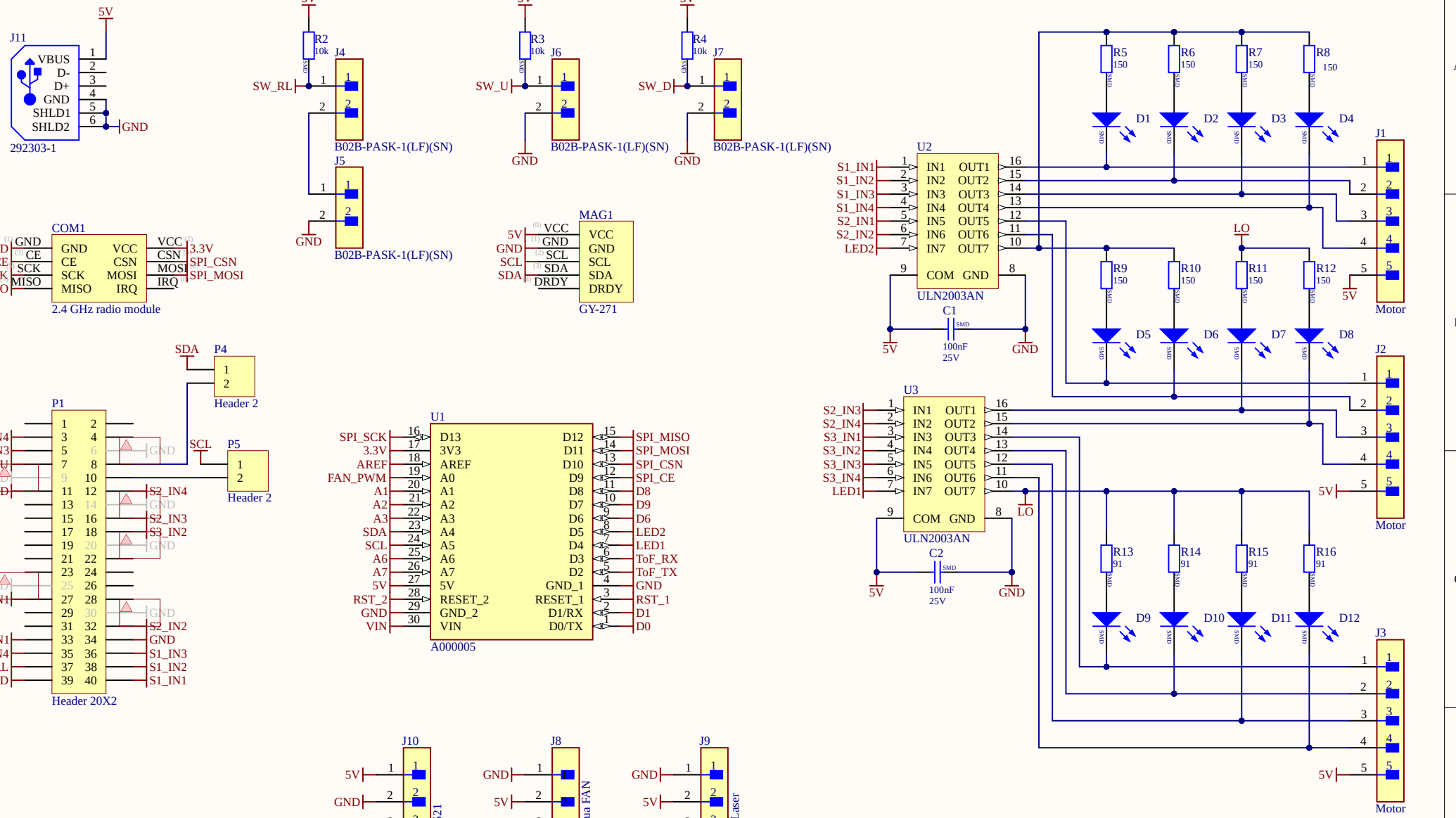
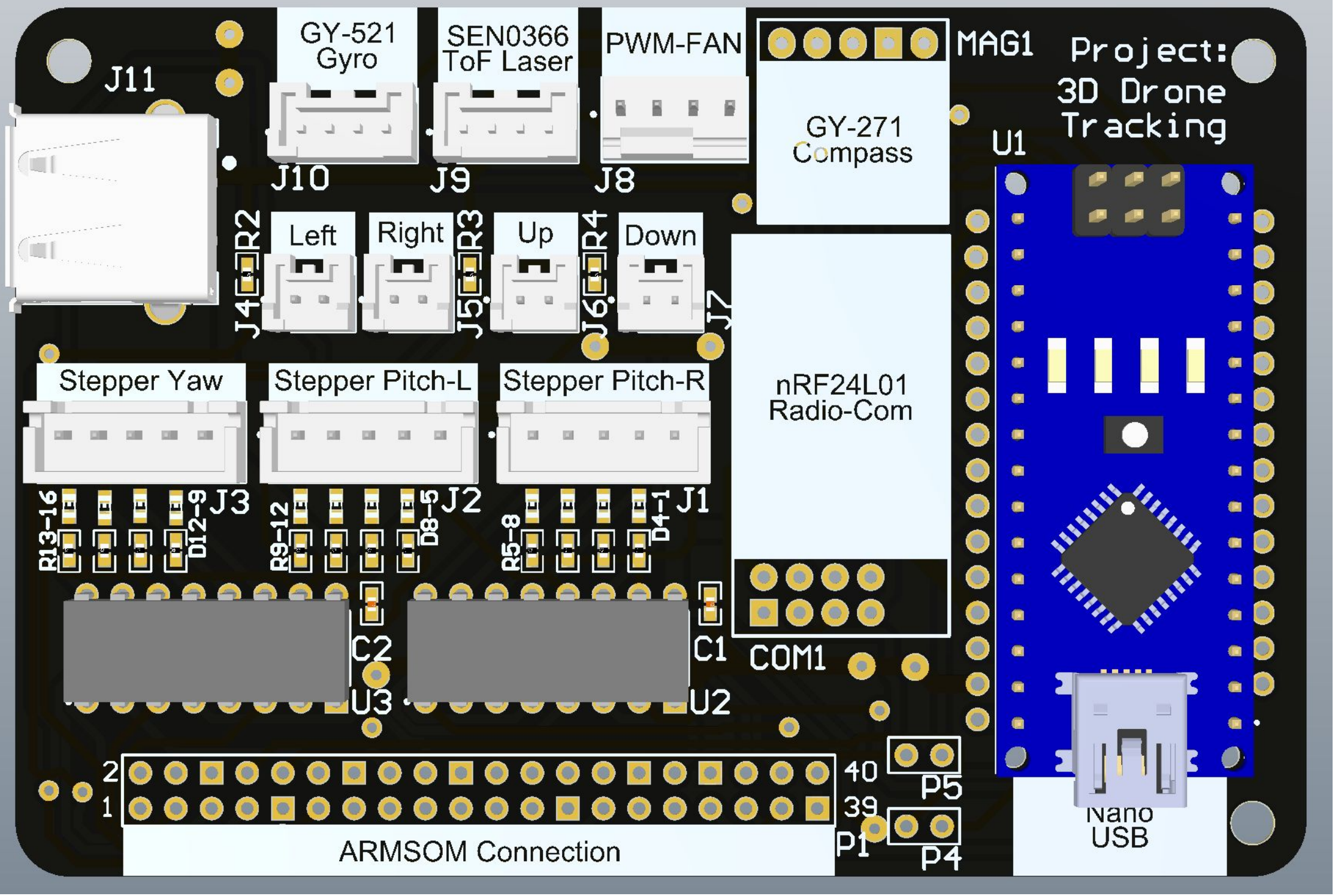
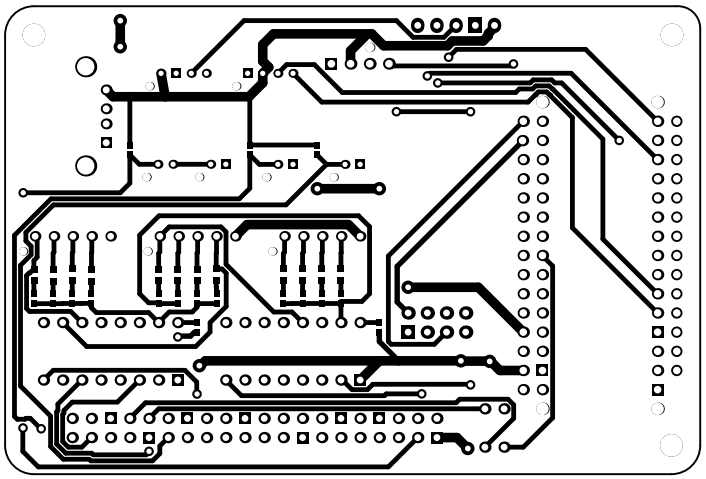


Sachnummer / Dateiname: Sheet1.SchDoc	Name: **Lukas Krahbichler**	Gruppe: I	Klasse: 5CHEL
HTBLVA Elektronik & Technische Informatik Anichstraße 26 - 28 A - 6020 Innsbruck	Titel: **Diploma PCB** With Arduino	Dokumentenart: Draft Dokumentenstatus: In Progress Datum: 14/11/2024	
		Ver.: 0.1	Blatt: 1 / Blätter: 1


J11
GY-521
Gyro
J10
SEN0366
ToF Laser
J9
PWM-FAN
J8
MAG1
GY-271
Compass
Project:
3D Drone
Tracking
U1
R2
Left
J4
R3
Right
J5
R4
Up
J6
Down
J7
Stepper Yaw
J3
Stepper Pitch-L
J2
Stepper Pitch-R
J1
nRF24L01
Radio-Com
R13-16
D12-9
R9-12
D8-5
R5-8
D4-1
C2
C1
COM1
U3
U2
2
1
40
39
P5
P1
P4
ARMSOM Connection
Nano
USB



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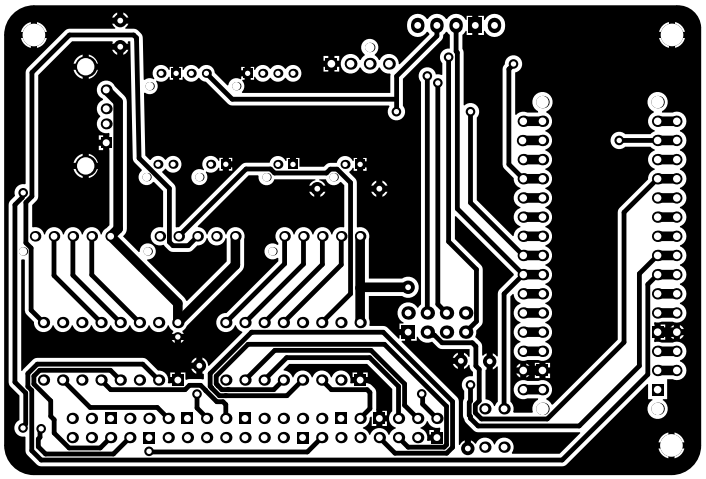
A–6020 Innsbruck

TITEL: 3D DRONE TRACKING			
NAME: LUKAS KRAHBICHLER	GRUPPE: I	KLASSE: 5CHEL	DOKUMENTENART: LAYOUT TOP
DATUM: 14/11/2024	REVISION: 0.1	MASZSTAB: SCALE: 1.00	DOKUMENTENSTATUS: ENTWURF
SACHNUMMER/DATEINAME: Sheet1.PcbDoc		BLATT: 2	BLAETTER: 6



C

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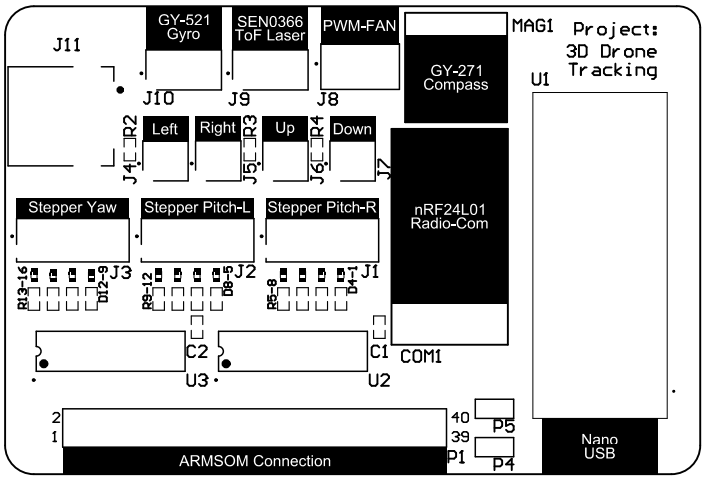
TITEL: 3D DRONE TRACKING			
NAME: LUKAS KRAHBICHLER	GRUPPE: I	KLASSE: 5CHEL	DOKUMENTENART: LAYOUT BOTTOM
DATUM: 14/11/2024	REVISION: 0.1	MASZSTAB: SCALE: 1.00	DOKUMENTENSTATUS: ENTWURF
SACHNUMMER/DATEINAME: Sheet1.PcbDoc		BLATT: 3	BLAETTER: 6



C

HTLinn HTBLVA Abt. Elektronik Anichstrasse 26–28 A–6020 Innsbruck	TITEL: 3D DRONE TRACKING		
	NAME: LUKAS KRAHBICHLER	GRUPPE: I	KLASSE: 5CHEL	DOKUMENTENART: BESTUECK. TOP
	DATUM: 14/11/2024	REVISION: 0.1	MASZSTAB: SCALE: 1.00	DOKUMENTENSTATUS: ENTWURF
	SACHNUMMER/DATEINAME: Sheet1.PcbDoc		BLATT: 4	BLAETTER: 6

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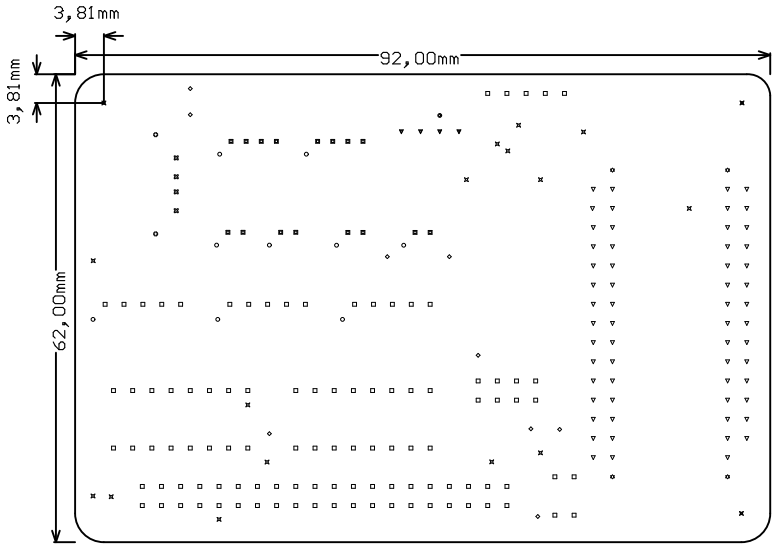
TITEL: 3D DRONE TRACKING			
NAME: LUKAS KRAHBICHLER	GRUPPE: I	KLASSE: 5CHEL	DOKUMENTENART: BESTUECK. BOTTOM
DATUM: 14/11/2024	REVISION: 0.1	MASZSTAB: SCALE: 1.00	DOKUMENTENSTATUS: ENTWURF
SACHNUMMER/DATEINAME: Sheet1.PcbDoc		BLATT: 5	BLAETTER: 6



Symbol	Count	Hole Size	Plated	Hole Type
◎	1	49,21mil (1,250mm)	NPTH	Round
✪	2	90,55mil (2,300mm)	PTH	Round
✖	3	118,11mil (3,000mm)	PTH	Round
⊠	4	36,22mil (0,920mm)	PTH	Round
▼	4	40,16mil (1,020mm)	PTH	Round
✡	4	65,00mil (1,651mm)	NPTH	Round
◇	9	30,00mil (0,762mm)	PTH	Round
○	9	43,31mil (1,100mm)	NPTH	Round
⊠	15	28,00mil (0,711mm)	PTH	Round
▣	16	27,56mil (0,700mm)	PTH	Round
▽	59	39,37mil (1,000mm)	PTH	Round
□	104	35,43mil (0,900mm)	PTH	Round
	230 Total			

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TITEL: 3D DRONE TRACKING			
NAME: LUKAS KRAHBICHLER	GRUPPE: I	KLASSE: 5CHEL	DOKUMENTENART: BOHRPLAN
DATUM: 14/11/2024	REVISION: 0.1	MASZSTAB: SCALE: 1.00	DOKUMENTENSTATUS: ENTWURF
SACHNUMMER/DATEINAME: Sheet1.PcbDoc		BLATT: 6	BLAETTER: 6

Designator	Quantity	Value	Comment	Footprint	Description
COM1	1		2.4 GHz radio module	nRF24L01	Header, 4-Pin, Dual row
J8	1		47053-1000	FP-470531000-MFG	CONN HEADER VERT 4POS 2.54MM
J11	1		292303-1	TE-292303-1_V	1 Port Right Angle Through Hole Mount Female Type A USB Connector, 4 Position, -55 to 85 degC, RoHS, Tube
MAG1	1		GY-271	GY271	I2C Compass Module Compass Magnet Sensor
P1	1		Header 20X2	HDR2X20	Header, 20-Pin, Dual row
U1	1		A000005	MODULE_A000005	Small, complete, and breadboard-friendly board based on the ATmega328 (Arduino Nano 3.x).
C1, C2	2	100nF	100nF	C_SMD_C0402	SMD Capacitor
J9, J10	2		B04B-PASK-1(LF)(SN)	FP-B04B-PASK-1_LF_SN-MFG	CONN HEADER VERT 4POS 2MM
P4, P5	2		Header 2	HDR1X2	Header, 2-Pin
U2, U3	2		ULN2003AN	STM-DIP-16L	Seven Darlington Array, 50 V, 0.5 A, -40 to 85 degC, 16-Pin DIP, RoHS, Tube
J1, J2, J3	3		Motor	FP-B5B-XH-AM_LF_SN-MFG	CONN HEADER VERT 5POS 2.5MM
R2, R3, R4	3	10k	10k	R_SMD_R0402	SMD Resistor
D1, D2, D3, D4	4		SMD LED RED	SMD_0603_CHIP-LED	Red GaAs LED (Vf=2V, If=20mA)
D5, D6, D7, D8	4		SMD LED GREEN	SMD_0603_CHIP-LED	Green GaAs LED (Vf=2V, If=20mA)
D9, D10, D11, D12	4		SMD LED BLUE	SMD_0603_CHIP-LED	Blue SiC LED (Vf=3.2V, If=20mA)
J4, J5, J6, J7	4		B02B-PASK-1(LF)(SN)	FP-B02B-PASK-1_LF_SN-MFG	CONN HEADER VERT 2POS 2MM
R13, R14, R15, R16	4	91	91	R_SMD_R0402	SMD Resistor
R5, R6, R7, R8, R9, R10, R11, R12	8	150	150	R_SMD_R0402	SMD Resistor