

Filename: UCD3138PWR-153-BOM.xls

Date: 04/23/2012

## BILLOFMATERIALS BOM

COUNT	RefDes	Value	Description	Size	Part Number	MFR
4	C1, C2, C3, C5	2.2uF	Capacitor, Ceramic Chip, 100V, 5%	1210	Std	STD
4	C11, C12, C13, C14	47uF	Capacitor, Ceramic Chip, 16V, 5%	1210	Std	STD
1	C15	820pF	Capacitor, Ceramic Chip, 16V, 5%	0402	STD	STD
1	C16	68nF	Capacitor, Ceramic Chip, 16V, 5%	0402	STD	STD
2	C17, C18	47pF	Capacitor, Ceramic Chip, 100V, 5%	0603	STD	STD
1	C23	0.01uF	Capacitor, Ceramic Chip, 6.3V, 5%	0402	STD	STD
3	C24, C25, C28	1nF	Capacitor, Ceramic Chip, 6.3V, 5%	0402	STD	STD
	C26, C37, C40, C41,					
7	C44, C45, C51	0.1uF	Capacitor, Ceramic Chip, 16V, 5%	0402	STD	STD
1	C27	2.2nF	Capacitor, Ceramic Chip, 6.3V, 5%	0402	STD	STD
2	C31, C39	1uF	Capacitor, Ceramic Chip, 6.3V, 5%	0402	STD	STD
1	C32	4.7uF	Capacitor, Ceramic Chip, 6.3V, 5%	0402	STD	STD
2	C34, C38	10pF	Capacitor, Ceramic Chip, 6.3V, 5%	0402	STD	STD
1	C35	560pF	Capacitor, Ceramic Chip, 6.3V, 5%	0402	STD	STD
1	C36	2200pF	Capacitor, Ceramic Chip, 50V, 5%	0603	STD	STD
2	C42, C50	220pF	Capacitor, Ceramic Chip, 50V, 5%	0402	STD	STD
2	C43, C48	4.7uF	Capacitor, Ceramic Chip, 16V, 10%	0805	STD	STD
1	C46	22nF	Capacitor, Ceramic Chip, 6.3V, 5%	0402	STD	STD
1	C47	680pF	Capacitor, Ceramic Chip, 500V, 5%	1206	STD	STD
1	C49	10uF	Capacitor, Ceramic Chip, 16V, 10%	0805	STD	STD
1	C52	2200pF	Capacitor, Ceramic Chip, 16V, 10%	0402	STD	STD
1	C6	47pF	Capacitor, Ceramic Chip, 6.3V, 5%	0402	STD	STD
4	C7, C10, C21, C22	0.1uF	Capacitor, Ceramic Chip, 25V, 5%	0603	STD	STD
4	C8, C9, C19, C20	1uF	Capacitor, Ceramic Chip, 16V, 5%	0603	STD	STD
1	D10	5.1V	zener diode 5.1V, SOD323		BZX384	
1	D5	BAT46W	schottky diode 100V SOD123		BAT46W	
1	D6	MMBD7000	DIODE SWITCH DUAL 100V SOT23 SER			
1	D7	BAT54	Schottky SWITCH 30V SOD523		BAT54	
1	J6	HEADER 100-2X4 SHR SHROUDED HEADER 8 POS STRAIGHT			576-2510-6002UB	

1	L1	100nH	INDUCTOR POWER .1UH 11A SMD		530-	
1	L2	1.5uH	POWER XFMR 400W 5:4		IHLP1616BZERR10M	
				0.190 x		
1	L3	MA5401-AE	MA5401-AE Flyback Transformer	0.190 inch	MA5401-AE	Coilcraft
1	ON/OFF	TEST POINT			5012	
1	PGND	TEST POINT			5012	
				QFN5X6m		Vishay
4	Q1, Q2, Q3, Q4	SiS892DN	MOSFET, NChan, For ENG. use only	m	STD	Siliconix
4	Q5, Q6, Q7, Q8	FDMS86101	FDMS8610 Power Pad FET		FDMS8610	
1	R1	7.1	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	R11	15	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R12	2.5k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
2	R13, R14	51.1	Resistor, Chip, 1/10W, 1%	0805	STD	STD
1	R15	Copper resistance	Resistor, Chip, 1/16W, 1%	0402	Std	Std
2	R16, R32	15k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R17	4.6k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R18	33.2k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R19	1.5k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
	R2, R4, R6, R8, R9, R10,					
8	R21, R29	10k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R20	100	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R22	2k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
3	R24, R26, R42	0	Resistor, Chip, 1/16W, 1%	0402	Std	Std
2	R27, R38, R49	3.32k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
	R3, R5, R23, R25, R28, R30, R31, R36, R41,					
12	R44, R48, R50	1k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R33	6.9k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R34	5.11k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R35	120k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
2	R37, R46	100k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R39	25k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R47	0.75	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	R52	NL	Resistor, Chip, 1/16W, 1%	0402	Std	Std

1	R7	130k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	T2	XFMR 5:2:2	POWER XFMR 300W 5:2:2		RM6	
2	TP1, TP2	None	Test point, 40 mil SMT	None	None	None
2	U1, U2	UCC27211DRM	IC, 120 V Boot, 2.5A Peak, High-Freq. High-Side Low-Side Driver	QFN-8	UCC27211DRM	TI
1	U11	LM60C	IC SENSOR TEMPERATURE SOT-23		LM60C	
1	U3	UCC27524	IC MOSFET DRVR DUAL HS 4A 8-MSOP		023-00019	
1	U4	ISO7420FED	Dual CHANNEL 25 MBPS DIGITAL ISOLATOR		521-ISO7420	
1	U5	OPA365NA	IC, R-R Op Amp, Single Supply,	SOT23-5	OPA365NA	TI
1	U6	UCD3138RHA	IC, Digital Power Controllers	QFN	UCD3138RHA	TI
1	U7	UCC25230	IC, Bias Supply		UCC25230	TI
1	U8	TPS76201	IC 3.3V HI-IN LDO REG 8-SON		521-TPS76201	
1	VIN+	TEST POINT			5012	
2	VOUT+, VOUT-	TEST POINT			5012	

- Notes:
1. These assemblies are ESD sensitive, ESD precautions shall be observed.
  2. These assemblies must be clean and free from flux and all contaminants.  
Use of no clean flux is not acceptable.
  3. These assemblies must comply with workmanship standards IPC-A-610 Class 2.
  4. Ref designators marked with an asterisk (\*\*\*) cannot be substituted.  
All other components can be substituted with equivalent MFG's components.

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