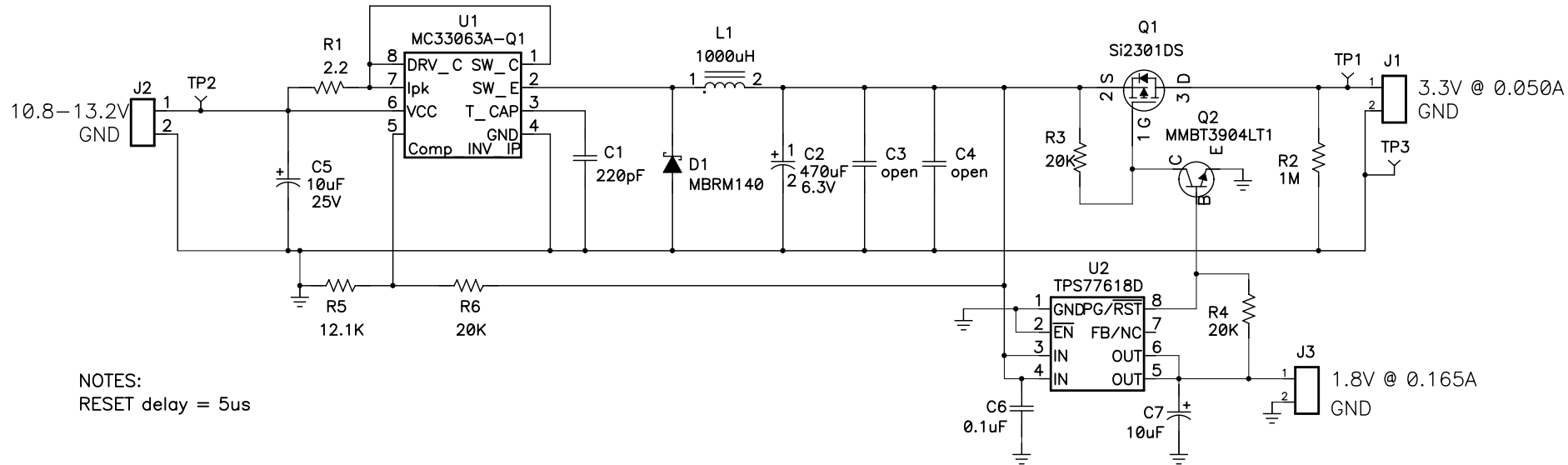




NOTES:
RESET delay = 5us

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 PMP2954-1.3	Rev A
Date 10/1/07	Drawn by S Zargar	
Filename PMP2954-1.3_Rev_A.sch		Sheet 1 of 1

Filename: PMP2954-1_bom.xls

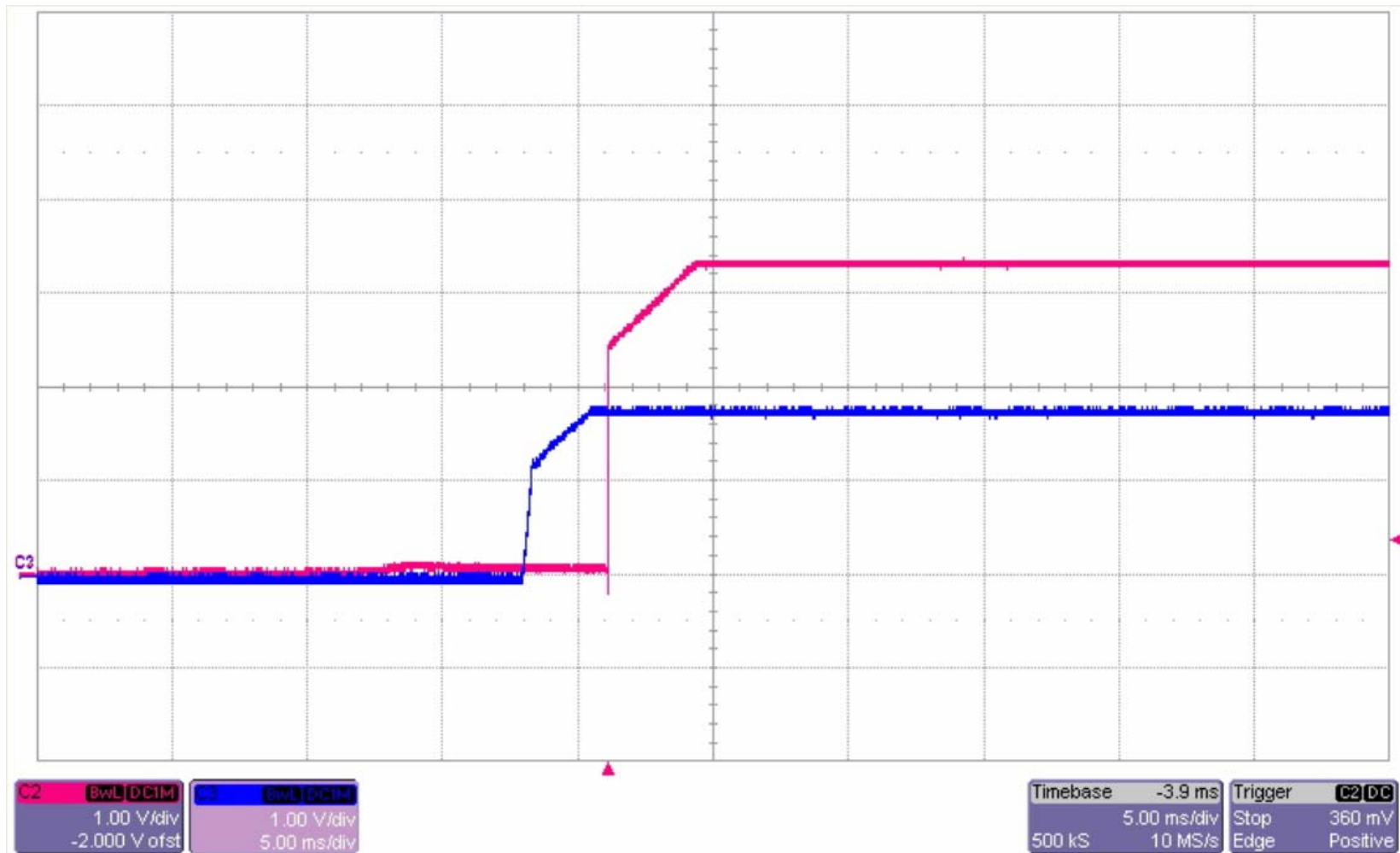
Date: 10/01/2007

PMP2954-1.3 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	1000uH	Inductor, SMT, 0.31A, 2.93ohm	0.300 sq"	DR74-102	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	2.2	Resistor, Chip, 2.2 Ohms, 0.125W, 10%	0805	Std	Std
1	R2	1M	Resistor, Chip, 1M-Ohms, 1/16-W, 1%	0603	Std	Std
3	R3, R4, R6	20K	Resistor, Chip, 20K-Ohms, 1/16-W, 1%	0603	Std	Std
1	R5	12.1K	Resistor, Chip, 12.1K-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

- 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.

PMP2954-1.3_Rev_A Start-up Waveform



IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

TI assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using TI components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any TI patent right, copyright, mask work right, or other TI intellectual property right relating to any combination, machine, or process in which TI products or services are used. Information published by TI regarding third-party products or services does not constitute a license from TI to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI products or services with statements different from or beyond the parameters stated by TI for that product or service voids all express and any implied warranties for the associated TI product or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

TI products are not authorized for use in safety-critical applications (such as life support) where a failure of the TI product would reasonably be expected to cause severe personal injury or death, unless officers of the parties have executed an agreement specifically governing such use. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of TI products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by TI. Further, Buyers must fully indemnify TI and its representatives against any damages arising out of the use of TI products in such safety-critical applications.

TI products are neither designed nor intended for use in military/aerospace applications or environments unless the TI products are specifically designated by TI as military-grade or "enhanced plastic." Only products designated by TI as military-grade meet military specifications. Buyers acknowledge and agree that any such use of TI products which TI has not designated as military-grade is solely at the Buyer's risk, and that they are solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI products are neither designed nor intended for use in automotive applications or environments unless the specific TI products are designated by TI as compliant with ISO/TS 16949 requirements. Buyers acknowledge and agree that, if they use any non-designated products in automotive applications, TI will not be responsible for any failure to meet such requirements.

Following are URLs where you can obtain information on other Texas Instruments products and application solutions:

Products		Applications	
Amplifiers	amplifier.ti.com	Audio	www.ti.com/audio
Data Converters	dataconverter.ti.com	Automotive	www.ti.com/automotive
DSP	dsp.ti.com	Broadband	www.ti.com/broadband
Interface	interface.ti.com	Digital Control	www.ti.com/digitalcontrol
Logic	logic.ti.com	Military	www.ti.com/military
Power Mgmt	power.ti.com	Optical Networking	www.ti.com/opticalnetwork
Microcontrollers	microcontroller.ti.com	Security	www.ti.com/security
RFID	www.ti-rfid.com	Telephony	www.ti.com/telephony
Low Power	www.ti.com/lpw	Video & Imaging	www.ti.com/video
Wireless		Wireless	www.ti.com/wireless

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2007, Texas Instruments Incorporated