

Power Supply Bill of Materials

Count	RefDes	Part Number	Value	Description	MFR	Size
1	C39	GRM39X7R103K16	0.01uF	Capacitor, Ceramic, 0.01-uF, 16-V, X7R, 10%	muRata	603
1	C28	GRM39X7R103K16	0.01uF	Capacitor, Ceramic, 0.01-uF, 16-V, X7R, 10%	muRata	603
1	C12	GRM39X7R103K16	0.01uF	Capacitor, Ceramic, 0.01-uF, 16-V, X7R, 10%	muRata	603
1	C42	GRM188R71H103K	0.01uF	Capacitor, Ceramic, 0.01-uF, 50-V, X7R, 10%	muRata	603
1	C38	GRM39X7R104K16	0.1uF	Capacitor, Ceramic, 0.1-uF, 16-V, X7R, 10%	muRata	603
1	C45	GRM39X7R104K16	0.1uF	Capacitor, Ceramic, 0.1-uF, 16-V, X7R, 10%	muRata	603
1	C11	GRM39X7R104K16	0.1uF	Capacitor, Ceramic, 0.1-uF, 16-V, X7R, 10%	muRata	603
1	C16	GRM39X7R104K16	0.1uF	Capacitor, Ceramic, 0.1-uF, 16-V, X7R, 10%	muRata	603
1	C21	GRM39X7R104K16	0.1uF	Capacitor, Ceramic, 0.1-uF, 16-V, X7R, 10%	muRata	603
1	C44	GRM39COG470J50	47pF	Capacitor, Ceramic, 47-pF, 50-V, COG, 5%	muRata	603
2	C33	GRM39COG101J50	100pF	Capacitor, Ceramic, 100-pF, 50-V, COG, 5%	muRata	603
	C36	GRM39COG101J50	100pF	Capacitor, Ceramic, 100-pF, 50-V, COG, 5%	muRata	603
1	C27	GRM39COG101J50	100pF	Capacitor, Ceramic, 100-pF, 50-V, COG, 5%	muRata	603
1	C18	GRM39COG331J50	330pF	Capacitor, Ceramic, 330-pF, 50-V, COG, 5%	muRata	603
2	C49	GRM39COG331J50	330pF	Capacitor, Ceramic, 330-pF, 50-V, COG, 5%	muRata	603
	C51	GRM39COG331J50	330pF	Capacitor, Ceramic, 330-pF, 50-V, COG, 5%	muRata	603
1	C20	GRM39X7R152K50	1500pF	Capacitor, Ceramic, 1500-pF, 50-V, X7R, 10%	muRata	603
1	C19	GRM39X7R222K50	2200pF	Capacitor, Ceramic, 2200-pF, 50-V, X7R, 10%	muRata	603
1	C50	GRM39X7R222K50	2200pF	Capacitor, Ceramic, 2200-pF, 50-V, X7R, 10%	muRata	603
1	C9	GRM39X7R682K50	6800pF	Capacitor, Ceramic, 6800-pF, 50-V, X7R, 10%	muRata	603
1	C10	GRM39X7R682K50	6800pF	Capacitor, Ceramic, 6800-pF, 50-V, X7R, 10%	muRata	603
4	C4	GRM40X7R105K16PT	1.0uF	Capacitor, Ceramic, 1.0 -uF, 16-V, X7R	muRata	805
	C15	GRM40X7R105K16PT	1.0uF	Capacitor, Ceramic, 1.0 -uF, 16-V, X7R	muRata	805
	C17	GRM40X7R105K16PT	1.0uF	Capacitor, Ceramic, 1.0 -uF, 16-V, X7R	muRata	805
	C26	GRM40X7R105K16PT	1.0uF	Capacitor, Ceramic, 1.0 -uF, 16-V, X7R	muRata	805
1	C48	GRM40X7R105K16PT	1.0uF	Capacitor, Ceramic, 1.0 -uF, 16-V, X7R	muRata	805
1	C34	GRM40X7R105K16PT	1.0uF	Capacitor, Ceramic, 1.0 -uF, 16-V, X7R	muRata	805
1	C46	GRM40X7R105K16PT	1.0uF	Capacitor, Ceramic, 1.0 -uF, 16-V, X7R	muRata	805
2	C6	GRM40X7R105K16PT	1.0uF	Capacitor, Ceramic, 1.0 -uF, 16-V, X7R	muRata	1206
	C35	GRM40X7R105K16PT	1.0uF	Capacitor, Ceramic, 1.0 -uF, 16-V, X7R	muRata	1206
9	C1	GMK325BJ225KN-T	2.2uF	Capacitor, Ceramic, 2.2uF, 35V, X5R	Taiyo Yuden	1210
	C2	GMK325BJ225KN-T	2.2uF	Capacitor, Ceramic, 2.2uF, 35V, X5R	Taiyo Yuden	1210
	C3	GMK325BJ225KN-T	2.2uF	Capacitor, Ceramic, 2.2uF, 35V, X5R	Taiyo Yuden	1210
	C23	GMK325BJ225KN-T	2.2uF	Capacitor, Ceramic, 2.2uF, 35V, X5R	Taiyo Yuden	1210
	C24	GMK325BJ225KN-T	2.2uF	Capacitor, Ceramic, 2.2uF, 35V, X5R	Taiyo Yuden	1210

	C25	GMK325BJ225KN-T	2.2uF	Capacitor, Ceramic, 2.2uF, 35V, X5R	Taiyo Yuden	1210
	C29	GMK325BJ225KN-T	2.2uF	Capacitor, Ceramic, 2.2uF, 35V, X5R	Taiyo Yuden	1210
	C40	GMK325BJ225KN-T	2.2uF	Capacitor, Ceramic, 2.2uF, 35V, X5R	Taiyo Yuden	1210
	C41	GMK325BJ225KN-T	2.2uF	Capacitor, Ceramic, 2.2uF, 35V, X5R	Taiyo Yuden	1210
5	C8	GRM42-2X5R106K16	10uF	Capacitor, Ceramic, 10-uF, 16-V, X5R	muRata	1210
	C14	GRM42-2X5R106K16	10uF	Capacitor, Ceramic, 10-uF, 16-V, X5R	muRata	1210
	C31	GRM42-2X5R106K16	10uF	Capacitor, Ceramic, 10-uF, 16-V, X5R	muRata	1210
	C32	GRM42-2X5R106K16	10uF	Capacitor, Ceramic, 10-uF, 16-V, X5R	muRata	1210
	C37	GRM42-2X5R106K16	10uF	Capacitor, Ceramic, 10-uF, 16-V, X5R	muRata	1210
3	C7	UUD0J471MNR1GS	470uF	Capacitor, Aluminum, 6.3-uF, 16-V, 20%, FC Series	Nichicon	0.335 x 0.374
	C13	UUD0J471MNR1GS	470uF	Capacitor, Aluminum, 6.3-uF, 16-V, 20%, FC Series	Nichicon	0.335 x 0.374
	C30	UUD0J471MNR1GS	470uF	Capacitor, Aluminum, 6.3-uF, 16-V, 20%, FC Series	Nichicon	0.335 x 0.374
2	C43	ECE-V2AA220P	22 uF	Capacitor, Aluminum, 22-uF, 100-V, 150-milliohms, series	Panasonic	10x12mm
	C47	ECE-V2AA220P	22 uF	Capacitor, Aluminum, 22-uF, 100-V, 150-milliohms, series	Panasonic	10x12mm
2	C5	RVS-25V220M-R	22 uF	Capacitor, Aluminum, 22-uF, 25-V	Elna	0.260 Sq
	C22	RVS-25V220M-R	22 uF	Capacitor, Aluminum, 22-uF, 25-V	Elna	0.260 Sq
5	D8	BAS16	BAS16	Diode, Switching, 10-mA, 85-V, 350-mW	Vishay-Liteon	SOT23
	D2	BAS16	BAS16	Diode, Switching, 10-mA, 85-V, 350-mW	Vishay-Liteon	SOT23
	D4	BAS16	BAS16	Diode, Switching, 10-mA, 85-V, 350-mW	Vishay-Liteon	SOT23
	D6	BAS16	BAS16	Diode, Switching, 10-mA, 85-V, 350-mW	Vishay-Liteon	SOT23
	D11	BAS16	BAS16	Diode, Switching, 10-mA, 85-V, 350-mW	Vishay-Liteon	SOT23
2	D9	BAT54	BAT54	Diode, Schottky, 200-mA, 30-V	Vishay-Liteon	SOT23
	D10	BAT54	BAT54	Diode, Schottky, 200-mA, 30-V	Vishay-Liteon	SOT23
1	D3	BZX84C9V1T	9.1V	Diode, Zener, 9.1-V, 350-mW	Diodes, Inc.	SOT23
2	D5	MBRS340T3	MBRS340T3	Diode, Schottky, 3-A, 40-V	Motorola	SMC
	D7	MBRS340T3	MBRS340T3	Diode, Schottky, 3-A, 40-V	Motorola	SMC
1	D15	BTZ52-C27DI	27V	Diode, Schottky, 350mA, 40V	Diodes Inc.	SOD-123
1	D12	MURS120	MURS120	Diode, Rectifier, 1-A, 200V	On Semi	SMB
1	D13	MURS160	MURS160	Diode, Rectifier, 1-A, 600-V	On Semi	SMB
1	D14	S2D	S2D	Diode, Rectifier, 2-A, 200-V	Microsemi	DO214-AA
1	D1	1SMB5919BTS	1SMB5932BT3	Diode, Zener, 5.6-V, xx-mA, ww-mW	On Semi	SMB
1	F1	429007	3A	Fuse, Very Fast, x-A, xx-V	Littlefuse	1206
1	L2	UP2B-330	33uH	Inductor, SMT, 33-uH, 1.7-A, 92-milliohm	Coiltronics	0.55x0.41
1	R16	Std	1K	Resistor, Chip, 1.0K-Ohms, 1/16-W, 1%	Std	603
2	R1	Std	1K	Resistor, Chip, 1.0K-Ohms, 1/16-W, 1%	Std	805
	R9	Std	1K	Resistor, Chip, 1.0K-Ohms, 1/16-W, 1%	Std	805
1	R38	Std	1.78K	Resistor, Chip, 1.78K-Ohms, 1/16-W, 1%	Std	603
1	R10	Std	2.67K	Resistor, Chip, 2.67K-Ohms, 1/16-W, 1%	Std	603
1	R28	Std	6.65K	Resistor, Chip, 6.65K-Ohms, 1/16-W, 1%	Std	603

1	R15	Std	10	Resistor, Chip, 10-Ohms, 1/16-W, 1%	Std	603
1	R26	Std	10	Resistor, Chip, 10-Ohms, 1/16-W, 1%	Std	603
1	R4	Std	10K	Resistor, Chip, 10.0K-Ohms, 1/16-W, 1%	Std	603
1	R33	Std	10K	Resistor, Chip, 10.0K-Ohms, 1/16-W, 1%	Std	603
1	R7	Std	10K	Resistor, Chip, 10.0K-Ohms, 1/16-W, 1%	Std	603
1	R30	Std	10K	Resistor, Chip, 10.0K-Ohms, 1/16-W, 1%	Std	603
1	R14	Std	10K	Resistor, Chip, 10.0K-Ohms, 1/16-W, 1%	Std	603
1	R6	Std	10K	Resistor, Chip, 10.0K-Ohms, 1/16-W, 1%	Std	603
1	R12	Std	10K	Resistor, Chip, 10.0K-Ohms, 1/16-W, 1%	Std	603
1	R11	Std	10K	Resistor, Chip, 10.0K-Ohms, 1/16-W, 1%	Std	603
1	R39	Std	15K	Resistor, Chip, 15K-Ohms, 1/16-W, 1%	Std	603
1	R21	Std	20K	Resistor, Chip, 20.0K-Ohms, 1/16-W, 1%	Std	603
1	R32	Std	20K	Resistor, Chip, 20.0K-Ohms, 1/16-W, 1%	Std	603
1	R22	Std	20K	Resistor, Chip, 20.0K-Ohms, 1/16-W, 1%	Std	603
1	R17	Std	30.1	Resistor, Chip, 30.1-Ohms, 1/16-W, 1%	Std	603
1	R41	Std	30.1	Resistor, Chip, 30.1-Ohms, 1/16-W, 1%	Std	603
1	R3	Std	32.4K	Resistor, Chip, 32.4K-Ohms, 1/16-W, 1%	Std	603
1	R2	Std	32.4K	Resistor, Chip, 32.4K-Ohms, 1/16-W, 1%	Std	603
1	R20	Std	35.7K	Resistor, Chip, 35.7K-Ohms, 1/16-W, 1%	Std	603
1	R19	Std	49.9K	Resistor, Chip, 49.9K-Ohms, 1/16-W, 1%	Std	603
1	R31	Std	49.9K	Resistor, Chip, 49.9K-Ohms, 1/16-W, 1%	Std	603
1	R29	Std	49.9K	Resistor, Chip, 49.9K-Ohms, 1/16-W, 1%	Std	603
1	R37	Std	49.9K	Resistor, Chip, 49.9K-Ohms, 1/16-W, 1%	Std	603
1	R27	Std	82.5K	Resistor, Chip, 82.5K-Ohms, 1/16-W, 1%	Std	603
1	R13	Std	200K	Resistor, Chip, 200K-Ohms, 1/16-W, 1%	Std	603
1	R36	Std	200K	Resistor, Chip, 200K-Ohms, 1/16-W, 1%	Std	603
1	R18	Std	499	Resistor, Chip, 499-Ohms, 1/16-W, 1%	Std	603
1	R43	Std	499	Resistor, Chip, 499-Ohms, 1/16-W, 1%	Std	603
1	R23	Std	open	Resistor, Chip, open	Std	603
1	R42	Std	open	Resistor, Chip, open	Std	603
1	R40	Std	open	Resistor, Chip, open	Std	603
2	R24	Std	open	Resistor, Chip, open	Std	603
	R25	Std	open	Resistor, Chip, open	Std	603
2	R5	Std	249	Resistor, Chip, 249-Ohms, 1/10-W, 1%	Std	805
	R8	Std	249	Resistor, Chip, 249-Ohms, 1/10-W, 1%	Std	805
1	R34	Std	10K	Resistor, Chip, 10K-Ohms, 1/8-W, 1%	Std	1206
1	R44	ERJ-12ZQJR33U	0.33	Resistor, Chip, 0.33-Ohms, 1/2-W, 1%	Panasonic	2010
1	R35		open	Resistor, Chip, open		2010
1	U3	TL750L12CD	TL750L12	IC, Low Drop Out Regulator, 12 volt option	Texas Instruments	SOIC8

1	U2	TL1451ACNS	TL1451ACNS	IC, Dual Channel PWM Controller w/Open-Collector Outputs	Texas Instruments	NS16
1	U1	TPS77050DBV	TPS77050DBV	IC, Ultra Low -Power LDO Regulator, 5V, 50-mA	Texas Instruments	SOT23-5
1	U4	TPS5103DB	TPS5103DB	IC, Controller, Hysteretic/PWM/Skip mode	Texas Instruments	DB20
1	Q10	IRF7603	IRF7603	XSTR, MOSFET, N-Chan, 30V, Rds(ON) = 35 milli ohm	IR	TSSOP8-MICRO8
2	Q8	IRLMS2002	IRLMS2002	MOSFET, N-ch, 20-V, yy -A, 30-milliOhms	IR	Micro6
	Q9	IRLMS2002	IRLMS2002	MOSFET, N-ch, 20-V, yy -A, 30-milliOhms	IR	Micro6
2	Q2		FMMT3904TA	Bipolar, NPN, 40-V, 200-mA, 330-mW	Zetex	SOT23
	Q5		FMMT3904TA	Bipolar, NPN, 40-V, 200-mA, 330-mW	Zetex	SOT23
1	Q7		MMBT2222ALT1	Bipolar, NPN, 40-V, 500-mA	On Semi	SOT23
2	Q1	IRLMS6802	IRLMS6802	MOSFET, P -ch, 20-V, 5.6-A, 50-milliOhms	IR	Micro6
	Q4	IRLMS6802	IRLMS6802	MOSFET, P -ch, 20-V, 5.6-A, 50-milliOhms	IR	Micro6
2	Q3		FMMT3906	Bipolar, PNP, 60-V, 200-mA	Zetex	SOT23
	Q6		FMMT3906	Bipolar, PNP, 60-V, 200-mA	Zetex	SOT23
1	U5	UCC3813-xD	UCC3813-5	IC, Low-Power BiCMOS Current-mode PWM, Von = xx V	Texas Instruments	SO8
1	T1	G013052	G013052	Transformer, Flyback, 1Primary, 2Secondary, Custom	GCI	0.500x0.760", "
1	L1	G013054	100uH	Transformer, 1P, 1Sec,	GCI	0.392 * 0.550
1	L3	G013059	33uH	Transformer, Ind 38.88 mH (1,2-4,5) @100 KHz,	GCI Technologies	0.700 * 0.524

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