Synchronous Split Supply

Designator	Description	Manufacturer	PartNumber	Quantity
PCB1	Printed Circuit Board	Any	PMP10651	1
C1	CAP, CERM, 470 pF, 100 V, +/- 10%, X7R, 0603	MuRata	GRM188R72A471KA01D	1
	CAP, CERM, 10uF, 50V, +/-10%, X7R, 1210	MuRata	GRM32ER71H106KA12L	4
C6	- , - , - , - , - , - , - , - , - , - ,			
C4	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	MuRata	GRM188R71H104KA93D	1
C7, C8	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	AVX	06035C104KAT2A	2
C9, C10,	CAP, CERM, 22uF, 25V, +/-10%, X7R, 1210	MuRata	GRM32ER71E226KE15L	8
C11, C13,				
C14, C15,				
C21, C26				
C12	CAP, CERM, 0.47uF, 10V, +/-10%, X7R, 0603	Kemet	C0603C474K8RACTU	1
C16	CAP, CERM, 470pF, 50V, +/-5%, C0G/NP0, 0603	AVX	06035A471JAT2A	1
C17, C19	CAP, CERM, 47 pF, 100 V, +/- 5%, C0G/NP0, 0805	AVX	08051A470JAT2A	2
C18	CAP, CERM, 2.2uF, 10V, +/-10%, X7R, 0603	MuRata	GRM188R71A225KE15D	1
C20, C25	CAP, CERM, 47 μF, 25 V, +/- 20%, X5R, 1206	TDK	C3216X5R1E476M160AC	2
C22, C27	CAP, CERM, 1 μF, 50 V, +/- 10%, X7R, 0805	AVX	08055C105KAT2A	2
C23, C24	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603	AVX	0603YC104JAT2A	2
	CAP, CERM, 22 μF, 25 V, +/- 20%, X7R, 1812	TDK	C4532X7R1E226M	2
C30	CAP, CERM, 3300 pF, 100 V, +/- 10%, X7R, 0603	AVX	06031C332KAT2A	1
C31, C32	CAP, CERM, 1 µF, 10 V, +/- 10%, X7R, 0805	AVX	0805ZC105KAT2A	2
C33	CAP, CERM, 0.01 μF, 100 V, +/- 5%, X7R, 0603 CAP, CERM, 4700 pF, 100 V, +/- 10%, X7R, 0805	AVX TDK	06031C103JAT2A C2012X7R2A472K	1 2
C35, C36 D1	Diode, Schottky, 60V, 3A, SMC	Diodes Inc.	B360-13-F	1
D1 D2	Diode, Schollky, 60V, 3A, SMC Diode, Zener, 17 V, 500 mW, SOD-123	Vishay-Semiconductor	MMSZ4704-V	1
D2 D3	Diode, TVS, Uni, 14 V, 600 W, SMB	Diodes Inc.	SMBJ14A-13-F	1
D3	Diode, Zener, 15 V, 500 mW, SOD-123	Diodes Inc.	MMSZ5245B-7-F	1
D4 D6	Diode, TVS, Uni, 28 V, 600 W, SMB	Diodes Inc.	SMBJ28A-13-F	1
	Fiducial mark. There is nothing to buy or mount.	N/A	N/A	6
FID3, FID4,				Ū
FID5, FID6				
	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips	B&F Fastener Supply	NY PMS 440 0025 PH	4
H4	panhead			
H5, H6, H7,	Standoff, Hex, 0.5"L #4-40 Nylon	Keystone	1902C	4
H8				
H9, H10,	Bumpon, Hemisphere, 0.44 X 0.20, Clear	3M	SJ-5303 (CLEAR)	4
H11, H12				
J1	Header, 100mil, 3x1, Tin, TH	Sullins Connector	PEC03SAAN	1
		Solutions		
J2, J3	SMA Straight Jack, Gold, 50 Ohm, TH	Amphenol RF	901-144-8RFX	2
J4	Standard Banana Jack, Insulated, Black	Keystone	6092	1
J5	Standard Banana Jack, Insulated, Red	Keystone	6091	1
L1	Coupled inductor, 8.2 µH, 4.27 A, 0.052 ohm, +/- 20%, SMD	Coilcraft	MSD1260-822MLB	1
LBL1	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Brady	THT-14-423-10	1
Q1, Q2	MOSFET, P-CH, -60 V, 30 A, PowerPAK_SO-8L	Vishay-Siliconix	SQJ461EP	2
Q3	MOSFET, N/P-CH, 60 V, 4.4 A, SOT-23	Vishay-Siliconix	SQ2360EES-T1-GE3	1
R1	RES, 100, 5%, 0.25 W, 1206	Vishay-Dale	CRCW1206100RJNEA	1
R2, R5	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA	2
R3, R9	RES, 100k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100KFKEA	2
R4, R7	RES, 10.0 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW080510K0FKEA	2
R6	RES, 8.06 ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW08058R06FKEA	1
R8	RES, 28.0 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060328K0FKEA	1
R10	RES, 58.3 k, 0.1%, 0.1 W, 0603	Yageo America	RT0603BRD0758K3L	1

Designator	Description	Manufacturer	PartNumber	Quantity
	RES, 1.00 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06031K00FKEA	1
	RES, 909, 1%, 0.125 W, 0805	Vishay-Dale	CRCW0805909RFKEA	2
R14	RES, 49.9, 1%, 1 W, 2512	Vishay-Dale	CRCW251249R9FKEG	1
R15	RES, 100, 1%, 1 W, 2512	Vishay-Dale	CRCW2512100RFKEG	1
R16	RES, 49.9, 1%, 0.25 W, 1206	Vishay-Dale	CRCW120649R9FKEA	1
R17	RES, 1.50 M, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06031M50FKEA	1
R18	RES, 162 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-07162KL	1
R19, R21	RES, 100 k, 0.1%, 0.063 W, 0603	TE Connectivity	CPF0603B100KE	2
R20	RES, 20 k, 5%, 0.1 W, 0603	Vishay-Dale	CRCW060320K0JNEA	1
R22	RES, 22.1 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060322K1FKEA	1
R23	RES, 20.0 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060320K0FKEA	1
R24	RES, 2.00 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW06032K00FKEA	1
R25	RES, 10.0 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060310K0FKEA	1
R26	RES, 232 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603232KFKEA	1
R27	RES, 44.2 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060344K2FKEA	1
TP1, TP2,	Terminal, Turret, TH, Double	Keystone	1503-2	13
TP3, TP5,				
TP6, TP7,				
TP8, TP9,				
TP10,				
TP11,				
TP12,				
TP13, TP14				
TP4	Test Point, Multipurpose, White, TH	Keystone	5012	1
U1	6th GENERATION BUCK REGULATOR, PWP0016H	Texas Instruments	LM53603AQPWP	1
U2	36-V, 1-A, 4.17-µVRMS, RF LDO Voltage Regulator,	Texas Instruments	TPS7A4700RGW	1
	RGW0020A			
U3	420 MHz Current-Feedback Amplifier, 9 to 32 V, 0 to 70	Texas Instruments	THS3001CDG4	1
	degC, 8-pin SOIC (D0008A), Green (RoHS & no Sb/Br)			
U4	–36-V, –1-A, Ultralow-Noise Negative Voltage	Texas Instruments	TPS7A3301RGW	1
	Regulator, Adjustable, RGW0020A			
U5	Low-Voltage Adjustable Precision Shunt Regulator, 80	Texas Instruments	TLVH431AQDBVRA	1
	mA, -40 to 125 degC, 5-pin SOT-23 (DBV), Green			
	(RoHS & no Sb/Br)			
U6	650mA SIMPLE SWITCHER Nano Module with 17V	Texas Instruments	LMZ21700SIL	1
	Maximum Input Voltage, SIL0008E			
U7	Single Output High PSRR LDO, 150 mA, Fixed 3.3 V	Texas Instruments	TPS71733DCKR	1
	Output, 2.5 to 6.5 V Input, with Low IQ, 5-pin SC70			
	(DCK), -40 to 85 degC, Green (RoHS & no Sb/Br)			

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