

APPROVALS

DATE

PROJECT

Altium

ENG:

DSN:

CHK:

REFERENCE DOCUMENTS

BOM:

ASSY DWG:

FAB DWG:

PCB DWG:

SIZE

B

CAGE CODE

DWG NO.

REV

PROJECT REVISION

DOCUMENT REVISION

DESIGN ITEM:

Not in version control

Not in version control

TITLE

*

General[7D]

HALLIN_3

General[7D]

HALLIN_2

General[7D]

HALLIN_1

General[7D]

TEMP_IN

VCC

R7

ERA-3AEB103V

R8

ERA-3AEB103V

R9

ERA-3AEB103V

R10

ERA-3AEB103V

R11

ERA-3AEB103V

R12

ERA-3AEB103V

R13

ERA-3AEB103V

GND

C13

C0603C47C3R0047000000000000

C14

C0603C47C3R0047000000000000

C15

C0603C47C3R0047000000000000

C16

C0603C47C3R0047000000000000

HALLOUT_3

General[6D]

HALLOUT_2

General[6D]

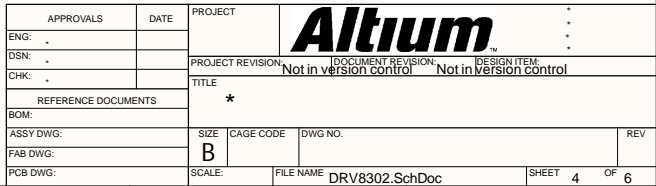
HALLOUT_1

General[6D]

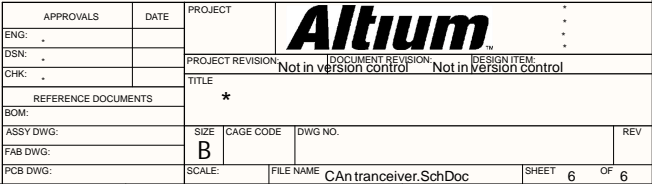
TEMP_OUT

General[6D]

DWG. NO.	REV.	SHT	2		1	
			REVISION	DESCRIPTION	DATE	APPROVED



REVISION	DESCRIPTION	DATE	APPROVED



Shell eco marathon 2024
Grune Welt V8
Designed by: Jordan

GND P1 P2 VSUPPLY

S49 Q5

R39 R36

P3

Q3

U

Q6

R37 R40

P4

Q1

V

R43

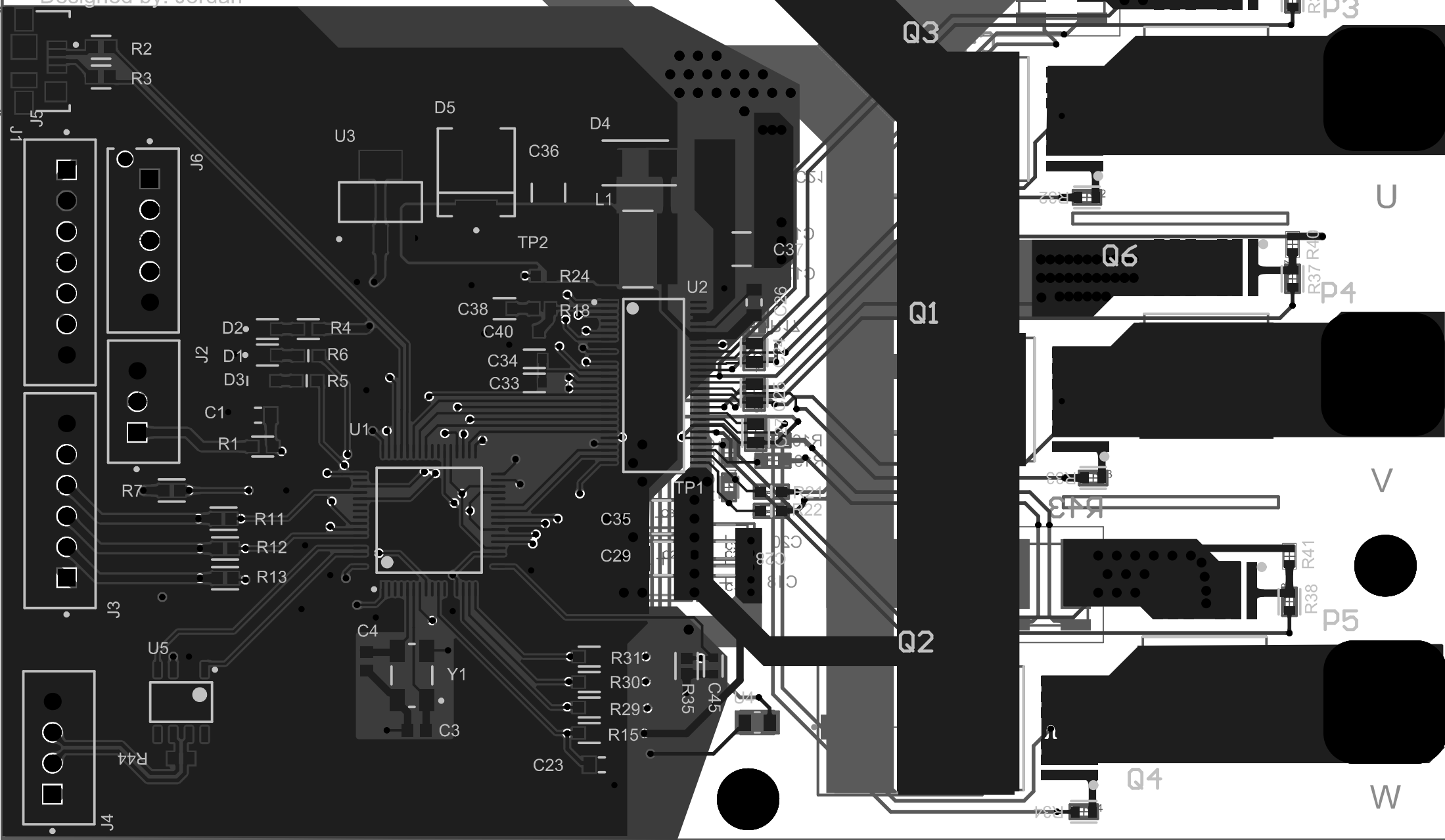
R41 R38

P5

Q2

Q4

W



Comment	Description	Designator	Footprint	LibRef	Quantity
CGA3E2X7R1H104K080AA	Cap Ceramic 100nF 50V X7R 10% Pad SMD 0603 +125°C Automotive T/R	C1, C2, C23, C26	FP-CGA3E-0_3-0_1-IPC_A	CMP-2000-07546-2	4
GRM188SC1H150JA01D		C3, C4	CAPC1608X90X35ML10T15	CMP-2006-02610-1	2
GRM188R71A225KE15D	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 2.2uF, X7R, 15%, 10%, 10V	C5, C6, C7, C8, C9, C10, C11, C30, C31, C32, C33, C34, C44, C46	FP-GRM188-0_1-e0_2_0_5-MFG	CMP-2006-02836-2	14
2u2	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 2.2uF, X7R, 15%, 10%, 10V	C12, C45	FP-GRM188-0_1-e0_2_0_5-MFG	CMP-2006-02836-2	2
C0603C472J5RACTU	C0603C 4.7nF Ceramic Multilayer Capacitor: 50 VDC; +125degC; X7R Dielec: +/-5%	C13, C14, C15, C16	FP-C0603C-CF-MFG	CMP-1035-02202-3	4
GRM32ER71J106KA12L	CAP CER 10UF 63V X7R 1210	C17, C18, C19, C20, C28, C29, C35, C37	FP-GRM32E-0_2-0_3-MFG	CMP-2000-07458-2	8
C5750X7S2A156M250KB	Multilayer Ceramic Capacitors 15uF ±20% 100V X7S SMD 2220	C21, C22	FP-C5750-250-0_4-IPC_B	CMP-2000-05460-2	2
C0805C224K1RACTU	CAP CER 0.22UF 100V 10% X7R 0805	C24, C25, C27	FP-C0805C-DN-MFG	CMP-2007-03262-2	3
GRM32ER60J107ME20L	CAP CER 100UF 6.3V XSR 1210	C36, C43	FP-GRM32-0_3-MFG	CMP-2000-05259-2	2
C0603C682J5GACTU	CAP CER 6800PF 50V 5% NP0 0603	C38	FP-C0603C-CF-MFG	CMP-2006-03259-2	1
GRM188SC1H222JA01D	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 2200pF, COG, 30ppm/°C, 5%, 50V	C39, C41	FP-GRM188-0_1-e0_2_0_5-MFG	CMP-06035-056041-1	2
C0603C121J5GACTU		C40	CAPC1608X87X35LL15T15	CMP-2006-03074-1	1
GRM188R71H223KA01D		C42	CAPC1608X90X35ML10T15	CMP-2006-02910-1	1
EEEFK1J101P	CAP ALUM 100UF 20% 63V SMD	C47, C48, C49	FP-FKG-MFG	CMP-05427-000067-1	3
LTST-C190GKT	LED GREEN CLEAR CHIP SMD	D1	FP-LTST-C190GKT-MFG	CMP-22017-000005-2	1
LTST-C191TBKT	LED BLUE CLEAR CHIP SMD	D2	FP-LTST-C191TBKT-MFG	CMP-22017-000008-1	1
150060RS75000		D3	WL-SMCW_0603_150060x75000	CMP-1426-00001-3	1
B280-13-F	Schottky Diode	D4	DIOM5336X250N	B280-13-F	1
SMCJ5.0A-E3/57T	TVS DIODE 5V 9.2V DO214AB	D5	FP-95402-MFG	CMP-02577-000008-1	1
473460001	CONN RCPT USB2.0 MICRO B SMD R/A	J1	FP-473460001-MFG	CMP-2000-05246-2	1
B3B-XH-A(LF)(SN)	CONN HEADER VERT 3POS 2.5MM	J2	FP-B3B-XH-A_LF_SN-MFG	CMP-17439-000014-3	1
B6B-XH-A(LF)(SN)	CONN HEADER VERT 6POS 2.5MM	J3	FP-B6B-XH-A_LF_SN-MFG	CMP-17439-000076-1	1
B4B-XH-A(LF)(SN)	CONN HEADER VERT 4POS 2.5MM	J4	FP-B4B-XH-A_LF_SN-MFG	CMP-17439-000250-1	1
B7B-XH-A(LF)(SN)	CONN HEADER VERT 7POS 2.5MM	J5	FP-B7B-XH-A_LF_SN-MFG	CMP-17439-000323-2	1
B5B-XH-AM(LF)(SN)	CONN HEADER VERT 5POS 2.5MM	J6	FP-B5B-XH-AM_LF_SN-MFG	CMP-17439-000304-1	1
NR6045T220M	Shielded Wirewound Inductor 22uH 20% 1.5A 0.1495Q SMD	L1	FP-NR6045-MFG	CMP-14484-000872-1	1
Power_Pad		P1, P2, P3, P4, P5	PowerPad	Power_Pad	5
IPB010N06N	MOSFET (N-Channel)	Q1, Q2, Q3, Q4, Q5, Q6	PG-T0263-7-3_3	IPB010N06N	6
RT0603BRD072K2L	RES 2.20K OHM 1/10W .1% SMD 0603	R1, R4, R8, R9, R10, R15, R29, R30, R31	FP-RT0603-MFG	CMP-2000-04423-2	9
CRCW060322R0FKEA	RES Thick Film, 22Q, 1%, 0.1W, 100ppm/°C, 0603	R2, R3	FP-CRCW0603-e3-IPC_B	CMP-2000-03097-2	2
RC0603FR-07100RL		R5, R6, R16, R19, R21, R22	FP-RC0603-0_55-MFG	CMP-2100-03663-2	6
ERA-3AEB103V	RES SMD 10K OHM 0.1% 1/10W 0603	R7, R11, R12, R13, R20	FP-ERA3A-IPC_C	CMP-2000-00874-2	5
RC0603FR-0739KL	Chip Resistor, 39 KOhm, +/- 1%, 0.1 W, -55 to 155 degC, 0603 (1608 Metric), RoHS, Tape and Reel	R14, R26, R27, R28, R39, R40, R41	RESC1608X55X25LL10T15	CMP-2000-06940-1	7
RC0603FR-0711ML	Chip Resistor, 1 MOhm, +/- 1%, 100 mW, -55 to 155 degC, 0603 (1608 Metric), RoHS, Tape and Reel	R17	RESC1608X55X25LL10T15	CMP-1659-00056-1	1
ERJ-3EKF1502V		R18	RESC1608X55X30NL15T15	CMP-2000-00258-1	1
ERJ-3GEYJ224V		R23	RESC1608X55X30LL15T15	CMP-2000-00749-1	1
ERJ3EF1802V	Fixed Resistor, Metal Glaze/thick Film, 0.1W, 18000ohm, 75V, 1% +/-Tol, 100ppm/Cel, Surface Mount, 0603	R24	RESC1608X55X30LL15T15	CMP-1012-00650-3	1
ERJ-3EF3301V	Chip Resistors, 3.3 KOhm, +/- 1%, 0.1 W, 0603 (1608 Metric), -55 to 155 degC, RoHS, Tape and Reel	R25	RESC1609X55X30ML15T15	CMP-2000-00436-2	1
ERJ-PA314R7V	RES SMD 4.7 OHM 5% 1/4W 0603	R32, R33, R36, R37, R38	FP-ERJPA3-IPC_C	CMP-05422-000119-1	5
4R7	RES SMD 4.7 OHM 5% 1/4W 0603	R34	FP-ERJPA3-IPC_C	CMP-05422-000119-1	1
10k	RES SMD 10K OHM 0.1% 1/10W 0603	R35	FP-ERA3A-IPC_C	CMP-2000-00874-2	1
WSLP2726SL000FEA	Resistor	R42, R43	WSLP2726SL000FEA	WSLP2726SL000FEA	2
ERA-3AEB121V		R44	RESC1608X55X30NL20T20	CMP-2000-00896-1	1
Test point		TP1, TP2	Test point	Test point	2
STM32F405RGt6Tr	IC MCU 32BIT 1MB FLASH 64QFP	U1	FP-LQFP64-5W-IPC_C	CMP-0243-00156-2	1
DRV8302DCAR	IC MOTOR DRIVER 8V-60V 56HTSSOP	U2	FP-DCA0056A-IPC_C	CMP-04915-000065-1	1
TC2117-3.3VDBTR	800mA Fixed Low Dropout Positive Regulator, 3-Pin SOT-223, Extended Temperature, Tape and Reel	U3	SOT-223-DB3_N	CMP-0136-00509-1	1
NTCS0805E3103GMT	NTCS0805E3103GMT Thermistor NTC 10K Ohm 2-Pin 0805 Surface Mount Solder Pad 3570K -4 to -3.5 T/R Automotive	U4	NTCS0805_VIS	CMP-00030-42801496-1	1
SN65HVD232D	3.3 V CAN Transceiver, 17 mA, -40 to 85 degC, 8-pin SOIC (D), Green (RoHS & no Sb/Bi)	U5	D0008A_L	CMP-0315-00073-2	1
ABM3B-8.000MHZ-10-1-U-T	Crystal 8MHz ±10ppm 10pF SMD-4 5mm x 3.2mm	Y1	FP-ABM3B-MFG	CMP-2000-05730-2	1