

Scarab v1.0 BOM 20160714

*Preferred parts listed with Mouser order number
 Substitutions accepted with prior approval
 Do not quote no-fit parts (marked NF)*

Reference	Value	Footprint	Mouser No.
C1	150uF	C_Radial_D10_L20_P	647-UPW1J151MPD
C10	750pF	0805	81-GRM2165C1H751JA
C11	1uF 25V X7R	0805	810-C2012X7R1E105K
C12	10uF	0805	81-GRM21BR61E106MA3L
C13	1uF 25V X7R	0805	810-C2012X7R1E105K
C14	NF	0805	-
C15	100nF	0805	710-885012207072
C16	100nF	0805	710-885012207072
C17	100nF	0805	710-885012207072
C18	10nF	0805	710-885012207092
C19	NF	0805	-
C2	2.2uF	1206	81-GRM31CR72A225KA3L
C20	39pF	0805	581-08055A390J
C21	100nF	0805	710-885012207072
C22	NF	0805	-
C23	10nF	0805	710-885012207092
C24	39pF	0805	581-08055A390J
C25	NF	0805	-
C26	NF	0805	-
C27	NF	0805	-
C28	NF	0805	-
C29	10nF	0805	710-885012207092
C3	NF	0805	-
C4	1uF	0805	810-C2012X7R1E105K
C5	1uF	0805	810-C2012X7R1E105K
C6	1uF 25V X7R	0805	810-C2012X7R1E105K
C7	1uF 25V X7R	0805	810-C2012X7R1E105K
C8	10nF	0805	710-885012207092
C9	68pF	0805	581-08051A680F
D1	NF	SMC	-
D10	RED	0805	859-LTST-C171KRKT
D11	BLUE	0805	859-LTST-C170TBKT
D12	GREEN	0805	859-LTST-C171GKT
D13	NF	DO-214AC	-
D14	NF	DO-214AC	-
D15	NF	DO-214AC	-
D16	NF	DO-214AC	-
D17	NF	DO-214AC	-
D18	NF	DO-214AC	-
D19	3V	SOT-23	863-BZX84C3V0LT1G
D2	NF	SMC	-
D3	NF	SMC	-
D4	NF	SMC	-
D5	TVS	SMB	512-SMBJ64CA
D6	BAV99	SOT-23	863-BAV99LT1G
D7	NF	SOT-23	-
D8	TVS 12V	DO-214AC	581-SMAJ12CA

Sheet1

D9	TVS 12V	DO-214AC	581-SMAJ12CA
F1	8A	Fuseholder_5x20_Schurter	2 x 693-0751.0062
L1	220uH 1.57R	INDUCTOR_SDR0604	652-SDR0604-221KL
P1	BATT	5.08mm_2way	710-691311500102
P2	MOTOR	5.08mm_2way	710-691311500102
P3	NF	5.08mm_2way	-
P4	AUX_A	3.5mm_8way	649-220107-C081A01LF
P5	AUX_B	3.5mm_5way	649-220107-C051A01LF
P6	COMMS	3.5mm_6way	649-220107-C061A01LF
P7	ISP	CON_02X05_1.27mm	649-202112100010C4LF
Q1	IPD35N10S3L-26	TO-252	726-IPD35N10S3L26
Q2	IPD35N10S3L-26	TO-252	726-IPD35N10S3L26
Q3	IPD35N10S3L-26	TO-252	726-IPD35N10S3L26
Q4	IPD35N10S3L-26	TO-252	726-IPD35N10S3L26
Q5	MMUN2211LT1G	SOT-23	863-MMUN2211LT1G
Q6	MMUN2211LT1G	SOT-23	863-MMUN2211LT1G
R1	0R	0805	71-CRCW0805-0-E3
R10	NF	0805	-
R11	0R	0805	71-CRCW0805-0-E3
R12	140k	0805	71-CRCW0805-140K-E3
R13	10k	0805	71-CRCW0805-10K-E3
R14	NF	0805	-
R15	0R	0805	71-CRCW0805-0-E3
R16	1k	0805	71-CRCW0805-1.0K-E3
R17	0R	0805	71-CRCW0805-0-E3
R18	47k	0805	71-CRCW0805-47K-E3
R19	47k	0805	71-CRCW0805-47K-E3
R2	0R	0805	71-CRCW0805-0-E3
R20	NF	0805	-
R21	NF	0805	-
R22	NF	0805	-
R23	NF	0805	-
R24	1k8	0805	71-CRCW0805-1.8K-E3
R25	1k8	0805	71-CRCW0805-1.8K-E3
R26	1k8	0805	71-CRCW0805-1.8K-E3
R27	120k	0805	71-CRCW0805120KFKEA
R28	10k	0805	71-CRCW0805-10K-E3
R29	10k	0805	71-CRCW0805-10K-E3
R3	NF	0805	-
R4	NF	0805	-
R5	97.6k	0805	71-CRCW0805-97.6K-E3
R6	0.01R 1W	2512	756-LRMAM2512R01FT4
R7	158k	0805	71-CRCW0805158KFKEA
R8	0R	0805	71-CRCW0805-0-E3
R9	0R	0805	71-CRCW0805-0-E3
TH1	NTCS0805E3103JMT	0805	594-2381-615-53103
U1	LPC1114FDH28/102	TSSOP-28	771-LPC1114FDH28/102
U2	TPS54061	VSON8	595-TPS54061DRBR
U3	MIC5205-3.3YM5	SOT-23-5	998-MIC5205-3.3YM5TR
U4	ST_CS70	TSSOP-8	511-CS70P
U5	MIC4605-1YM	SOIC-8	998-MIC4605-1YM
U6	MIC4605-1YM	SOIC-8	998-MIC4605-1YM
U7	MAX3485	SOIC-8	700-MAX3485CSA
Y1	12MHz 20pF	Crystal_FOX_HC	559-FOXSDLF/120R-20

Manufacturer	Manf. Part No.	Mating Part
Nichicon	UPW1J151MPD	
Murata	GRM2165C1H751JA01D	
TDK	C2012X7R1E105K125AB	
Murata	GRM21BR61E106MA73L	
TDK	C2012X7R1E105K125AB	
Würth Electronics	885012207072	
Würth Electronics	885012207072	
Würth Electronics	885012207072	
Würth Electronics	885012207092	
Murata	GRM31CR72A225KA73L	
AVX	08055A390JAT2A	
Würth Electronics	885012207072	
Würth Electronics	885012207092	
AVX	08055A390JAT2A	
Würth Electronics	885012207092	
TDK	C2012X7R1E105K125AB	
TDK	C2012X7R1E105K125AB	
TDK	C2012X7R1E105K125AB	
TDK	C2012X7R1E105K125AB	
Würth Electronics	885012207092	
AVX	08051A680FAT2A	
Lite-On	LTST-C171KRKT	
Lite-On	LTST-C170TBKT	
Lite-On	LTST-C171GKT	
ON Semiconductor	BZX84C3V0LT1G	
Fairchild Semiconductor	SMBJ64CA	
ON Semiconductor	BAV99LT1G	
AVX	SMAJ12CA	

Sheet1

AVX	SMAJ12CA	
Schurter	751.0062	530-5ST8-R
Bourns	SDR0604-221KL	
Würth Electronics	691311500102	649-202007H021B01LF
Würth Electronics	691311500102	649-202007H021B01LF
FCI / Amphenol	20020107-C081A01LF	538-39503-2008
FCI / Amphenol	20020107-C051A01LF	538-39500-0005
FCI / Amphenol	20020107-C061A01LF	538-39500-0006
FCI / Amphenol	20021121-00010C4LF	
Infineon	IPD35N10S3L-26	
Infineon	IPD35N10S3L-26	
Infineon	IPD35N10S3L-26	
Infineon	IPD35N10S3L-26	
ON Semiconductor	MMUN2211LT1G	
ON Semiconductor	MMUN2211LT1G	
Vishay	CRCW08050000Z0EA	
Vishay	CRCW08050000Z0EA	
Vishay	CRCW0805140KFKEA	
Vishay	CRCW080510K0FKEA	
Vishay	CRCW08050000Z0EA	
Vishay	CRCW08051K00FKEA	
Vishay	CRCW08050000Z0EA	
Vishay	CRCW080547K0FKEA	
Vishay	CRCW080547K0FKEA	
Vishay	CRCW08050000Z0EA	
Vishay	CRCW08051K80FKEA	
Vishay	CRCW08051K80FKEA	
Vishay	CRCW08051K80FKEA	
Vishay	CRCW0805120KFKEA	
Vishay	CRCW080510K0FKEA	
Vishay	CRCW080510K0FKEA	
Vishay	CRCW080597K6FKEA	
TT Electronics	LRMAM2512-R01FT4	
Vishay	CRCW0805158KFKEA	
Vishay	CRCW08050000Z0EA	
Vishay	CRCW08050000Z0EA	
Vishay	NTCS0805E3103JMT	
NXP	LPC1114FDH28/102:5	
Texas Instruments	TPS54061DRBR	
Microchip	MIC5205-3.3YM5-TR	
STMicroelectronics	CS70P	
Microchip	MIC4605-1YM	
Microchip	MIC4605-1YM	
Maxim Integrated	MAX3485CSA+	
Fox	FOXSDLF/120R-20/TR	