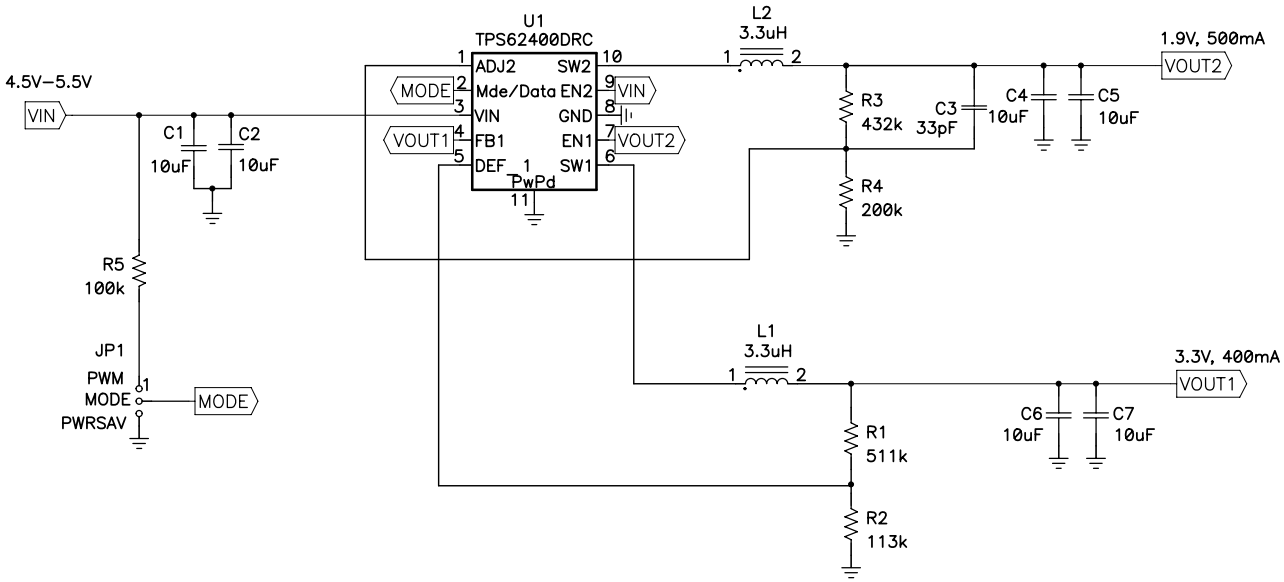

TEXAS INSTRUMENTS

Title: F2833x Power Reference Design		
Size: B	Number: PMP3781	Rev: B
Date: 05/21/08		Drawn by: K Ohn
Filename: PMP3781.sch		Sheet: of

Filename: PMP3781_bom.xls

Date: 04/16/2008

PMP3781 BOM

Count	RefDes	Value	Description	Size	Part Number	MFR
1	C3	33pF	Capacitor, Ceramic, 50V, C0G, 5%	0402	C1608C0G1H330J	TDK
6	C1-C6	10uF	Capacitor, Ceramic, 10V, X5R, 10%	0805	C2012X5R1A106K	TDK
1	JP1	PTC36SAAN	Header, 3 pin, 100mil spacing, (36-pin strip)	0.100 x 3	PTC36SAAN	Sullins
2	L1, L2	3.3uH	Inductor, SMT, 1.1-A, 220-milliohm	0.118 x 0.118 inch	LPS3010-332ML	Coilcraft
1	R1	511k	Resistor, Chip, 1/16W, x%	0402	Std	Std
1	R2	113k	Resistor, Chip, 1/16W, x%	0402	Std	Std
1	R3	432k	Resistor, Chip, 1/16W, x%	0402	Std	Std
1	R4	200k	Resistor, Chip, 1/16W, x%	0402	Std	Std
1	R5	100k	Resistor, Chip, 1/16W, 1%	0402	Std	Std
1	U1	TPS62400DRC	IC, 2.25 MHz Dual Step Down Converter	QFN10	TPS624x0DRC	TI

1 Power Up

The figure below shows the startup waveforms after ENABLE is applied. The outputs voltages shown are at full load. (Enable=5.00V/div, 1.9-V=1.00V/div, 3.3-V=1.00V/div, 500us/div)

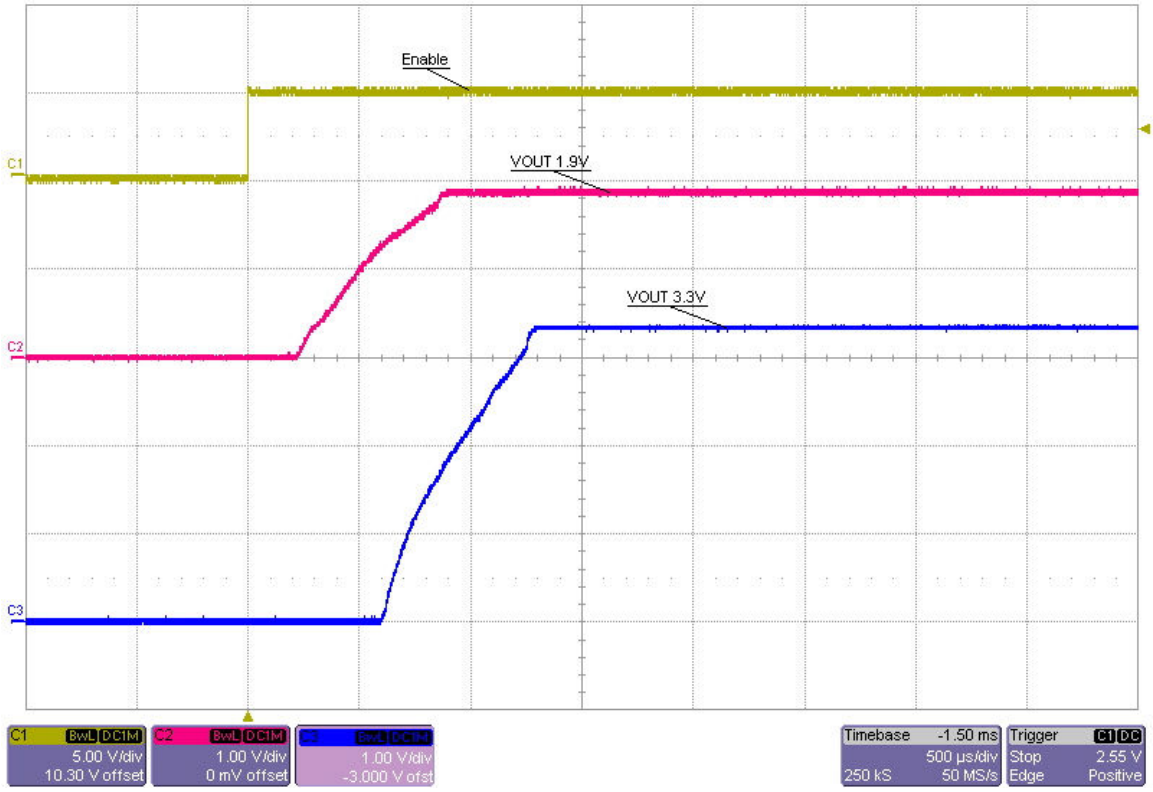

Figure 1. Power Up with 5-V Input and ENABLE Voltage

Once ENABLE is pulled high, the 1.9-V rail comes up and 3.3-V rail comes up later.

2 Power Down

The figure below shows the power down waveforms after ENABLE is pulled low. The outputs voltages shown are at full load. (Enable=5.00V/div, 1.9-V=1.00V/div, 3.3-V=1.00V/div, 500us/div)

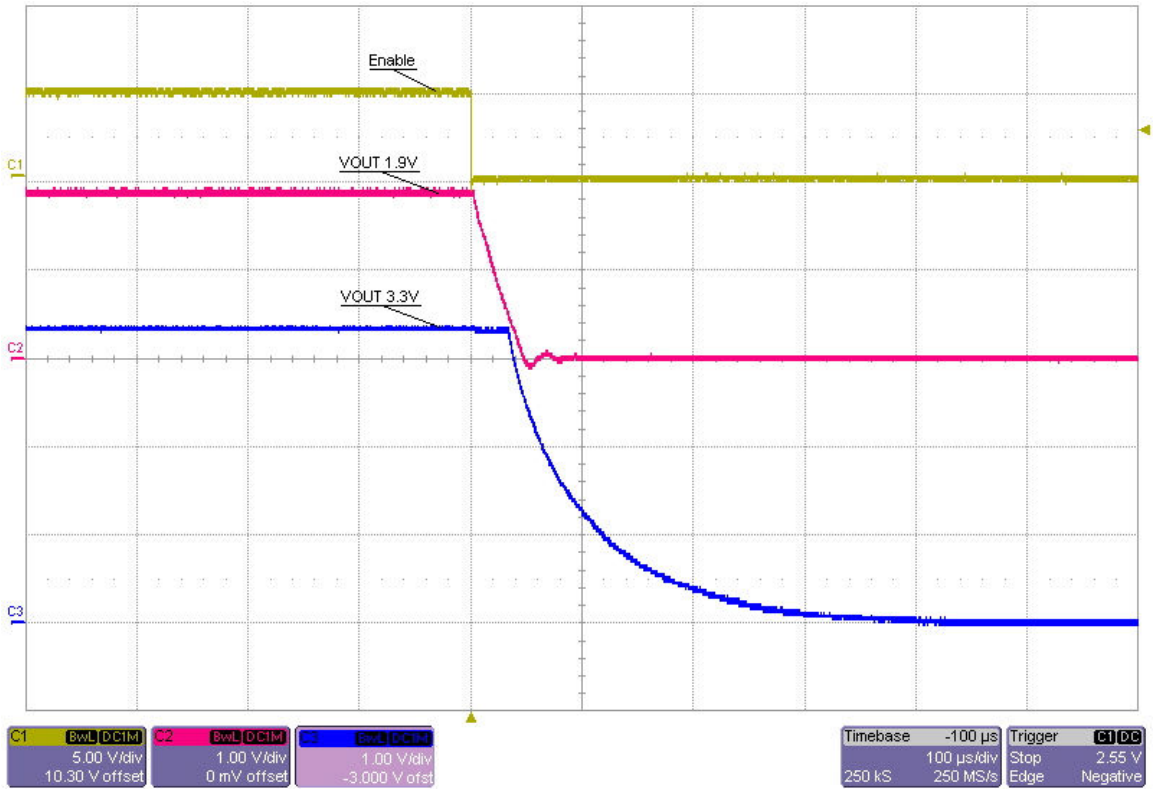

Figure 3. Power Down with 5-V Input and ENABLE Voltage

Once ENABLE is pulled low, the 1.9-V rail starts to come down first, and 3.3V comes down after 40us.

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