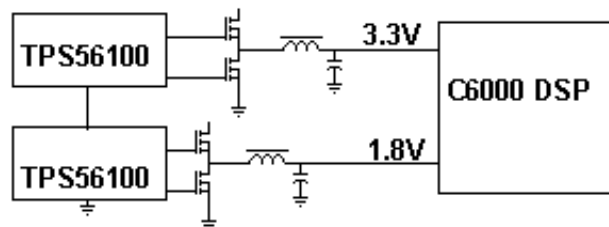




'C6000 Power Solutions

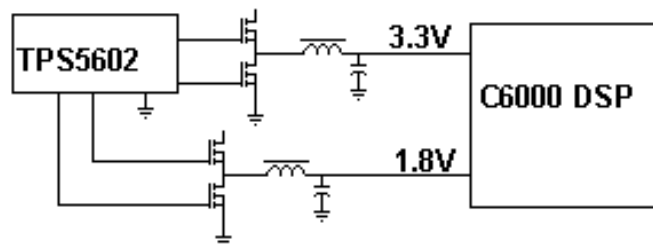
5 V solution



TPS56100

- Single 5V DC-DC controller
- Adjustable output voltage with 5 bit DAC
- Excellent transient response and regulation (1.5%) over temperature range
- Features soft start, over current, and over voltage protection
- Drive capability up to 30 amps
- Sub 1V output possible for future DSP core voltages
- EVM: SLVP128

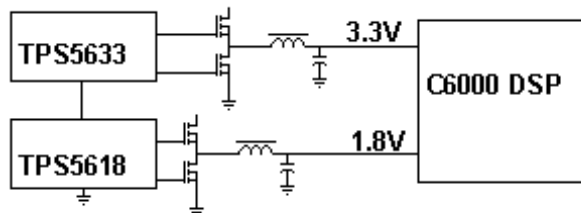
4.5 V to 25 V solution



TPS5602

- Dual controller with wide input range
- Current protection for each channel
- Very low standby current
- Adjustable output voltages down to 1.2V
- EVM: SLVP121

12 V solution



TPS56xx

- Single 12V DC-DC controller
- Excellent transient response and regulation (1%) over temperature range
- Supply single or multiple DSPs
- Drive capability up to 20 amps
- Features soft start, over current protection, and under voltage lockout
- 3.3V EVM: SLVP114
- 1.8V EVM: SLVP113

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'C6000 Power Management Selection Chart

DSP Family	Typical DSP Supply Voltage/Current	SVS	Powering DSP Only	Supply Current for system including one or more DSPs								
				Low Dropout Regulator (LDO)						Switching Regulator		
				Single			Single w/ SVS		Dual w/ SVS	Single		Dual
				< 150 mA	150 - 250 mA	250 - 500 mA	500 mA - 1A			1 - 3 A	> 3 A	
C6000 Platform												
TMS320C6201	2.5 V Core @ 2.5 A	TPS3305-25	TPS5602	N/A	N/A	N/A	N/A	N/A	N/A	TL5001A	TPS56100	TPS5602
	3.3 V I/O @ 150 mA			TPS76333	TPS7233	TPS7133	TPS7333	TPS76733		TL5001A	TPS56100	
TMS320C6201B	1.8 V Core @ 830 mA	TPS3305-18	TPS767D318	N/A	N/A	N/A	N/A	TPS76718	TPS767D318	TL5001A	TPS56100	TPS5602
	3.3 V I/O @ 130 mA			TPS76333	TPS7233	TPS7133	TPS7333	TPS76733		TL5001A	TPS56100	
TMS320C6202	1.8 V Core @ 1.4 A	TPS3305-18	TPS5602	N/A	N/A	N/A	N/A	N/A	N/A	TL5001A	TPS56100	TPS5602
	3.3 V I/O 160 mA			N/A	TPS7233	TPS7133	TPS7333	TPS76733		TL5001A	TPS56100	
TMS320C6211	1.8 V Core @ 830 mA	TPS3305-18	TPS767D318	N/A	N/A	N/A	N/A	TPS76718	TPS767D318	TL5001A	TPS56100	TPS5602
	3.3 V I/O @ 130 mA			TPS76333	TPS7233	TPS7133	TPS7333	TPS76733		TL5001A	TPS56100	
TMS320C6701	1.8 V Core @ 830 mA	TPS3305-18	TPS767D318	N/A	N/A	N/A	N/A	TPS76718	TPS767D318	TL5001A	TPS56100	TPS5602
	3.3 V I/O @ 160 mA			N/A	TPS7233	TPS7133	TPS7333	TPS76733		TL5001A	TPS56100	
TMS320C6711	1.8 V Core @ 720 mA	TPS3305-18	TPS767D318	N/A	N/A	N/A	N/A	TPS76718	TPS767D318	TL5001A	TPS56100	TPS5602
	3.3 V I/O @ 130 mA			TPS76333	TPS7233	TPS7133	TPS7333	TPS76733		TL5001A	TPS56100	

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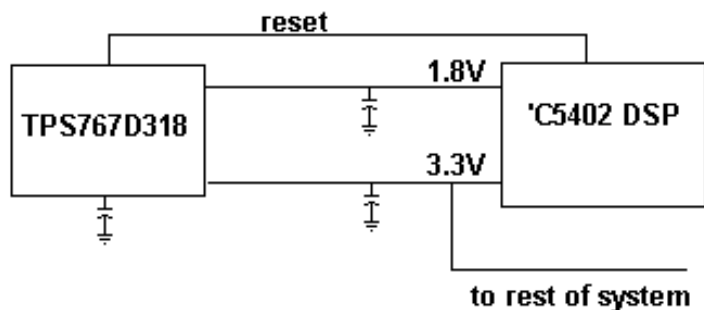
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INSTRUMENTS**



'C54x Power Solutions

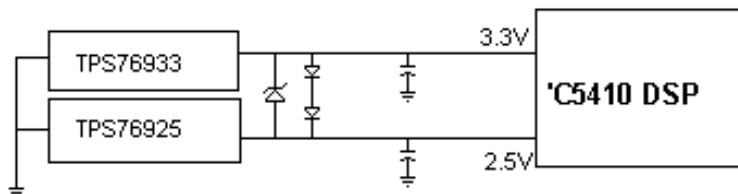
Dual voltage solution



TPS767D3xx

- Low quiescent current (85 μ A) - 1 μ A in shutdown mode
- Drive capability to 1A for each output
- 350 mV dropout voltage
- Accuracy (2%) over entire temperature range
- TSSOP PowerPAD package
- Other output voltage devices available

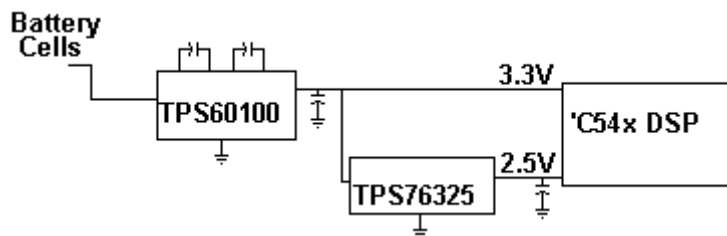
Low power LDO solution



TPS769xx

- Low dropout voltage - 98 mV
- Low quiescent current (17 μ A) - 1 μ A in shutdown mode
- 100mA drive capability
- Other output voltage devices available

Low power charge-pump solution



TPS60100

- Less than 5mV Vout ripple
- 1.8 to 3.6 V input voltage range
- No inductors required
- 50mA quiescent current - 5mA shutdown current
- Multiple output voltages available
- EVM: SLVP131

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'C5000 Power Management Selection Chart

DSP Family	Typical DSP Supply Voltage/Current	SVS	Supply Current for system including one or more DSPs									
			Powering DSP Only	Low Dropout Regulator (LDO)								Switching Regulator
				Single					Single w/ SVS		Dual w/ SVS	
				< 50 mA	50 - 100 mA	100 - 150 mA	150 - 250 mA	250 - 500 mA	500 mA - 1A		> 1 A	
C5000 Platform												
TMS320C541B	5 V @ 47 mA	TPS3823-50	TPS76950	TPS77050	TPS76950	TPS76350	TPS7250	TPS7150	TPS7350	TPS76701	-	TL5001A
TMS320C542	5 V @ 47 mA	"	"	"	"	"	"	"	"	"	"	"
TMS320LC541	3.3 V @ 50 mA	TPS3823-33	TPS76933	TPS77033	TPS76933	TPS76333	TPS7233	TPS7133	TPS7333	TPS76733		TPS56100
TMS320LC542	3.3 V @ 50 mA	"	"	"	"	"	"	"	"	"		"
TMS320LC543	3.3 V @ 50 mA	"	"	"	"	"	"	"	"	"		"
TMS320LC545A	3.3 V @ 66 mA	"	"	N/A	"	"	"	"	"	"	-	"
TMS320LC546A	3.3 V @ 66 mA	"	"	N/A	"	"	"	"	"	"		"
TMS320LC548	3.3 V @ 80 mA	"	"	N/A	"	"	"	"	"	"		"
TMS320LC549	3.3 V @ 80 mA	"	"	N/A	"	"	"	"	"	"		"
TMS320VC549	2.5 V Core @ 50 mA	TPS3305-25	TPS76925	TPS77025	TPS76925	TPS76325	TPS7225	TPS71025	TPS7325	TPS76725		
	3.3 V I/O @ 30 mA		TPS77033	TPS77033	TPS76933	TPS76333	TPS7233	TPS7133	TPS7333	TPS76733	TPS767D325	TPS5602 (Dual)
TMS320VC5402	1.8 V Core @ 33 mA	TPS3305-18	TPS77018	TPS77018	TPS76918	TPS76318	-	TPS7101	-	TPS76718		
	3.3 V I/O @ 30 mA		TPS77033	TPS77033	TPS76933	TPS76333	TPS7233	TPS7133	TPS7333	TPS76733	TPS767D318	TPS5602 (Dual)
TMS320VC5410	2.5 V Core @ 50 mA	TPS3305-25	TPS76925	TPS77025	TPS76925	TPS76325	TPS7225	TPS71025	TPS7325	TPS76725		
	3.3 V I/O @ 30 mA		TPS77033	TPS77033	TPS76933	TPS76333	TPS7233	TPS7133	TPS7333	TPS76733	TPS767D325	TPS5602 (Dual)
TMS320VC5420	1.8 V Core @ 99 mA	TPS3305-18	TPS76918	N/A	TPS76918	TPS76318	-	TPS7101	-	TPS76718		
	3.3 V I/O @ 30 mA		TPS77033	TPS77033	TPS76933	TPS76333	TPS7233	TPS7133	TPS7333	TPS76733	TPS767D318	TPS5602 (Dual)

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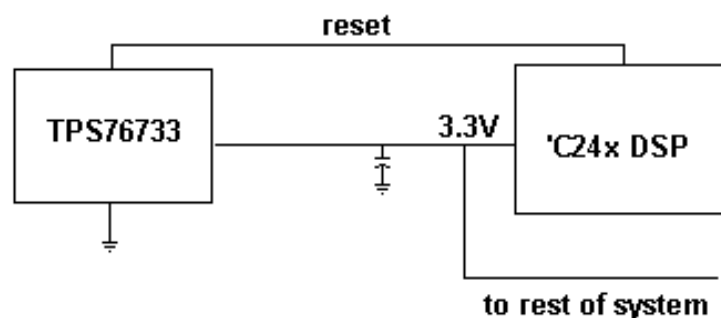
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'C24x Power Solutions

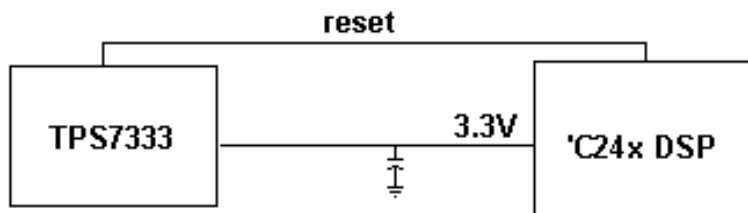
Integrated SVS for Higher Current Solution



TPS767xx

- 1.0 A current capability for digital control applications
- Fast transient response
- Integrated SVS on chip
- 230mV dropout / 85uA quiescent current
- Thermal shutdown
- Available in PowerPAD package

Integrated SVS for Medium Power Solution



TPS73xx

- 500mA current handling capability
- Integrated SVS on-chip
- 44mV dropout / 340uA quiescent current
- Small 8 pin SOIC

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'C2000 Power Management Selection Chart

DSP Family	Typical DSP Supply Voltage/Current	Supply Current for system including one or more DSPs											
		SVS	Powering DSP Only	Low Dropout Regulator (LDO)							Switching Regulator		
				Single				Single w/ SVS		Dual w/ SVS	Single		Dual
				< 100 mA	100 - 150 mA	150 - 250 mA	250 - 500 mA	500 mA - 1A			1 - 3 A	> 3 A	
C2000 Platform													
TMS320C203-80	5V @ 76 mA	TPS3823-50	TPS76350	TPS76950	TPS76350	TPS7250	TPS7150	TPS7350	TPS76701	-	TL5001A	-	-
TMS320F206	5V @ 76 mA	"	"	"	"	"	"	"	"		"		
TMS320C209-57	5V @ 76 mA	"	"	"	"	"	"	"	"		"		
TMS320LC203-40	3.3 V @ 40 mA	TPS3823-33	TPS76333	TPS76933	TPS76333	TPS7233	TPS7133	TPS7333	TPS76733	-	TL5001A	TPS56100	-
TMS320LC206-40	3.3 V @ 50 mA	"	"	"	"	"	"	"	"		"	"	
TMS320C206-40	3.3 V Core @ 45 mA	TPS3305-33	TPS76333	TPS76933	-	-	-	-	-	TPS767D301	TL5001A	-	TPS5602
	5 V I/O @ 10 mA		TPS76950	TPS76950							TL5001A		
TMS320C240	5V @ 80 mA	TPS3823-50	TPS76350	TPS76950	TPS76350	TPS7250	TPS7150	TPS7350	TPS76701		TL5001A		
TMS320F240	5V @ 80 mA	"	"	"	"	"	"	"	"		"		
TMS320F241	5V @ 90 mA	"	"	"	"	"	"	"	"	-	"	-	-
TMS320C242	5V @ 90 mA	"	"	"	"	"	"	"	"		"		
TMS320F243	5V @ 120 mA	"	"	"	"	"	"	"	"		"		
TMS320LC2402	3.3 V @ 75 mA	TPS3823-33	TPS76333	TPS76933	TPS76333	TPS7233	TPS7133	TPS7333	TPS76733		TL5001A	TPS56100	
TMS320LC2404	3.3 V @ 150 mA	TPS3823-33	TPS7233	N/A	"	"	"	"	"		"	"	
TMS320LC2406	3.3 V @ 150 mA	TPS3823-33	"	N/A	"	"	"	"	"	-	"	"	
TMS320LF2402	3.3 V @ 75 mA	TPS3823-33	TPS76333	TPS76933	"	"	"	"	"		"	"	
TMS320LF2406	3.3 V @ 150 mA	TPS3823-33	TPS7233	N/A	"	"	"	"	"		"	"	
TMS320LF2407	3.3 V @ 150 mA	TPS3823-33	"	N/A	"	"	"	"	"		"	"	

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