

NOTES:
RESET delay = 5us

LAYOUT CONSIDERATIONS:

1. Keep noisy and high current traces away from sensitive lines or separate them by using additional ground traces in between, otherwise instability or oscillation can occur.
2. The resistive divider for fixing the output voltage should be placed as close as possible to the COMP pin.
3. All power components like the input and output capacitors, the inductor, the diode, and the device should be kept as close together as possible. The traces should be kept short, wide, and direct.

TEXAS INSTRUMENTS

Title			MC33063 Power Supply		
Size	Number			Rev	
B	PMP2954-1.4			A	
Date	10/1/2007	Drawn by	S Zargar		
Filename PMP2954-1.4_Rev_A.sch		Sheet	1 of 1		

Filename: PMP2954-1_bom.xls

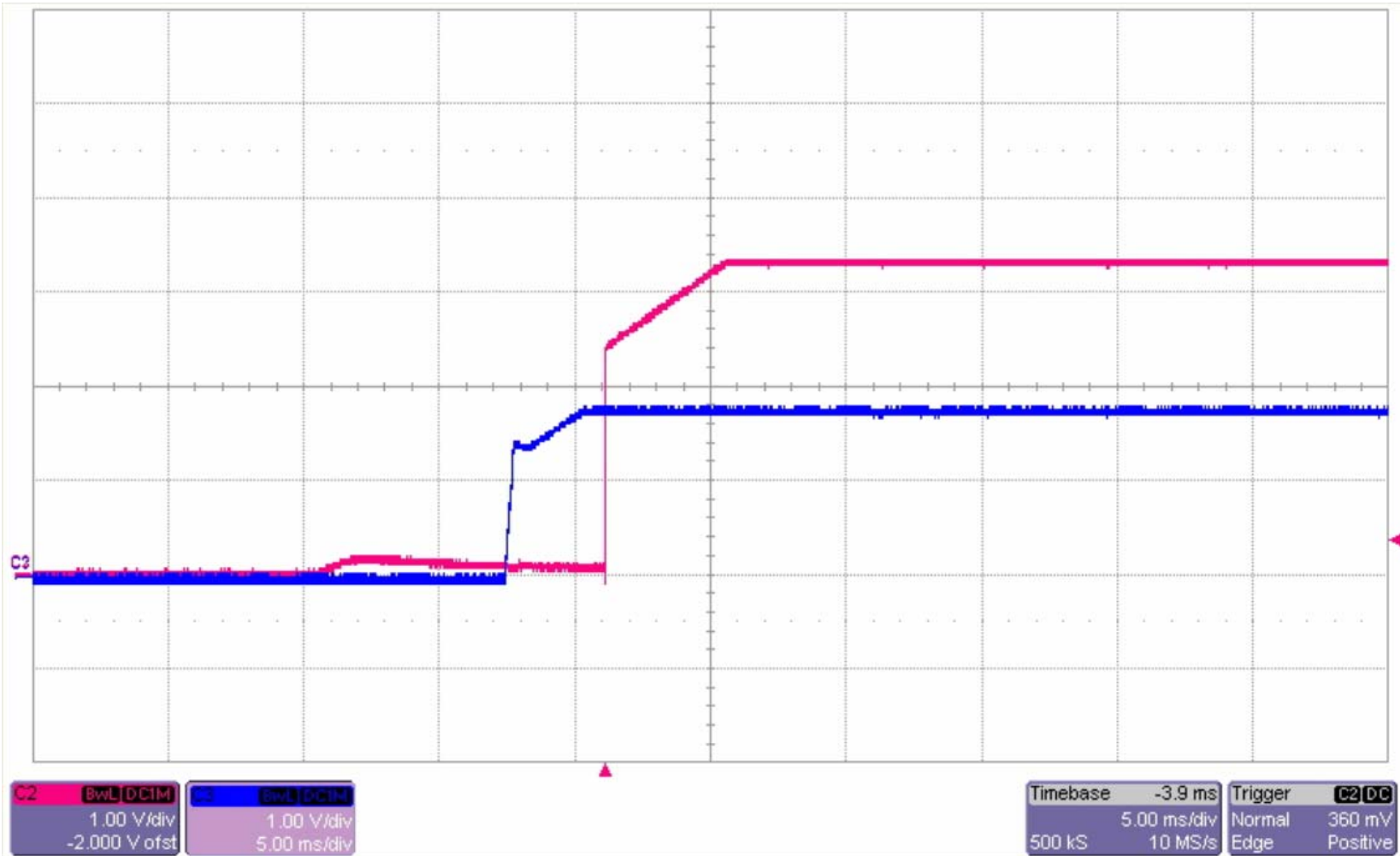
Date: 10/01/2007

PMP2954-1.4 BOM

COUNT	RefDes	Value	Description	Size	Part Number	MFR
1	C1	220pF	Capacitor, Ceramic, 220-pF, 50-V, X7R, 15%	0603	Std	Std
1	C2	470uF	Capacitor, Aluminum, 470uF, 6.3V, ±20%	0.328 x 0.390 inch	EEVFK0J471F	Panasonic
2	C3, C4	open	Capacitor, Ceramic, open	1206	Std	Std
1	C5	10uF	Capacitor, Aluminum, 10uF, 25V, ±20%	0.200 x 0.210 inch	EEVFK1E100B	Panasonic
1	C6	0.1uF	Capacitor, Ceramic, 0.1uF, 50V, X7R, 10%	0603	Std	Std
1	C7	10uF	Capacitor, Tantalum, 10V, 4milliohm, 20%	0.110 x 0.215 inch	TAJT106006	AVX
1	D1		Diode, Schottky, 1A, 40V	457-04	MBRM140	On Semi
3	J1, J2, J3		Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25	ED1514	OST
1	L1	470uH	Inductor, SMT, 0.40A, 1.74ohm	0.300 sq"	DR74-471	Coiltronics
1	Q1		MOSFET, P-ch, -20V, -2.3A, 130 milliohms	SOT23	Si2301DS	Vishay
1	Q2		Bipolar, NPN, 40-V, 200-mA, 0.350-W	SOT23	MMBT3904LT1	On Semi
1	R1	3.3	Resistor, Chip, 3.3 Ohms, 0.125W, 10%	0805	Std	Std
1	R2	1M	Resistor, Chip, 1M-Ohms, 1/16-W, 1%	0603	Std	Std
3	R3, R5, R6	20K	Resistor, Chip, 20K-Ohms, 1/16-W, 1%	0603	Std	Std
1	R4	12.1K	Resistor, Chip, 12.1K-Ohms, 1/16-W, 1%	0603	Std	Std
2	TP1, TP2		Test Point, Black, 1mm	0.038	240-333	Farnell
1	U1		IC, 1.5 A Boost/Buck/Inverting SW Reg.	SO8	MC33063AQDRJRQ1	Texas Instruments
1	U2		IC, LDO Regulator With PG Output Fast-Transient-Response, 500mA, xxV SO8		TPS77618D	TI

- Notes:
1. These assemblies are ESD sensitive, ESD precautions shall be observed.
 2. These assemblies must be clean and free from flux and all contaminants.
Use of no clean flux is not acceptable.
 3. These assemblies must comply with workmanship standards IPC-A-610 Class 2.
 4. Ref designators marked with an asterisk (***) cannot be substituted.
All other components can be substituted with equivalent MFG's components.

PMP2954-1.4_Rev_A Start-up Waveform



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