Designator	Comment	Footprint
3V3	Header 2	HDR1X2
5V	Header 2	HDR1X2
12V	Header 2	HDR1X2
AUX-1	Header 4X2	DC8P
C1	100uF 35V	CAP EL PANASONIC
C2	150pF	C0603
C3	100nF	C0603
C5	4.7uF	C0603
C6	4.7uF	C0603
C7	10uF	C0805
C8	100nF	C0603
C9	1uF	C0603
C10	100nF	C0603
C11	100nF	C0603
C12	4.7uF	C0603
C13	100nF	C0603
C14	100nF	C0603
C15	100nF	C0603
C16	100nF	C0603
C17	10uF	C1206
C18	0.1uF	C0603
C19	100nF	C0603
C20	100nF	C0603
C21	100uF 35V	CAP EL PANASONIC
C22	100uF 35V	CAP EL PANASONIC
C23	100uF 35V	CAP EL PANASONIC
C24	100uF 35V	CAP EL PANASONIC
C25	100uF 35V	CAP EL PANASONIC
C26	1uF	C0603
C27	1uF	C0603
C28	1uF	C0603
C29	1uF	C0603
C30	100uF 35V	CAP EL PANASONIC
C31	220uF/16V	CAP EL PANASONIC
C32	100uF 35V	CAP EL PANASONIC
C33	100nF	C0603
C34	100nF	C0603
C35	4.7uF	C0603
C36	0.1uF	C0603
C37	0.1uF	C0603
C38	10uF	C0805
C39	10uF	C0805
C41	0.1uF	C0603
C42	0.1uF	C0603
C43	0.1uF	C0603
C44	0.1uF	C0603
C45	0.1uF	C0603
C46	0.1uF	C0603
C47	100uF	CAP EL PANASONIC
D1	S1G	D-SMA

D2	SS54	D-SMA
D3	SS24	D-SMA
D4	SS12	D-SMA
D5	B340A-13-F	D-SMA
D6	S1A	D-SMA
D7	S1A	D-SMA
D8	SS54	D-SMA
D15	SS24	D-SMA
E0_0	Header 8	HDR1X8-HEADER
E0_1	Header 8	HDR1X8-HEADER
E0_MOT		TERM4 3.5mm
E0_MOT_A	Header 4	HDR1X4
E0 MS1	Header 3	HDR1X3-HEADER
E0 MS2	Header 3	HDR1X3-HEADER
E0 MS3	Header 3	HDR1X3-HEADER
E0_SLP	Header 3	HDR1X3-HEADER
E1_0	Header 8	HDR1X8-HEADER
E1_1	Header 8	HDR1X8-HEADER
E1_MOT		TERM4 3.5mm
E1_MOT_A	Header 4	HDR1X4
E1_MS1	Header 3	HDR1X3-HEADER
E1_MS2	Header 3	HDR1X3-HEADER
E1_MS3	Header 3	HDR1X3-HEADER
E1_SLP	Header 3	HDR1X3-HEADER
E2_0	Header 8	HDR1X8-HEADER
E2_1	Header 8	HDR1X8-HEADER
E2_MOT		TERM4 3.5mm
E2_MOT_A	Header 4	HDR1X4
E2_MS1	Header 3	HDR1X3-HEADER
E2_MS2	Header 3	HDR1X3-HEADER
E2_MS3	Header 3	HDR1X3-HEADER
E2_SLP	Header 3	HDR1X3-HEADER
ENC_1	Header 4	HDR1X4
ENC_2	Header 4	HDR1X4
ENC_3	Header 4	HDR1X4
ENC_4	Header 4	HDR1X4
EXP1	Header 5X2	HDR2X5_exp Iner only\
EXP2	Header 5X2	HDR2X5_exp Iner only\
EXP3	Header 7X2	HDR2X7
F1	15A	F1206
F2	30A	F1206
F3		R0805
F4	1A	MF-MSMF050
FAN0		TERM2 3.5mm
FAN0_1	Header 2	HDR1X2
FAN1		TERM2 3.5mm
FAN1_1	Header 2	HDR1X2
FB1	120R @ 100MHz 2A 0603	R0603
FB2	120R @ 100MHz 2A 0603	R0805
Fid1	Fiducial	Fiducial-A
Fid2	Fiducial	Fiducial-A

Fid3	Fiducial	Fiducial-A
HB-OUT		TERM2 5MM
HB-PWR		TERM2 5MM
HE0		TERM2 3.5mm
HE1		TERM2 3.5mm
HE2		TERM2 3.5mm
ISP1	Header 3X2	HDR2X3
J1	Header 3	HDR1X3
J2	MINI-5PIN-180	MicroUSB-B
J3	Header 3	HDR1X3
J4	Header 2	HDR1X2
J5	Header 2	HDR1X2
J6	Header 2	HDR1X2
J7	Header 2	HDR1X2
J8	Header 2	HDR1X2
J9	Header 2	HDR1X2
JMP	Green	
L1	15uH/3A	L7*7*4
L2		SRN6045TA SMD Inductor
 LD1		LED0603
LD2		LED0603
LD3		LED0603
LD4		LED0603
LD5		LED0603
LD6		LED0603
LD7		LED0603
LD8		LED0603
LD9		LED0603
LD10		LED0603
LD11		LED0603
LED1		LED0603
MAIN-PWR		TERM2 5MM
PS_ON	Header 2	HDR1X2
PWR	Header 2	HDR1X2
Q1	HY1403	TO-252AA
Q2	HY1403	TO-252AA
Q3	HY1403	TO-252AA
Q4	HY1403	TO-252AA
Q5	HY1403	TO-252AA
Q6	HY3403	TO-252AA
R1	22R	R0603
R2	2K2	R0603
R3	2K2	R0603
R4	1.8K	R0603
R5	210k	R0603
R6	40.2k	R0603
R7	22R	R0603
R8	22R	R0603
R9	22R 22R	R0603
R10	100K	R0603
R11	10K	R0603

R12	10K	R0603
R13	1.8K	R0603
R14	10K	R0603
R15	1.8K	R0603
R19	54.9k	R0603
R20	1.8K	R0603
R21	10K	R0603
R22	100K	R0603
R23	10K	R0603
R24	100K	R0603
R25	10K	R0603
R26	100K	R0603
R27	10K	R0603
R28	100K	R0603
R29	10K	R0603
R30	100K	R0603
R31	22R	R0603
R32	100K	R0603
R33	1.8K	R0603
R34	22R	R0603
R35	100K	R0603
R36	1.8K	R0603
R37	22R	R0603
R38	100K	R0603
R39	1.8K	R0603
R40	4.7K	R0603
R41	4.7K	R0603
R42	4.7K	R0603
R43	4.7K	R0603
R44	100K	R0603
R45	10K	R0603
R46	22R	R0603
R47	100K	R0603
R48	22R	R0603
R49	100K	R0603
R50	1.8K	R0603
R51	22R	R0603
R52	100K	R0603
R53	1.8K	R0603
R54	4.7K	R0603
R55	1.8K	R0603
R56	140K	R0603
R57	10K	R0603
R58	1.8K	R0603
R59	4.7K	R0603
R60	1K	R0603
R61	1K	R0603
R62	1K	R0603
R63	1K	R0603
R64	1K	R0603
R65	1K	R0603
1.00		1.0000

R66	4.7K	R0603
R67	4.7K	R0603
R68	4.7K	R0603
R69	4.7K	R0603
R70	4.7K	R0603
R71	4.7K	R0603
R72	100	R0603
R73	100	R0603
R74	100	R0603
R75	100	R0603
R76	100	R0603
R77	100K	R0603
R78	24.9k	R0603
R79	100K	R0603
R80	100K	R0603
R81	10	R0603
R82	0Ω	R0603
R83	0Ω	R0603
R84	0Ω	R0603
R85	0Ω	R0603
R86	0Ω	R0603
R87	0Ω	R0603
R88	100	R0603
R89	100	R0603
R90	1K	R0603
R91	1K	R0603
R92	1K	R0603
R93	1K	R0603
R94	1K	R0603
R95	1K	R0603
S1	Momentary Tactile Button	SW-PB SMD 2pin
S2	Momentary Tactile Button	SW-PB SMD 2pin
S3	Momentary Tactile Button	SW-PB SMD 2pin
Thermistors	Header 5X2	HDR2X5
U1	STM32F446VET6	STM-LQFP100_N
U3	MP1584	SOIC8E
U4	AOZ1284	SOIC127P600X170_HS-9N
U5	USBLC6-4SC6	SOT23-6N
U6	电源芯片-AMS1117-3.3V	SOT223-4N
USB_AUX	Header 4	HDR1X4
VFA0_sel	Header 3	HDR1X3-HEADER
VFA1_sel	Header 3	HDR1X3-HEADER
VHE2_sel	Header 3	HDR1X3-HEADER
X+	Header 3	HDR1X3-HEADER
X-	Header 3	HDR1X3-HEADER
XT1	12MHz 33pF 0.5%	CERALOCK CSTCE_G
X_0	Header 8	HDR1X8-HEADER
X_1	Header 8	HDR1X8-HEADER
X_MOT	11000010	TERM4 3.5mm
X_MOT_A	Header 4	HDR1X4
X_MS1	Header 3	HDR1X3-HEADER
V_INIO I	i leauel 3	HDI IAS-HEADEK

X_MS2	Header 3	HDR1X3-HEADER
X_MS3	Header 3	HDR1X3-HEADER
X_SLP	Header 3	HDR1X3-HEADER
Y+	Header 3	HDR1X3-HEADER
Y-	Header 3	HDR1X3-HEADER
Y_0	Header 8	HDR1X8-HEADER
Y_1	Header 8	HDR1X8-HEADER
Y_MOT		TERM4 3.5mm
Y_MOT_A	Header 4	HDR1X4
Y_MS1	Header 3	HDR1X3-HEADER
Y_MS2	Header 3	HDR1X3-HEADER
Y_MS3	Header 3	HDR1X3-HEADER
Y_SLP	Header 3	HDR1X3-HEADER
Z+	Header 3	HDR1X3-HEADER
Z-	Header 3	HDR1X3-HEADER
Z_0	Header 8	HDR1X8-HEADER
Z_1	Header 8	HDR1X8-HEADER
Z_MOT		TERM4 3.5mm
Z_MOT_A	Header 4	HDR1X4
Z_MS1	Header 3	HDR1X3-HEADER
Z_MS2	Header 3	HDR1X3-HEADER
Z_MS3	Header 3	HDR1X3-HEADER
Z_SLP	Header 3	HDR1X3-HEADER

	Quantity
1	Quantity
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
<u> </u>	

1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
ı	

1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
ı	

1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
ı	

1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
ı	

1	
1	
1	_
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	
1	_
1	_
1	