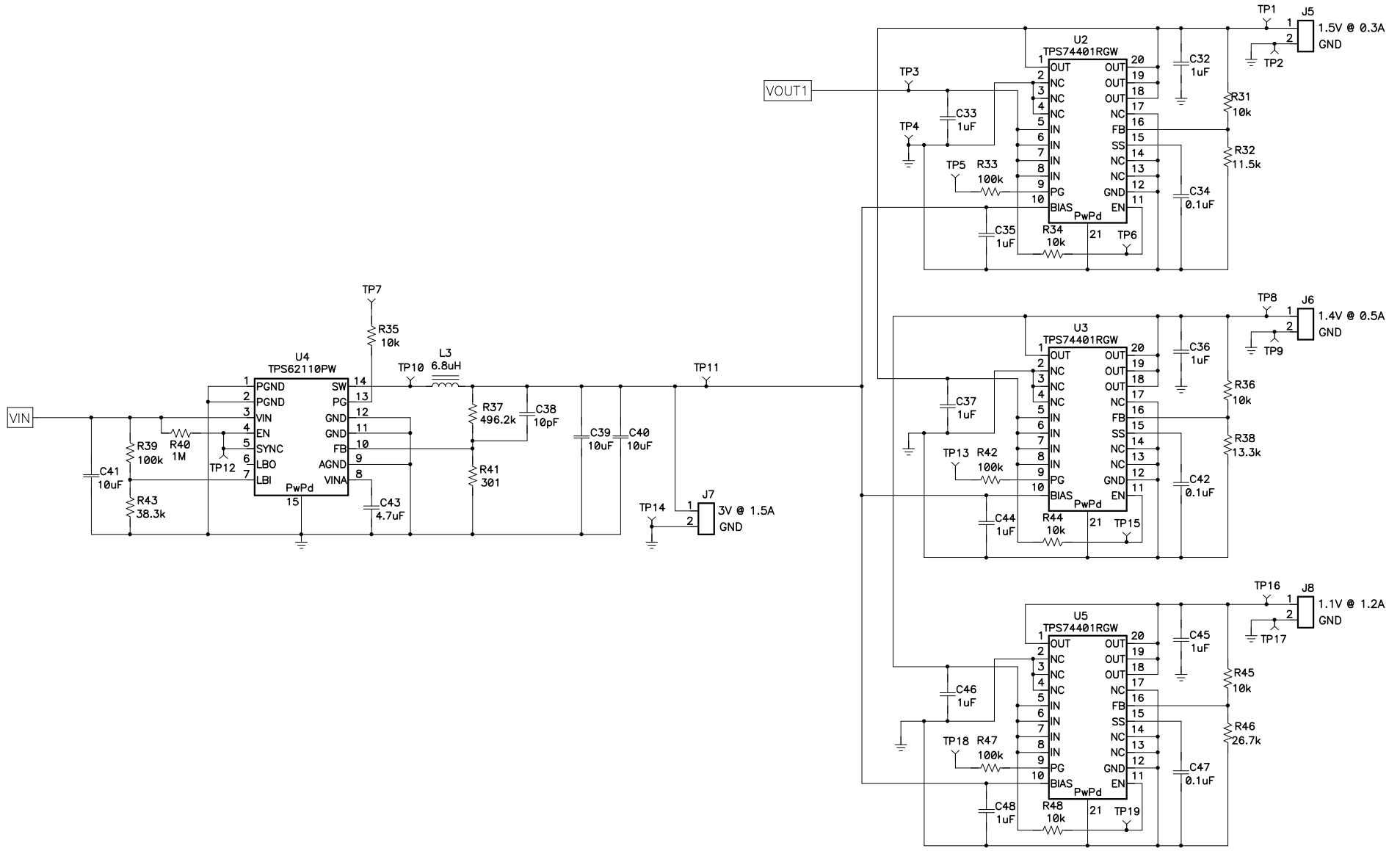


Title <b>TPS40140 sync buck, TPS62110, TPS74401</b>		
Size <b>C</b>	Number <b>PMP5149.3</b>	Rev <b>A</b>
Date 9/16/09	Drawn by S Bhuyan	
Filename PMP5149.3.SCH	Sheet 1 of 2	



Texas Instruments

Title		
TPS40140 sync buck, TPS62110, TPS74401		
Size	Number	Rev
C	PMP5149.3	A
Date	9/16/09	Drawn by S Bhuyan
Filename	PMP5149.3.SCH	Sheet 2 of 2

## PMP5149.3 REV A BOM

COUNT	RefDes	Value	Description	Size	Part Number	MFR	AREA
2	AGND1, AGND2 BODE1, BODE2,	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	
4	BODE3, BODE4 BP1	5000 5000	Test Point, Red, Thru Hole Color Keyed Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch 0.100 x 0.100 inch	5000 5000	Keystone Keystone	
	C1, C2, C3, C4, C27, C28, C29,						
8	C30	22uF	Capacitor, Ceramic, 22uF, 16V, X5R, 20%, 1210	1210	Std	Std	
2	C11, C20	470uF	Capacitor, POSCap, 470uF, 4V, 0.01 Ohms, 20%, 7343	7343	4TPF470ML	Sanyo	
1	C12	DNP	Capacitor, POSCap, 470uF, 4V, 0.01 Ohms, 20%, 7343	7343	4TPF470ML	Sanyo	
	C13, C14, C21,						
4	C22	10uF	Capacitor, Ceramic, 6.3V, X5R, 20%	1206	Std	Std	
2	C15, C16	1uF	Capacitor, Ceramic, 1uF, 6.3V, X5R, 10%, 0603	0603	Std	Std	
1	C19	4.7uF	Capacitor, Ceramic, 4.7uF, 6.3V, X5R, 10%, 0603	0603	Std	Std	
1	C23	330pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
	C32, C33, C35, C36, C37, C44,						
9	C45, C46, C48	1uF	Capacitor, Ceramic, X7R, 16V	0603	Std	TDK	
3	C34, C42, C47	0.1uF	Capacitor, Ceramic, X7R, 16V	0603	Std	TDK	
1	C38	10pF	Capacitor, Ceramic, X5R, 25V	0603	Std	TDK	
2	C39, C40	10uF	Capacitor, Ceramic, X7R, 16V	1210	Std	TDK	
1	C41	10uF	Capacitor, Ceramic, X5R, 25V	1210	Std	TDK	
1	C43	4.7uF	Capacitor, Ceramic, X5R, 25V	0603	Std	TDK	
4	C5, C9, C18, C31	0.01uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
1	C6	330pF	Capacitor, Ceramic, 330pF, 16V, COG, 5%, 0603	0603	Std	Std	
	C7, C10, C17,						
5	C25, C26	0.1uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
2	C8, C24	0.033uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	
2	CMP1, CMP2	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	
2	D1, D2	MBR0520L	Diode, Schottky, 0.5A, 20V	SOD-123	MBR0520L	Fairchild	
	GNDTP1,						
2	GNDTP2	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone	
1	GNDTP3	5000	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	
3	J1, J3, J4		Terminal Block, 4-pin, 15-A, 5.1mm	0.80 x 0.35	ED2227	OST	
1	J2	ED1514	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED1514	OST	
4	J5, J6, J7, J8	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST	
1	L1	1.5uH	Inductor, SMT, 27A, 2.5-milliohm	0.51 x 0.51 inch	IHLP5050FDERxxxM01	Vishay	
1	L2	2.2uH	Inductor, SMT, 8A, 18-milliohm	0.255 x 0.270 inch	IHLP2525CZ-01	Vishay	
1	L3	6.8uH	Inductor, SMT, 3.6A, 18 milliohm	0.402 x 0.394 inch	MSS1048-682NL	Coilcraft	
2	PG1, PG2	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	
3	Q1, Q2, Q5	CSD16404Q5A-R	MOSFET, NChan, 25V, 20A, 4.1milliOhm	QFN5X6mm	CSD16404Q5A-R	TI	
3	Q3, Q4, Q6	CSD16321Q5	MOSFET, N-Chan, 25V, 31 A	QFN-8 POWER	CSD16321Q5	TI	
1	R1	Open	Resistor, Chip, 1/16W, 1%	0603	Std	Std	

2	R10, R21	49.9	Resistor, Chip, 1/16W, 1%	0603	Std	Std
2	R11, R12	51.1	Resistor, Chip, 1/16W, 1%	0603	Std	Std
3	R13, R19, R23	4.7	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R14	698K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R15	75K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R16	49.9K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R17	150K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R18	15K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R2	5K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R20	665K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R22	2K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R26	3.83K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R29	7.5K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R3, R4, R5, R7, R8, R24, R25,					
9	R27, R28	10K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R30	4.99K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
	R31, R34, R35, R36, R44, R45,					
7	R48	10k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R32	11.5k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
	R33, R39, R42,					
4	R47	100k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R37	496.2k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R38	13.3k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R40	1M	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R41	301	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R43	38.3k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
1	R46	26.7k	Resistor, Chip, 1/16W, 1%	0603	CRCW0603-xxxx-F	Vishay
2	R6	2k	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	R9	34.8K	Resistor, Chip, 1/16W, 1%	0603	Std	Std
1	SH1		Short jumper			
2	SWN1, SWN2 TP1, TP3, TP5, TP6, TP7, TP8, TP10, TP11, TP12, TP13, TP15, TP16,	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
14	TP18, TP19 TP2, TP4, TP9,	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
5	TP14, TP17	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone
2	TRK1, TRK2	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
1	U1	TPS40140RHH	IC, 2-Phase or Dual Output PWM Controller, QFN	QFN-36	TPS40140RHH	Texas Instruments
3	U2, U3, U5	TPS74401RGW	IC, 1.5 A LDO With Programmable Soft-Start	QFN-20	TPS74401RGW	TI
1	U4	TPS62110PW	IC, Synchronous Step-Down Converter, 17V, 1.5A	TSSOP-14	TPS62110PW	TI
	VIN1	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone
2	VOUT1, VOUT2	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone

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