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TPS92560 Boost High Power REF. Design

Designator	Description	Manufacturer	PartNumber	Quantity
C1, C2, C5	CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805	MuRata	GRM21BR71H105KA12L	3
C3	CAP, CERM, 4.7uF, 16V, +/-10%, X5R, 0603	MuRata	GRM188R61C475KAAJ	1
C4	CAP ALUM 1000UF 50V 20% RADIAL	United Chemi-Con	EKZE500ELL102ML25S	1
C6	CAP, CERM, 4.7uF, 10V, +/-10%, X5R, 0805	MuRata	GRM219R61A475KE34	1
C7	CAP, CERM, 220pF, 100V, +/-5%, C0G/NP0, 0603	MuRata	GRM1885C2A221JA01D	1
C8	CAP, CERM, 1uF, 50V, +/-10%, X7R, 1206	MuRata	GRM31MR71H105KA88L	1
C9	CAP, CERM, 2.2uF, 25V, +/-10%, X7R, 0805	MuRata	GRM21BR71E225KA73L	1
C10	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603	MuRata	GRM188R71H103KA01D	1
CN1, CN2	Conn Term Block, 2POS, 5.08mm PCB	Phoenix Contact	1715721	2
D3, D8, D9, D11, D12	Diode, Schottky, 60V, 5A, SMC	ST	STPS5L60S	5
D4, D7	Diode, Ultrafast, 100V, 0.15A, SOD-123	Diodes Inc.	1N4148W-7-F	2
D5	Diode, Zener, 24V, 250mW, SOD-323	Central Semiconductor	CMDZ24L	1
D6	Diode, Zener, 36V, 500mW, SOD-123	Central Semiconductor	CMHZ4715	1
D10	Diode, Zener, 3.3V, 250mW, SOD-323	Central Semiconductor	CMDZ3L3	1
FB1	6A Ferrite Bead, 26 ohm @ 100MHz, SMD	MuRata	BLM18SG260TN1D	1
L1	Inductor, 160uH, 3A, 0.07 ohm, Shield Core, Ferrite, SMT	MAG. LAYERS	MVLF-2208AT-161M-E	1
L2	Inductor, 5.8uH, SMD	SUMIDA AMERICA COMPONENTS INC	CDRH10D48/ANP-5R8MC	1
Q4	MOSFET, N-CH, 60V, 30A, PowerPAK SO-8	Vishay-Siliconix	SI7138DP	1
Q5, Q6	Transistor, NPN, 65V, 0.1A, SOT-23	ON Semiconductor	BC846AW	2
Q7, Q8, Q9, Q10	MOSFET, N-CH, 30V, 5.8A, SOT-23		AO3404A	4
R1	RES, 0 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08050000Z0EA	1
R4, R6, R16	RES, 4.02k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06034K02FKEA	3
R5	RES, 0.5 ohm, 1%, 0.5W, 1206	Stackpole Electronics Inc	CSR1206FKR500	1
R8	RES, 453 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603453RFKEA	1
R10	RES, 17.4k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060317K4FKEA	1
R11	RES, 8.25k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06038K25FKEA	1
R12	RES, 249 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603249RFKEA	1
R13, R15	RES, 0.2 ohm, 1%, 0.5W, 1210	Rohm	MCR25JZHFLR200	2
R14	RES, 511 ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW0805511RFKEA	1
R17, R18	RES, 1.00k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K00FKEA	2
R19	RES, 2.00 ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW08052R00FKEA	1
R20, R21	RES, 20.5k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060320K5FKEA	2
R22, R24	RES, 0 ohm, 5%, 0.25W, 1206	Vishay-Dale	CRCW12060000Z0EA	2
R23, R25	RES, 2.00 ohm, 1%, 0.25W, 1206	Vishay-Dale	CRCW12062R00FKEA	2
U1	SIMPLE LED DRIVER FOR MR16 AND AR111 APPLICATIONS, DGQ0010A	Texas Instruments	TPS92560DGQ	1
U2, U3	Adjustable Precision Zener Shunt Regulator, 3-pin SOT-23	Texas Instruments	TL431AQDBZR	2

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