
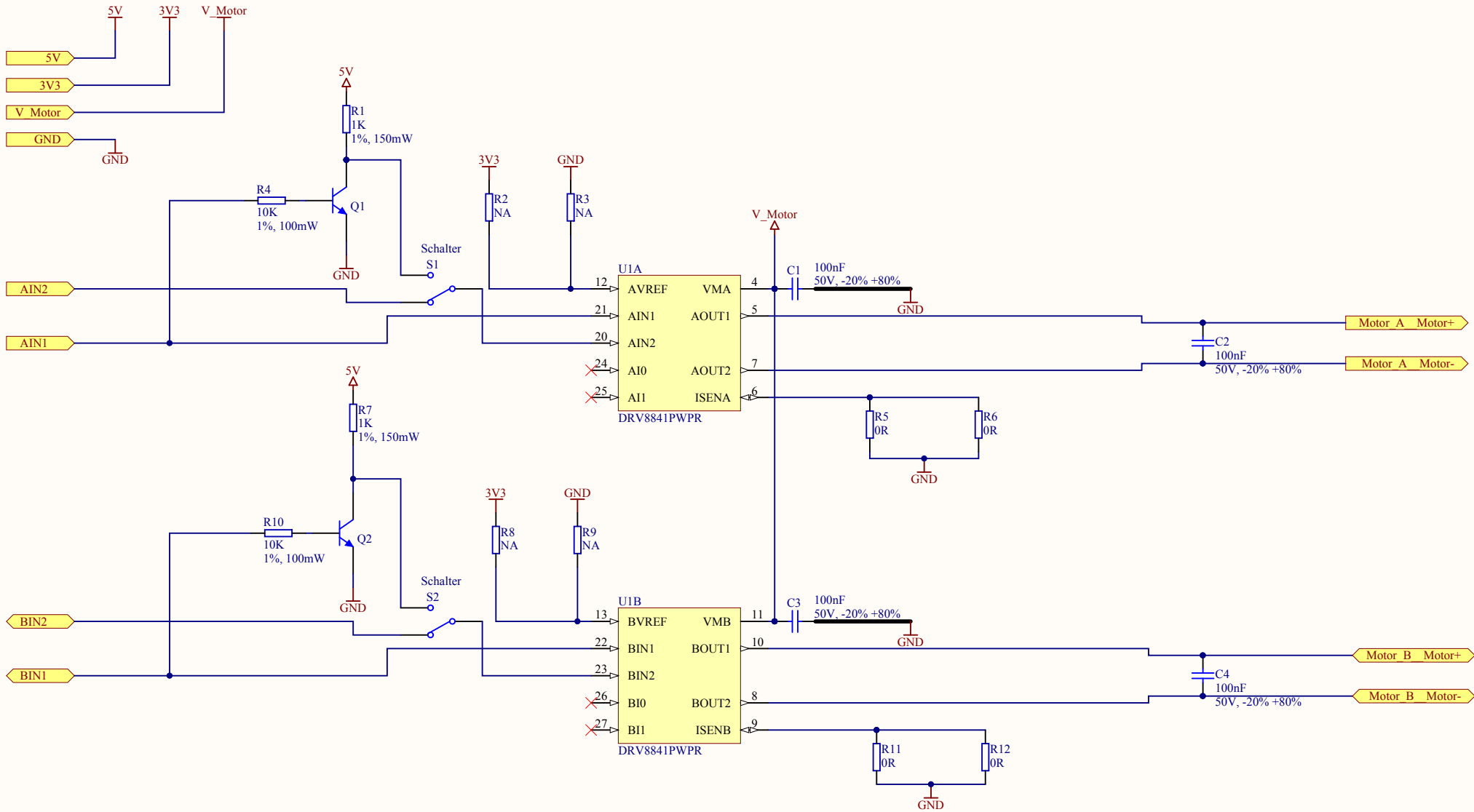

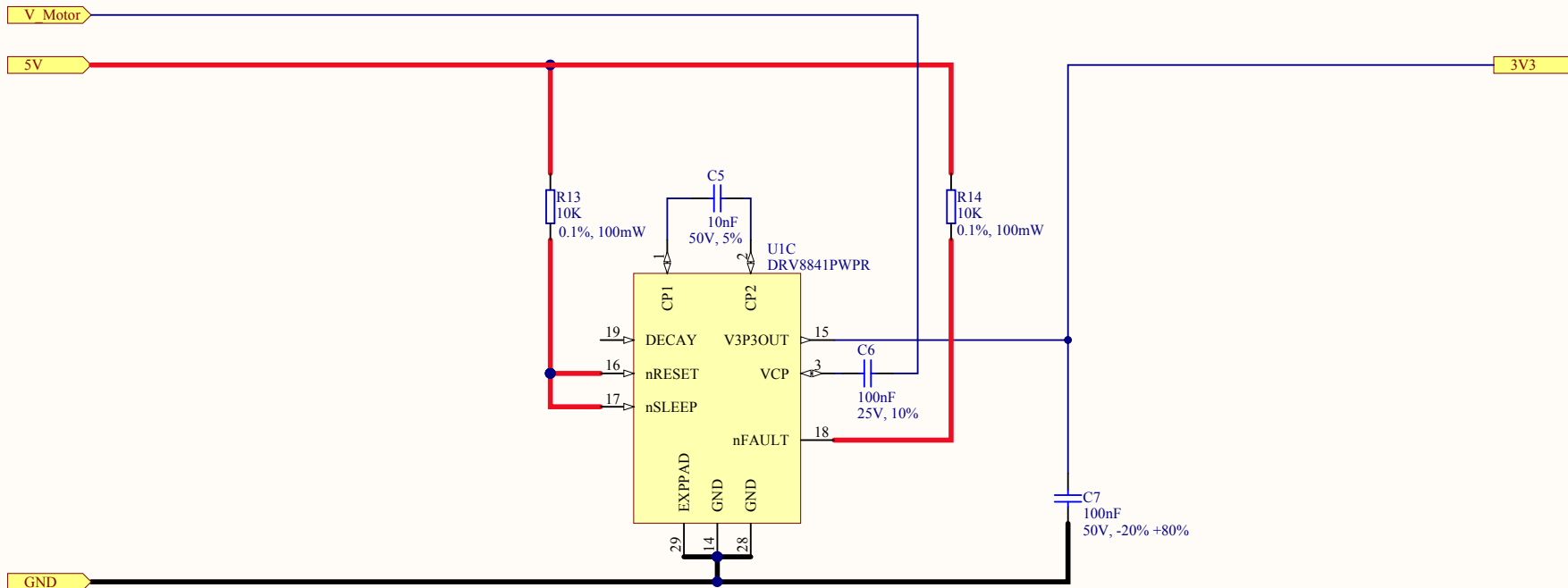



Title: <i>Dual Motorentreiber - Haupt</i>			 NTB INTERSTAATLICHE HOCHSCHULE FÜR TECHNIK BUCHS <i>NTB Interstate University of Applied</i> <i>Sciences of Technology Buchs</i> <i>Werdenbergstrasse 4</i> <i>9471 Buchs Switzerland</i>
Description: <i>Description</i>			
Name: <i>Alex Mullis</i>		Checked: <i>Aaron Leander</i>	
Size: <i>A4</i>	Number: <i>*</i>	Revision: <i>1.3</i>	
Date: <i>22.07.2014</i>	Time: <i>10:26:23</i>	Sheet <i>1</i> of <i>3</i>	
File: <i>D:\SYN\ExpSystem\Motorentreiber Leistungsverstaerker\Dual_Motortreiber\Elektronik\Haupt_Dual_Motorentreiber.Sc</i>			



Title: <i>Dual Motorentreiber - Motorentreiber</i>		 NTB INTERSTAATLICHE HOCHSCHULE FÜR TECHNIK BUCHS <i>NTB Interstate University of Applied Sciences of Technology Buchs Werdenbergstrasse 4 9471 Buchs Switzerland</i>	
Description: <i>Description</i>			
Name: <i>Alison Jäggi</i>	Checked: <i>Aaron Leander</i>		
Size: <i>A4</i>	Number: <i>*</i>		Revision: <i>1.3</i>
Date: <i>22.07.2014</i>	Time: <i>10:26:23</i>		Sheet <i>2</i> of <i>3</i>
File: <i>D:\SYN\ExpSystem\Motorentreiber_Leistungverstaerker\Dual_Motortreiber\Elektronik\Treiber_Dual_Motorentreiber.S</i>			



Title: <i>Dual Motorentreiber - Versorgung</i>			 NTB INTERSTAATLICHE HOCHSCHULE FÜR TECHNIK BUCHS <i>NTB Interstate University of Applied</i> <i>Sciences of Technology Buchs</i> <i>Werdenbergstrasse 4</i> <i>9471 Buchs Switzerland</i>
Description: <i>Description</i>			
Name: <i>Alex Mullis</i>	Checked: <i>Aaron Leander</i>		
Size: <i>A4</i>	Number: <i>*</i>	Revision: <i>1.3</i>	
Date: <i>22.07.2014</i>	Time: <i>10:26:23</i>	Sheet <i>3</i> of <i>3</i>	
File: <i>D:\SYN\ExpSystem\Motorentreiber Leistungsverstaerker\Dual_Motortreiber\Elektronik\Versorgung_Dual_Motorentreiber</i>			

PWM_A_IN1

PWM_A_IN2

V_Motor

PWM_B_IN1

PWM_B_IN2

*2

5V Input

*1

Motor_A_Motor+

Motor_A_Motor-

*7

*5

Motor_B_Motor+

Motor_B_Motor-

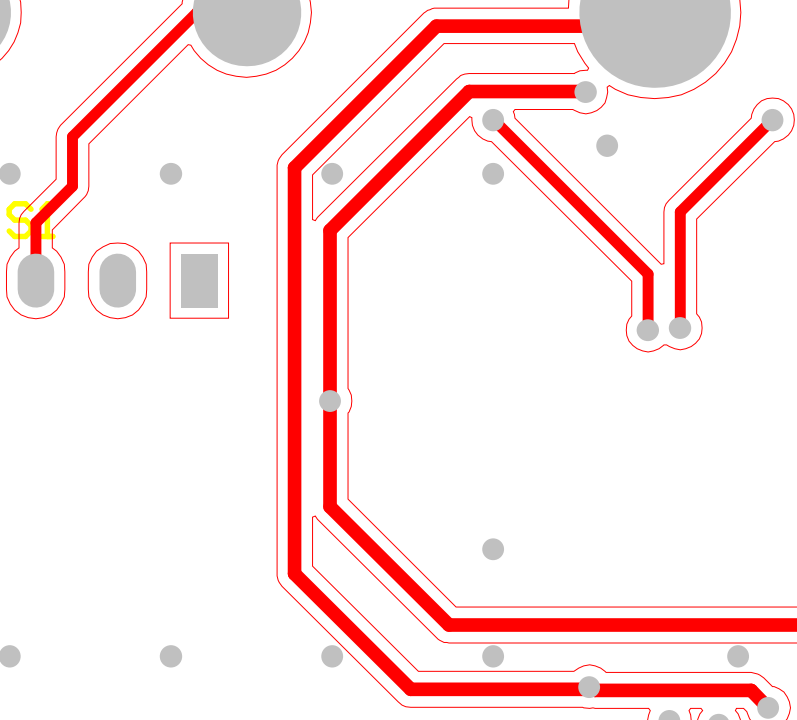
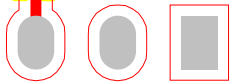
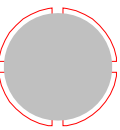
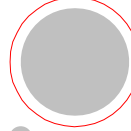
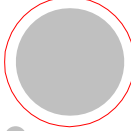
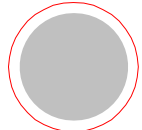
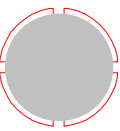
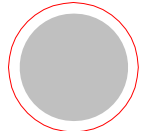
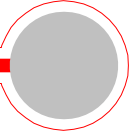
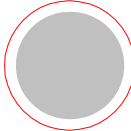
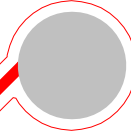
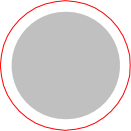
*11

*9

*12

GND

*13



PWM_B_IN2

PWM_B_IN1

V_Motor

PWM_A_IN2

PWM_A_IN1

R10

R4

Q2 Q1

R14

R13

R12

R11

R10

U1

C7

C5

C6

C1

C3

Alison Jaggi
Dual_Motorentreiber
Version: 1.3
04.07.2014

Q4

V_Motor

R10 R11 R12 R13

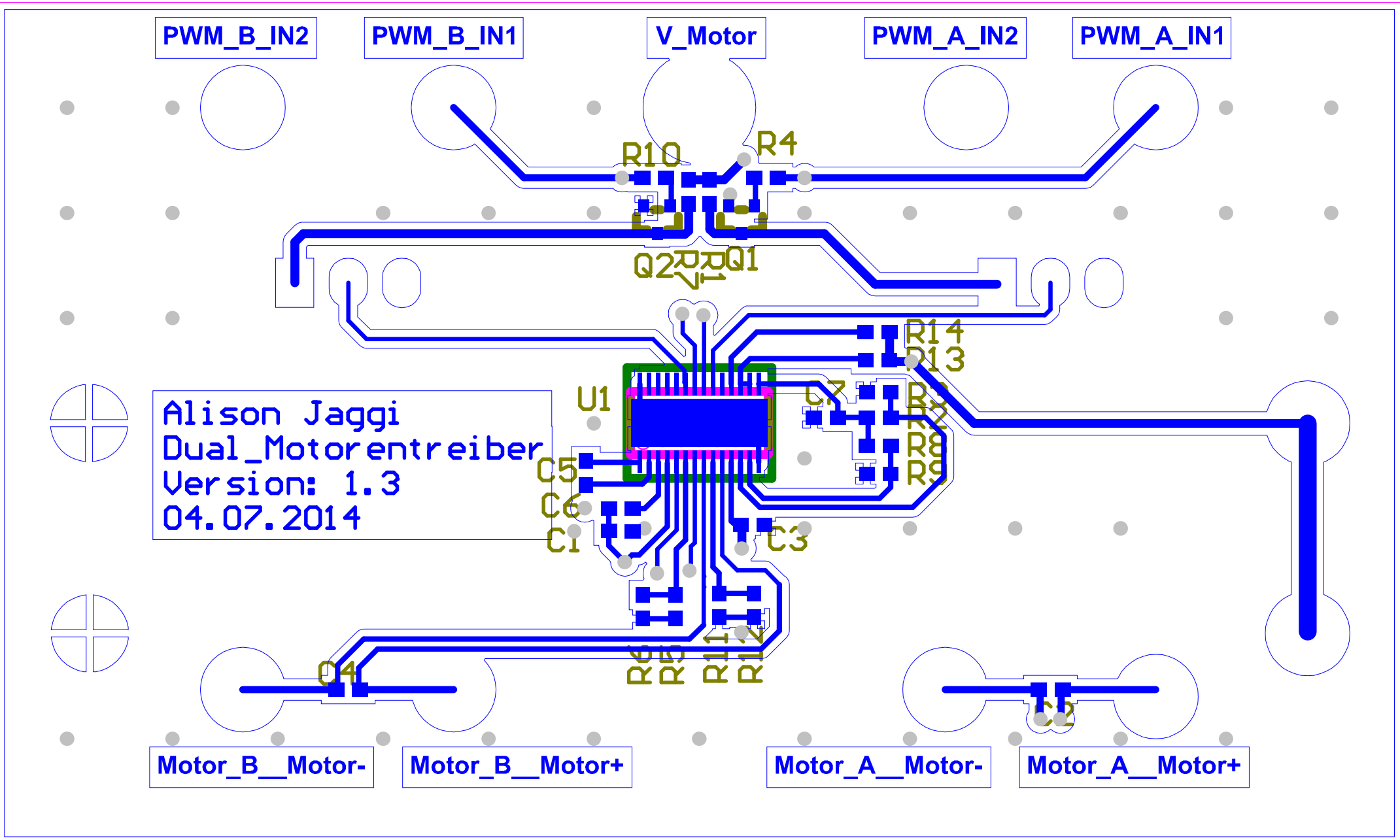
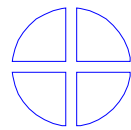
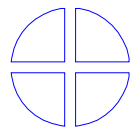
C2

Motor_B_Motor-

Motor_B_Motor+

Motor_A_Motor-

Motor_A_Motor+



Comment	Description	Designator	Footprint	LibRef	Quantity
Input 5V		*1, *2	2mm sleeve	Single Pin Connector	2
V_Motor		*3	4mm sleeve	Single Pin Connector	1
PWM_A_IN1		*4	2mm sleeve	Single Pin Connector	1
Motor_A__Motor-		*5	2mm sleeve	Single Pin Connector	1
PWM_A_IN2		*6	2mm sleeve	Single Pin Connector	1
Motor_A__Motor+		*7	2mm sleeve	Single Pin Connector	1
PWM_B_IN1		*8	2mm sleeve	Single Pin Connector	1
Motor_B__Motor-		*9	2mm sleeve	Single Pin Connector	1
PWM_B_IN2		*10	2mm sleeve	Single Pin Connector	1
Motor_B__Motor+		*11	2mm sleeve	Single Pin Connector	1
GND		*12, *13	2mm sleeve	Single Pin Connector	2
100nF	Capasitor	C1, C2, C3, C4, C6, C7	0603	C	6
10nF	Capasitor	C5	0603	C	1
BC847B-7-F	NPN SURFACE MOUNT SMALL SIGNAL TRANSISTOR IN SOT23	Q1, Q2	DIODES_SOT23_R	BJT-NPN-00002-A.1	2
1K	Resistor	R1, R7	0603	R?	2
NA	Resistor	R2, R3, R8, R9	0603	R?	4
10K	Resistor	R4, R10, R13, R14	0603	R?	4
0R	Resistor	R5, R6, R11, R12	0603	R?	4
Schalter		S1, S2	Schalter	Schalter	2
DRV8841PWPR	DUAL H-BRIDGE DRIVER	U1	TI_HTSSOP(PWP)-(R-PDS	MOTOR--00001-A.3	1