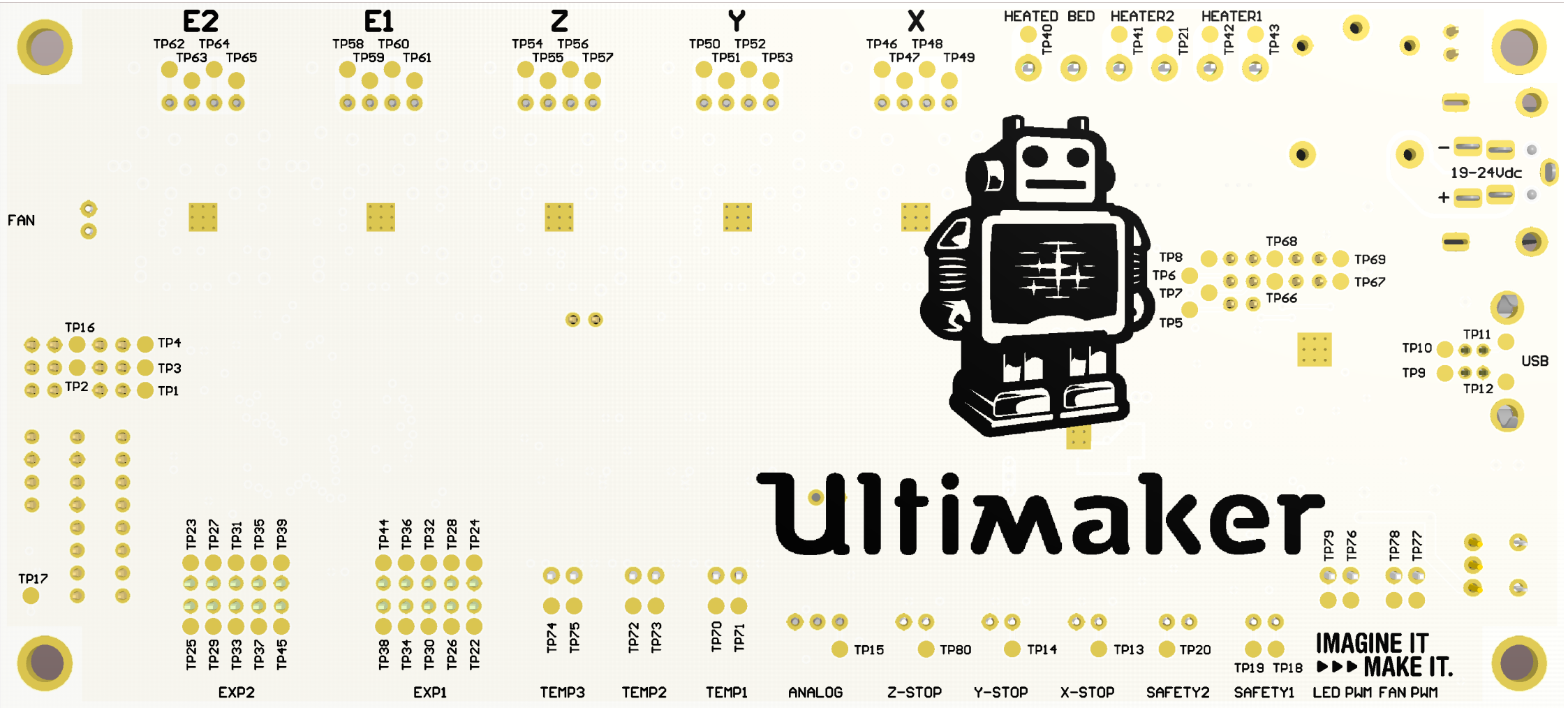
Revisies:

rev. V2.1.1
Wijzigingen t.o.v. rev. V2.1:
RT (27-06-2013) - C100 t/m C105 (100nF) toegevoegd
RT (28-06-2013) - J34 (B2B-XH-A (LF)(SN)) toegevoegd
RT (28-06-2013) - SP1 t/m SP4 (M3-10ET) toegevoegd
RT (28-06-2013) - Layout: Ultiboard 2.1 wordt Ultimainboard 2.1.1 (silkscreen tekst)
RT (28-06-2013) - Layout: www.ultimaker.com/ub21 wordt www.ultimaker.com/umb211 (silkscreen tekst)

Project name Ultimaker.PrjPcb			
Document Name revisies.SchDoc			
Revision: 2.1.1 Status: Final	Engineer: CdB Drawing by: RT	Checked By: CdB Approved By: CdB Date of approval:	Size: A3
Date: 7/3/2013	Time: 1:12:39 PM	Sheet 5 of 5	
File: E:\Projecten\Ultimaker Ultiboard\Versie 4 (v2.1.1)\Altium\revisies.SchDoc			

FaberElectronics bv
Th. Dobbeweg 1, 6883 GN Velp, Netherlands
T: 026-38 46 800
F: 026-36 48 244


C54
C55
R77
C60
R79
R80
C64
C61
C66
C65
U11
R78
C51
C42
R72
C50
C45
R71
R67
C52
R83
R86
R64
C67
R68
JP3


E2
TP62 TP64
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TP59 TP61
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TP11
TP10
TP9
TP12
USB
Ultimaker
TP17
TP23 TP27 TP31 TP35 TP39
TP25 TP29 TP33 TP37 TP45
EXP2
TP44 TP36 TP32 TP28 TP24
TP38 TP34 TP30 TP26 TP22
EXP1
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TEMP3
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TEMP2
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TP13
X-STOP
TP20
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TP19 TP18
SAFETY1
TP79 TP76
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TP78 TP77
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IMAGINE IT
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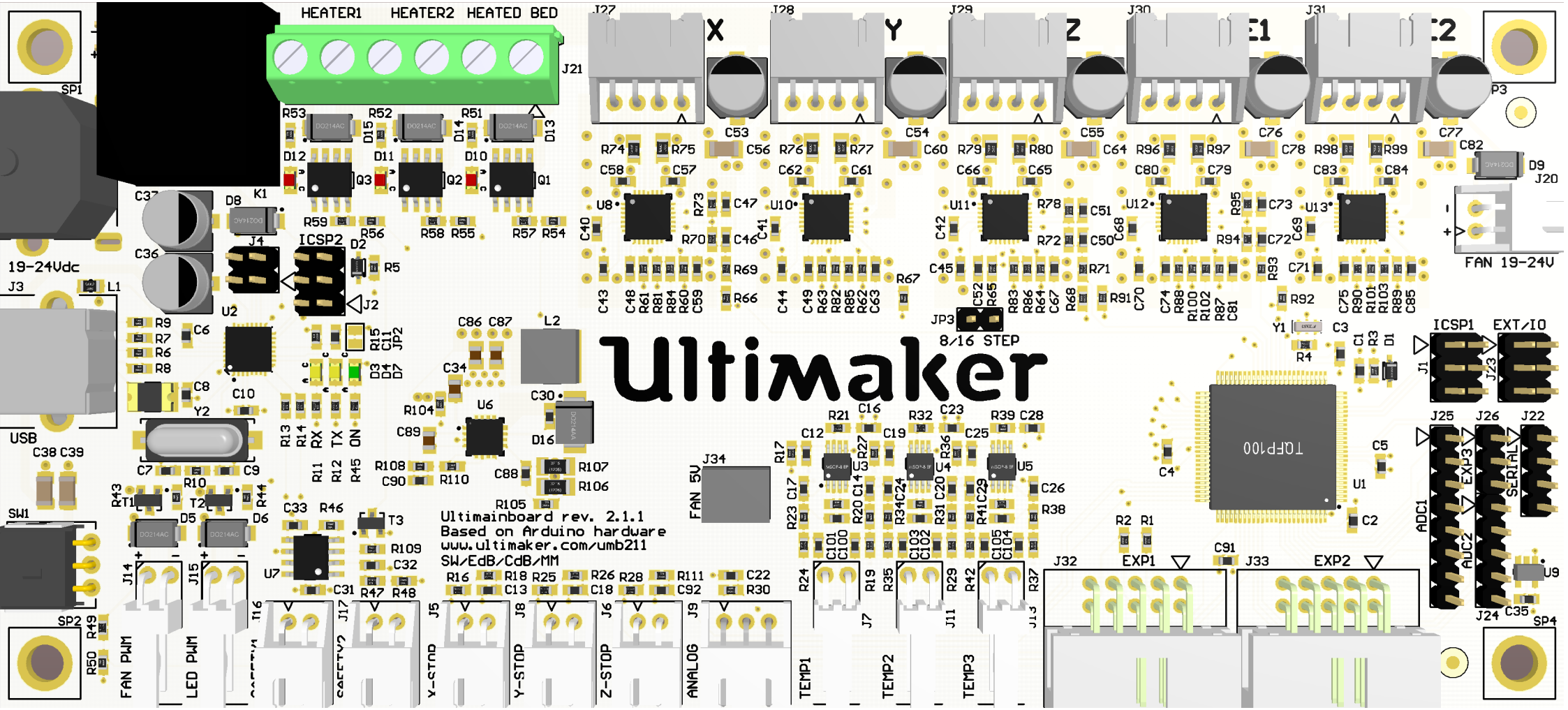
HEATER1
HEATER2
HEATED BED
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E1
E2
Ultimaker
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TEMP3
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SERIAL
ADC1
ADC2
EXP3