

Wide Input-Voltage Power Quick Reference Card

1Q 2007

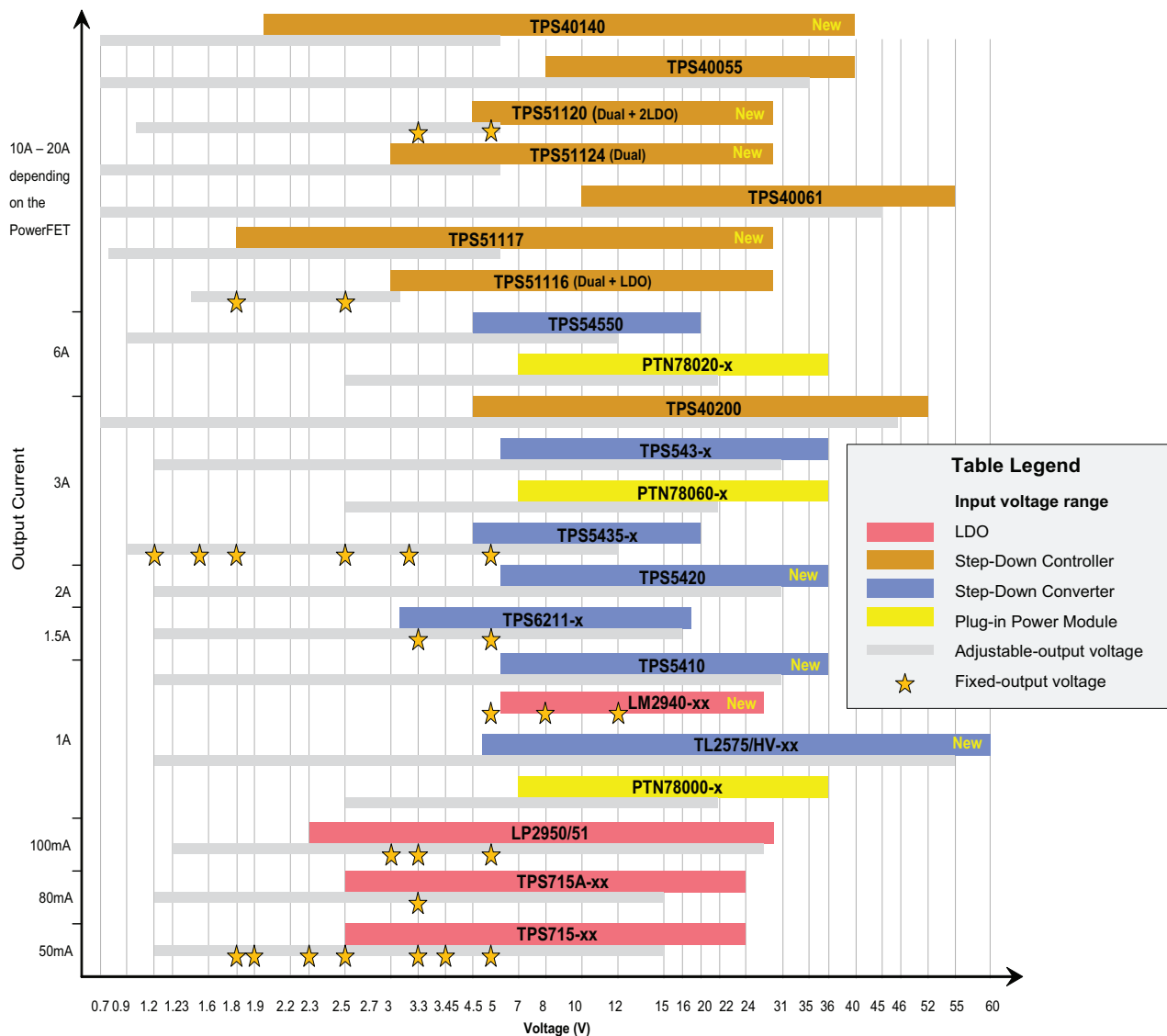
In this Quick Reference Card you will find TI's most popular wide input-voltage DC/DC conversion products. To discover the complete DC/DC conversion portfolio, please also visit power.ti.com.

Step-Down DC/DC Controllers and Converters, LDOs and Power Modules

TI has a wide range of products for industrial applications with wide input-voltage requirements. LDOs are a simple and inexpensive way

to regulate an output power. DC/DC controllers utilize an external power MOSFET for maximum design flexibility. DC/DC converters with integrated power MOSFETs offer a highly integrated way to step down the input voltage. The Plug-in Modules present the fastest time-to-market solution. Find your wide input voltage solution below.

TI Power Solutions:
Power Behind Your Designs
power.ti.com



What are the benefits?

- Pb-free and green components
- Competitive pricing
- Wide input-voltage range, like TPS5410/20/30 with V_{IN} up to 36 V and TL2575HV with up to 60 V
- LDOs for 24-V bus rails
- Plug-in power modules covering wide input and output voltages
- Controllers and converters with up to 1-MHz switching frequency and small external components, like TPS40140 and TPS6211x
- Excellent thermal performance, like TPS5430 and TPS54550 due to PowerPAD™ package
- Cross-reference to popular devices

Quick Wide Input Voltage Cross Reference - Functional replacements*

Comp Part #	Comp Name	TI Part #	Advantages vs. Competition	Package
LDO				
LP2980/A	NSC	TPS715xx	Wider input voltage range, lower I _Q	5/SC70
TC10xx	Mircochip	TPS715xx	Higher PSRR, lower I _Q	5/SC70
TC20xx	Mircochip	TPS715xx	Higher PSRR, lower I _Q	5/SC70
LP2981/A	NSC	TPS715A	Wider input voltage range, lower I _Q	5/SC70
LP295x	NSC	LP295x	Pin-to-pin replacement	3/TO-92
LM2940-xx	NSC, OnS	LM2940-xx	Pin-to-pin replacement	3/TO-220
Controller				
LT3788	LTC	TPS40055	Higher switching frequency	16/HTSSOP
LTC1179	LTC	TPS40061	Higher maximum input voltage	16/HTSSOP
LTC3728	LTC	TPS40140	Dual output or 2-phase, higher switching frequency (up to 1 MHz), fixed PWM	36/QFN
LTC3829	LTC	TPS40140	Dual output or 2-phase, higher switching frequency (up to 1 MHz), fixed PWM	36/QFN
LTC1628-xx	LTC	TPS40140	Wider input voltage range, fixed PWM, stackable solution up to 320 A	36/QFN
LTC1929	LTC	TPS40140	Wider input voltage range, fixed PWM, stackable solution up to 320 A	36/QFN
LM3485	NSC	TPS40200	Low pin-count, closed loop soft-start and synch., fixed PWM	8/SOIC
ISL88550A	Intersil	TPS51116	Wider input and output voltage range, smaller package	20/HTSSOP
ISL6229x	Intersil	TPS51117	Wider input and output voltage range, smaller package	14/QFN
ISL6227	Intersil	TPS51120	Wider input voltage range, smaller package	32/QFN
ISL6440	Intersil	TPS51124	Wider input voltage range, higher switching frequency, smaller package	24/QFN
Converter				
LM2575/HV	NSC	TL2575/HV-xx	Pin-to-pin replacement	5/TO-263
LM2675	NSC	TPS5410	Higher switching frequency (500 kHz)	8/SOIC
L5970D	ST	TPS5410	Higher switching frequency (500 kHz), lower I _Q	8/SOIC
MIC4690	Micrel	TPS5410	Higher efficiency (up to 92%), higher maximum input voltage	8/SOIC
L5973D	ST	TPS5420	Higher switching frequency (500 kHz), lower I _Q	8/SOIC
LM25005	NSC	TPS5420	Higher efficiency (up to 93%), lower input voltage	8/SOIC
LM2676	NSC	TPS5430	Higher switching frequency (500 kHz), better thermal performance	8/SOIC
LM2696	NSC	TPS5430	Higher switching frequency (500 kHz), better thermal performance	8/SOIC
MIC4576	Micrel	TPS5430	Higher switching frequency (500 kHz), higher efficiency (up to 93%)	8/SOIC
LT1765	LTC	TPS5435x	Higher efficiency (up to 92%), higher accuracy (1%)	16/HTSSOP
LM2677	NSC	TPS54550	Higher switching frequency (700 kHz), smaller package	16/HTSSOP
LM2678	NSC	TPS54550	Higher switching frequency (700 kHz), higher efficiency (>90%), smaller package	16/HTSSOP
LM2734	NSC	TPS6211x	Higher efficiency (up to 95%), lower I _Q , power-save mode	16/QFN
MIC2179	Micrel	TPS6211x	Higher switching frequency (1 MHz), smaller package, power-save mode	16/QFN
Mod				
NGA10S150	C&D	PTN78000x	Wider output voltage range	Horizontal
NGA10S150	C&D	PTN78060x	Higher output current, wider output voltage range	Horizontal

* No pin-to-pin replacements in case not stated

NEW!! SwitcherPRO Power Design Software – Coming in January 2007!

TI is merging the TPS40k, SWIFT™ and TPS62k into on single power design tool called SwitcherPRO. This comprehensive, easy-to-use tool will assist you in the design of your power solution and optimize it for efficiency, stability and component stress. Due in January 2007 at www.ti.com/analogdesigncenter.

TI EUROPEAN TECHNICAL SUPPORT

INTERNET All About Power: power.ti.com Cross Reference Search: www.ti.com/crossreference
 Analog Literature: www.ti.com/analoglit Top Side Package Marketing: www.ti.com/topsidesymbol

EUROPEAN PRODUCT INFORMATION CENTERS

Belgium (English)	+32 (0) 27 45 54 32	Finland (English)	+358 (0) 9 25173948
France	+33 (0) 1 30 70 11 64	Germany	+49 (0) 8161 80 33 11
Israel (English)	180 949 0107	Italy	800 79 11 37
Netherlands (English)	+31 (0) 546 87 95 45	Russia	+7 (0) 95 363 4824
Spain	+34 902 35 40 28	Sweden (English)	+46 (0) 8587 555 22
United Kingdom	+44 (0) 1604 66 33 99		

Important Notice: The products and services of Texas Instruments Incorporated and its subsidiaries described herein are sold subject to TI's standard terms and conditions of sale. Customers are advised to obtain the most current and complete information about TI products and services before placing orders. TI assumes no liability for applications assistance, customer's applications or product designs, software performance, or infringement of patents. The publication of information regarding any other company's products or services does not constitute TI's approval, warranty or endorsement thereof.

Technology for Innovators and the black/red banner are trademarks of Texas Instruments. All other trademarks are the property of their respective owners.



B120905

SLVT152A