

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 B	Number PMP2954-1.1	Rev A
Date 10/1/07	Drawn by S Zargar	
Filename PMP2954-1.1_REV_A.sch		Sheet 1 of 1

Filename: PMP2954-1\_bom.xls

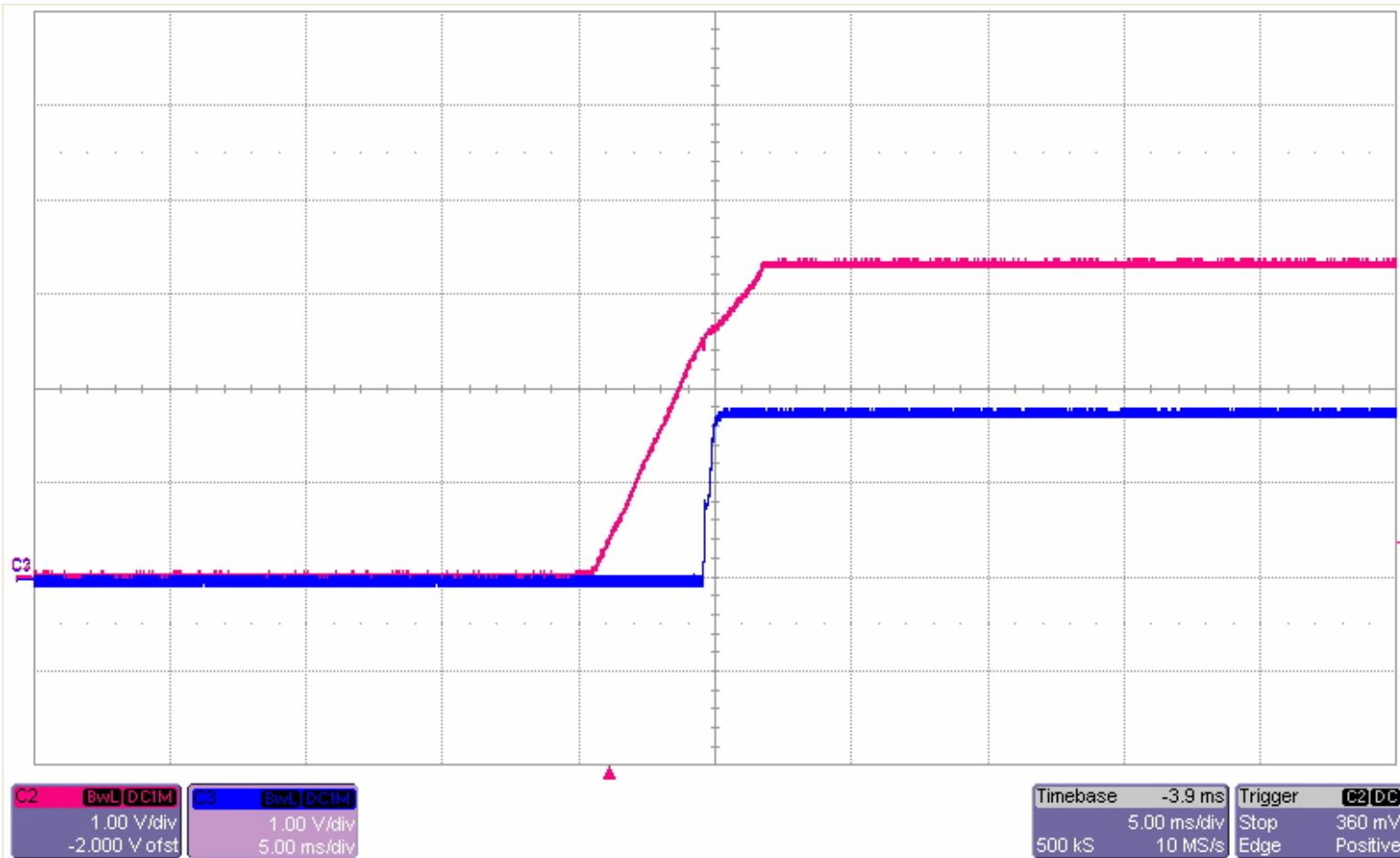
Date: 10/01/2007

## PMP2954-1.1 BOM

COUNT	RefDes	Value	Description	Size	Part Number	MFR
1	C1	220pF	Capacitor, Ceramic, 220-pF, 50-V, X7R, 15%	0603	Std	Std
2	C2, C3	open	Capacitor, Ceramic, open	1206	Std	Std
1	C4	470uF	Capacitor, Aluminum, 6.3V, ±20%	0.328 x 0.390 inch	EEVFK0J471F	Panasonic
1	C5	10uF	Capacitor, Aluminum, 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	220uH	Inductor, SMT, 220uH, 1.19A, 0.384 ohms	0.492 sq"	DR125-221	Coiltronics
1	Q1		MOSFET, N-ch, 60-V, 115-mA, 1.2-Ohms	SOT23	2N7002DICT	Vishay-Liteon
1	R1	0.3	Resistor, Chip, 0.3 Ohms, 0.125W, 10%	0805	Std	Std
3	R2, R4, R5	20K	Resistor, Chip, 20K-Ohms, 1/16-W, 1%	0603	Std	Std
1	R3	12.1K	Resistor, Chip, 12.1K-Ohms, 1/16-W, 1%	0603	Std	Std
2	R6, R7	1K	Resistor, Chip, 1K-Ohms, 1/16-W, 1%	0603	Std	Std
3	TP1, TP2, TP3		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
1	U3		IC, Voltage Supervisor, xxVolts,	SOP-5 (DCK)	TPS3803-01	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.

# PMP2954-1.1\_Rev\_A Start-up Waveform



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