

For Non Volatile Memory NVM operation: omit R62, pinstrap resistors R44-49, R55-58, R60-61 not needed

For 5 phase operation: U600, L600 and all other parts with ref des 6xx not needed

For 4 phase operation: also U500, L500 and all other parts with ref des 5xx not needed

For 3 phase operation: also U400, L400 and all other parts with ref des 4xx not needed

For 3 or 4 phase versions with CSD95373B's for lower cost: Last item becomes CSD95373BQ5M with same package as CSD95372BQ5M



Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCB	1		PMP9738A	Any	Printed Circuit Board	
C1, C2, C3	3	470uF	35ZL470MEFC10X20	Rubycon	CAP, AL, 470uF, 35V, +/-20%, TH	10x20
C4, C5, C6, C7	4	0.1uF	C1005X7R1H104M	TDK	CAP, CERM, 0.1uF, 50V, +/-20%, X7R, 0402	0402
C8	1	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0402	0402
C9, C10, C11, C12, C13, C14, C15, C16, C17, C18	10	470uF	EEFSX0E471ER	Panasonic	CAP, AL, 470uF, 2.5V, +/-20%, 9 ohm, SMD	7.3x1.8x4.3mm
C19, C20, C21, C22, C23, C24, C25, C26, C27, C28	10	100uF	C1210C107M9PACTU	Kemet	CAP, CERM, 100uF, 6.3V, +/-20%, X5R, 1210	1210
C29, C31	2	10uF	C3225X7R1E106M	TDK	CAP, CERM, 10uF, 25V, +/-20%, X7R, 1210	1210
C30	1	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603
C32	1	15pF	GRM1555C1H150JA01D	MuRata	CAP, CERM, 15pF, 50V, +/-5%, C0G/NP0, 0402	0402
C41	1	6800pF	06031C682KAT2A	AVX	CAP, CERM, 6800pF, 100V, +/-10%, X7R, 0603	0603
C42	1	1000pF	C1005X7R1H102K	TDK	CAP, CERM, 1000pF, 50V, +/-10%, X7R, 0402	0402
C43, C44, C45, C48	4	1uF	C1608X5R1E105K080AC	TDK	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0603	0603
C46	1	10pF	GRM1555C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C47	1	1500pF	GRM155R71H152KA01D	MuRata	CAP, CERM, 1500 pF, 50 V, +/- 10%, X7R, 0402	0402
C49	1	0.33uF	GRM155R60J334KE01D	MuRata	CAP, CERM, 0.33uF, 6.3V, +/-10%, X5R, 0402	0402
C50, C51	2	4.7uF	GRM155R61A475M	MuRata	CAP, CERM, 4.7uF, 10V, +/-20%, X5R, 0402	0402
C52	1	2200pF	C1005X7R1H222K	TDK	CAP, CERM, 2200pF, 50V, +/-10%, X7R, 0402	0402
C100, C200, C300, C400, C500, C600	6	1000pF	C1005C0G1E102J	TDK	CAP, CERM, 1000pF, 25V, +/-5%, C0G/NP0, 0402	0402
C101, C102, C103, C104, C105, C201, C202, C203, C204, C205, C301, C302, C303, C304, C305, C401, C402, C403, C404, C405, C501, C502, C503, C504, C505, C601, C602, C603, C604, C605	30	10uF	GRM31CR71E106KA12L	MuRata	CAP, CERM, 10uF, 25V, +/-10%, X7R, 1206	1206
C106, C206, C306, C406, C506, C606	6	3300pF	C1005X7R1H332K	TDK	CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0402	0402
C110, C210, C310, C410, C510, C610	6	0.1uF	C0603C104J3RACTU	Kemet	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603

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C111, C211, C311, C411, C511, C611	6	10uF	C0603C106M9PACTU	Kemet	CAP, CERM, 10uF, 6.3V, +/-20%, X5R, 0603	0603
C112, C212, C312, C412, C512, C612	6	0.1uF	GRM155R61C104KA88D	MuRata	CAP, CERM, 0.1uF, 16V, +/-10%, X5R, 0402	0402
C113, C213, C313, C413, C513, C613	6	1500pF	08051C152KAT2A	AVX	CAP, CERM, 1500pF, 100V, +/-10%, X7R, 0805	0805
D1, D3	2	30V	MBR0530T1G	ON Semiconductor	Diode, Schottky, 30V, 0.5A, SOD-123	SOD-123
D2	1	30V	BAT54WS-7-F	Diodes Inc.	Diode, Schottky, 30V, 0.2A, SOD-323	SOD-323
D4	1	Red	LTST-C170KRKT	Lite-On	LED, Red, SMD	LED_0805
H9, H10, H11, H12	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
J1, J2, J5, J6, J7, J8, J10	7	GSLU-70	GSLU-70	ILSCO	Lug, Solderless, #2 - #8 AWG, 1/4", Copper	1.55 x 0.50 inch
J3, J47	2	PEC02SAA N	PEC02SAAN	Sullins	Header, Male 2-pin, 100mil spacing,	0.100 inch x 2
J4, J9, J45	3		ED555/2DS	On-Shore Technology	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	7.0x8.2x6.5mm
J41	1		5103308-1	TE Connectivity	Header (shrouded), 100mil, 5x2, Gold, TH	5x2 Shrouded header
J42, J46	2	PEC05DAA N	PEC05DAAN	Sullins	Header, Male 2x5-pin, 100mil spacing	0.100 inch x 5 X 2
J43	1	1x3	PBC03SAAN	Sullins Connector Solutions	Header, TH, 100mil, 1x3, Gold plated, 230 mil above insulator	PBC03SAAN
J44	1	PEC03SAA N	PEC03SAAN	Sullins	Header, Male 3-pin, 100mil spacing,	0.100 inch x 3
L1	1	6.8 uH	SLF7032T-xxx	TDK	Inductor, SMT, yyA, zzmilohm	0.276 sq inch
L100, L200, L300, L400, L500, L600	6	210 uH	FP1308R3-R21	Cooper Bussman	Inductor, Low-Profile, High-Current ±20%	2525/5050
Q1	1	25V	CSD16556Q5B	Texas Instruments	MOSFET, N-CH, 25V, 40A, SON 5x6mm	SON 5x6mm
R1, R2, R3, R4, R6, R7, R12, R13	8	0.002	CSNL2512FT2L00	Stackpole Electronics Inc	RES, 0.002 ohm, 1%, 2W, 2512	2512
R5	1	8.06k	CRCW04028K06FKED	Vishay-Dale	RES, 8.06k ohm, 1%, 0.063W, 0402	0402
R8, R51, R52, R53	4	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0k ohm, 1%, 0.063W, 0402	0402
R9, R11	2	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00k ohm, 1%, 0.063W, 0402	0402
R10	1	200k	CRCW0402200KFKED	Vishay-Dale	RES, 200k ohm, 1%, 0.063W, 0402	0402
R14	1	330	CRCW0402330RJNED	Vishay-Dale	RES, 330 ohm, 5%, 0.063W, 0402	0402
R15, R16	2	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9 ohm, 1%, 0.063W, 0402	0402
R17, R18, R19, R20, R22, R23	6	1.00Meg	CRCW04021M00FKED	Vishay-Dale	RES, 1.00Meg ohm, 1%, 0.063W, 0402	0402
R21	1	51	CRCW040251R0JNED	Vishay-Dale	RES, 51 ohm, 5%, 0.063W, 0402	0402
R24	1	261k	CRCW0402261KFKED	Vishay-Dale	RES, 261k ohm, 1%, 0.063W, 0402	0402
R25	1	294k	CRCW0402294KFKED	Vishay-Dale	RES, 294k ohm, 1%, 0.063W, 0402	0402
R44	1	402k	CRCW0402402KFKED	Vishay-Dale	RES, 402k ohm, 1%, 0.063W, 0402	0402
R45	1	16.5k	CRCW040216K5FKED	Vishay-Dale	RES, 16.5k ohm, 1%, 0.063W, 0402	0402
R46, R49	2	9.31k	CRCW04029K31FKED	Vishay-Dale	RES, 9.31k ohm, 1%, 0.063W, 0402	0402
R47	1	14.0k	CRCW040214K0FKED	Vishay-Dale	RES, 14.0k ohm, 1%, 0.063W, 0402	0402
R48	1	1.15k	CRCW04021K15FKED	Vishay-Dale	RES, 1.15k ohm, 1%, 0.063W, 0402	0402
R55, R56, R57, R60, R62	5	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0k ohm, 1%, 0.063W, 0402	0402
R58, R61	2	150k	CRCW0402150KFKED	Vishay-Dale	RES, 150k ohm, 1%, 0.063W, 0402	0402
R63	1	24.3k	CRCW040224K3FKED	Vishay-Dale	RES, 24.3k ohm, 1%, 0.063W, 0402	0402

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R64, R65, R66, R71, R81, R82, R83, R84, R85, R86	10	100	CRCW0402100RJNED	Vishay-Dale	RES, 100 ohm, 5%, 0.063W, 0402	0402
R67	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100k ohm, 1%, 0.063W, 0402	0402
R68	1	19.1k	CRCW040219K1FKED	Vishay-Dale	RES, 19.1 k, 1%, 0.063 W, 0402	0402
R69	1	2.43k	CRCW04022K43FKED	Vishay-Dale	RES, 2.43k ohm, 1%, 0.063W, 0402	0402
R70	1	121k	CRCW0402121KFKED	Vishay-Dale	RES, 121k ohm, 1%, 0.063W, 0402	0402
R72, R73	2	10	CRCW040210R0JNED	Vishay-Dale	RES, 10 ohm, 5%, 0.063W, 0402	0402
R74	1	1.0	CRCW04021R00JNED	Vishay-Dale	RES, 1.0 ohm, 5%, 0.063W, 0402	0402
R100, R200, R300, R400, R500, R600	6	0	RC0402JR-070RL	Yageo America	RES, 0 ohm, 5%, 0.063W, 0402	0402
R110, R210, R310, R410, R510, R610	6	2.2	CRCW04022R20JNED	Vishay-Dale	RES, 2.2 ohm, 5%, 0.063W, 0402	0402
R113, R213, R313, R413, R513, R613	6	1.0	CRM1206-JW-1R0ELF	Bourns	RES, 1.0 ohm, 5%, 0.5W, 1206	1206
TH1, TH2	2				Thru Hole, 15 mil, plated	
TP1, TP3, TP4, TP6	4	5000	5000	Keystone	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch
TP2, TP5, TP7	3	5001	5001	Keystone	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch
TP8	1	131-4244-00	131-4244-00	Tektronix	Adaptor, 3.5-mm probe clip (or 131-5031-00)	0.200 inch
TP100, TP200, TP300, TP400, TP500, TP600	6	SMT	5015	Keystone	Test Point, Miniature, SMT	Testpoint_Keystone_Miniature
TP301, TP601	2	5016	5016	Keystone	Test Point, SM, 0.150 x 0.090	0.185 x 0.135 inch
U1	1	TLC555CD	TLC555CD	TI	IC, Timer, Low-Power CMOS	SO8
U2	1	UCC37324D	UCC37324D	TI	IC, Dual 4-A High Speed Low-Side Power MOSFET Drivers	SO-8
U3	1		TPS62110RSAR	Texas Instruments	Buck Adjustable Regulator with 3.1 to 17 V Input and 1.2 to 16 V Output, -40 to 85 degC, 16-Pin QFN (RSA), Green (RoHS & no Sb/Br)	RSA0016B
U41	1		TPS53661RSB	Texas Instruments	6-Phase, D-CAP+ Step-Down VR12.x Server CPU VCORE and DDR Memory Controller with PMBus Interface, RSB0040E	RSB0040E
U42	1		TPS73233DBV	Texas Instruments	Cap-Free, NMOS, 250mA Low Dropout Regulator with Reverse Current Protection, DBV0005A	DBV0005A
U100, U200, U300, U400, U500, U600	6		CSD95372BQ5M	Texas Instruments	Synchronous Buck NexFET Power Stage, DQP0012A	DQP0012A

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