





















Value	Layout	Parts	Digikey Part #	Coilcraft	Discription	Notes
1 10uF	C0603	C1	445-7486-6-ND		CAP CER 10UF 10V 10% X5R 0603	
1 4.7uF	C0603	C2	490-3297-6-ND		CAP CER 4.7UF 6.3V 10% X5R 0603	
4 100uF	C1206	C3, C4, C5, C6	478-3130-1-ND		CAP TANT 100UF 6.3V 20% 1210	
1 AM-1437	Solar cell	D1				Customer supplied.
1 LED	LED0603	D2	160-1837-6-ND		LED BLUE CLEAR 0603 SMD	
1 4.7uH	L-US	L1		EPL3012-472MLB	4.7 UH INDUCTOR	
1 PMOS	SOT23-3	Q1	SI2305ADS-T1-GE3DKR-ND		MOSFET P-CH 8V 5.4A SOT23-3	
2 MOSFET NP-CH	6-TSOP	Q2, Q3	SI3585DV-T1-E3DKR-ND		MOSFET N/P-CH 20V 2A/1.5A 6-TSOP	
3 1K	R0603	R1, R2, R3	RHM1.00KCFDKR-ND		RES 1.00K OHM 1/10W 1% 0603 SMD	
4 100K	R0603	R4, R5, R7, R11	RHM100KCFDKR-ND		RES 100K OHM 1/10W 1% 0603 SMD	
100K	R0603	R6	RHM100KCFDKR-ND		RES 100K OHM 1/10W 1% 0603 SMD	To use External Trigger solder R6 instead of R11
3 470K	R0603	R8, R9, R10	RHM470KHDKR-ND		RES 470K OHM 1/10W 1% 0603 SMD	
1 649K	R0603	R12	541-649KHDKR-ND		RES 649K OHM 1/10W 1% 0603 SMD	
1 976K	R0603	R13	541-976KHDKR-ND		RES 976K OHM 1/10W 1% 0603 SMD	
1 470	R0603	R14	RHM470CFDKR-ND		RES 470 OHM 1/10W 1% 0603 SMD	
1 MN1382S 2.0V	SOT23-3	U1	TC54VC2102ECB713DKR-ND		IC VOLT DETECT 2.0V CMOS SMD	
1 TC54VC 2.9V	SOT23-3	U2	TC54VC2902ECB71DKR-ND		IC VOLT DETECTOR 2.9V SOT23A	Not needed if not using external Trigger (R11 soldered)
1 MCP1640T	SOT23-6	U3	MCP1640T-I/CHYDKR-ND		IC BOOST SYNC ADJ 0.1A SOT23-6	
	1 10uF 1 4.7uF 4 100uF 1 AM-1437 1 LED 1 4.7uH 1 PMOS 2 MOSFET NP-CH 3 1K 4 100K 100K 3 470K 1 649K 1 976K 1 470 1 MN1382S 2.0V 1 TC54VC 2.9V	1 10uF C0603 1 4.7uF C0603 4 100uF C1206 1 AM-1437 Solar cell 1 LED LED0603 1 4.7uH L-US 1 PMOS SOT23-3 2 MOSFET NP-CH 6-TSOP 3 1K R0603 4 100K R0603 1 00K R0603 3 470K R0603 1 649K R0603 1 976K R0603 1 470 R0603 1 470 R0603 1 470 R0603 1 MN1382S 2.0V SOT23-3 1 TC54VC 2.9V SOT23-3	1 10uF C0603 C1 1 4.7uF C0603 C2 4 100uF C1206 C3, C4, C5, C6 1 AM-1437 Solar cell D1 1 LED LED0603 D2 1 4.7uH L-US L1 1 PMOS SOT23-3 Q1 2 MOSFET NP-CH 6-TSOP Q2, Q3 3 1K R0603 R1, R2, R3 4 100K R0603 R4, R5, R7, R11 100K R0603 R6 3 470K R0603 R12 1 976K R0603 R12 1 470 R0603 R14 1 MN1382S 2.0V SOT23-3 U1 1 TC54VC 2.9V SOT23-3 U2	1 10uF C0603 C1 445-7486-6-ND 1 4.7uF C0603 C2 490-3297-6-ND 4 100uF C1206 C3, C4, C5, C6 478-3130-1-ND 1 AM-1437 Solar cell D1 1 1 LED LED0603 D2 160-1837-6-ND 1 4.7uH L-US L1 1 1 PMOS SOT23-3 Q1 S12305ADS-T1-GE3DKR-ND 2 MOSFET NP-CH 6-TSOP Q2, Q3 S13585DV-T1-E3DKR-ND 3 1K R0603 R1, R2, R3 RHM1.00KCFDKR-ND 1 100K R0603 R4, R5, R7, R11 RHM100KCFDKR-ND 1 100K R0603 R6 RHM100KCFDKR-ND 3 470K R0603 R1 R2 541-649KHDKR-ND 1 649K R0603 R12 541-976KHDKR-ND 1 470 R0603 R14 RHM470CFDKR-ND 1 MN1382S 2.0V SOT23-3 U1 TC54VC2902ECB713DKR-ND 1 TC54VC 2.9V SOT23-3 U2 TC54VC2902ECB71DKR-ND	1 10uF C0603 C1 445-7486-6-ND 1 4.7uF C0603 C2 490-3297-6-ND 4 100uF C1206 C3, C4, C5, C6 478-3130-1-ND 1 AM-1437 Solar cell D1 1 LED LED0603 D2 160-1837-6-ND 1 4.7uH L-US L1 EPL3012-472MLB 1 PMOS SOT23-3 Q1 SI2305ADS-T1-GE3DKR-ND 2 MOSFET NP-CH 6-TSOP Q2, Q3 SI3585DV-T1-E3DKR-ND 3 1K R0603 R1, R2, R3 RHM1.00KCFDKR-ND 4 100K R0603 R4, R5, R7, R11 RHM100KCFDKR-ND 1 00K R0603 R6 RHM100KCFDKR-ND 3 470K R0603 R8, R9, R10 RHM470KHDKR-ND 1 649K R0603 R12 541-649KHDKR-ND 1 470 R0603 R14 RHM470CFDKR-ND 1 MN1382S 2.0V SOT23-3 U1 TC54VC2102ECB713DKR-ND 1 TC54VC 2.9V SOT23-3 U2 TC54VC2902ECB71DKR-ND	1 10uF C0603 C1 445-7486-6-ND CAP CER 10UF 10V 10% X5R 0603 1 4.7uF C0603 C2 490-3297-6-ND CAP CER 4.7UF 6.3V 10% X5R 0603 4 100uF C1206 C3, C4, C5, C6 478-3130-1-ND CAP TANT 100UF 6.3V 20% 1210 1 AM-1437 Solar cell D1 LED LED0603 D2 160-1837-6-ND LED BLUE CLEAR 0603 SMD 1 4.7uH L-US L1 EPL3012-472MLB 4.7 UH INDUCTOR LPD BLUE CLEAR 0603 SMD 1 PMOS SOT23-3 Q1 SI2305ADS-T1-GE3DKR-ND MOSFET P-CH 8V 5.4A SOT23-3 MOSFET NP-CH 6-TSOP Q2, Q3 SI3585DV-T1-E3DKR-ND MOSFET NP-CH 8V 5.4A SOT23-3 MOSFET NP-CH 8V 5.4A SOT23-3 RMOSFET NP-CH 8V 5.4A SOT23-3 MOSFET NP-CH 8V 5.4A SOT23-3 MOSFET NP-CH 8V 5.4A SOT23-3 MOSFET NP-CH 8V 5.4A SOT23-3 RMOSFET NP-CH 8V 5.4A SOT23-3 RES 1.00K OHM 1/10W 1/0 0603 SMD RES 470K OHM 1/10W 1/0 0