

# Low-Voltage, Integrated Load Switches



## Easy-to-use, ultra-small, high-performance

TI's **TPS229xx** family of integrated load switches provides an easy solution to optimize system power consumption and save board space. An answer to the challenges faced by portable power management designers, these load switches integrate all the main features of a discrete load switch on a single die, providing maximum performance and flexibility to the end user.

[www.ti.com/loadswitches](http://www.ti.com/loadswitches)



Device	Input Voltage	# Channels	rON at 3.6V	Output Rise Time	Quick Output Discharge <sup>1</sup>	Min. Current Limit	Max Output Current	Enable	Package Size
TPS22901	1.0V to 3.6V	1	78mΩ	40μs	No	—	500mA	active high	CSP, 0.8mm x 0.8mm
TPS22902	1.0V to 3.6V	1	78mΩ	40μs	Yes	—	500mA	active high	CSP, 0.8mm x 0.8mm
TPS22902B	1.0V to 3.6V	1	78mΩ	220μs	Yes	—	500mA	active high	CSP, 0.8mm x 0.8mm
TPS22903	1.1V to 3.6V	1	66mΩ	1μs	No	—	500mA	active high	CSP, 0.8mm x 0.8mm
TPS22904	1.1V to 3.6V	1	66mΩ	1μs	Yes	—	500mA	active high	CSP, 0.8mm x 0.8mm
TPS22906	1.0V to 3.6V	1	90mΩ	220μs	Yes	—	500mA	active high	CSP, 0.9mm x 0.9mm
TPS22907	1.1V to 3.6V	1	44mΩ	40μs	No	—	1A	active high	CSP, 0.9mm x 0.9mm
TPS22910A	1.4V to 5.5V	1	61mΩ	0.5μs	No	—	2A	active low	CSP, 0.9mm x 0.9mm
TPS22912C	1.4V to 5.5V	1	61mΩ	1000μs	No	—	2A	active high	CSP, 0.9mm x 0.9mm
TPS22913B	1.4V to 5.5V	1	61mΩ	100μs	Yes	—	2A	active high	CSP, 0.9mm x 0.9mm
TPS22913C	1.4V to 5.5V	1	61mΩ	1000μs	Yes	—	2A	active high	CSP, 0.9mm x 0.9mm
TPS22920	0.75 to 3.6V	1	5.3mΩ	800μs	Yes	—	4A	active high	CSP, 0.9mm x 1.9mm
TPS22921	0.9V to 3.6V	1	14mΩ	30μs	No	—	2A	active high	CSP 0.8mm x 1.2mm or 0.9mm x 1.4mm

<sup>1</sup>QOD: Quick Output Discharge. This feature discharges the output of the switch to ground through a resistor, preventing the output from floating.

Table continued on back.

Device	Input Voltage	# Channels	rON at 3.6V	Output Rise Time	Quick Output Discharge <sup>1</sup>	Min. Current Limit	Max Output Current	Enable	Package Size
TPS22922	0.9V to 3.6V	1	14mΩ	30μs	Yes	—	2A	active high	CSP, 0.8mm x 1.2mm or 0.9mm x 1.4mm
TPS22922B	0.9V to 3.6V	1	14mΩ	200μs	Yes	—	2A	active high	CSP, 0.8mm x 1.2mm or 0.9mm x 1.4mm
TPS22924B	0.75V to 3.6V	1	18.3mΩ	100μs	Yes	—	2A	active high	CSP, 0.9mm x 1.4mm x 0.4mm
TPS22924C	0.75V to 3.6V	1	18.3mΩ	800μs	Yes	—	2A	active high	CSP, 0.9mm x 1.4mm x 0.5mm
TPS22929D	1.4V to 5.5V	1	115mΩ	4ms	Yes	—	1.8A	active high	SOT23-6, 3mm x 3mm
TPS22932B	1.1V to 3.6V	1	55mΩ	165μs	Yes	—	500mA	configurable	CSP, 1.2mm x 0.8mm
TPS22934	1.5V to 3.6V	1	70mΩ	50μs	Yes	—	2A	SVS input	CSP, 0.9mm x 0.9mm
TPS22941	1.62V to 5.5V	1	500mΩ	10μs	No	40mA	80mA	active low	SC70, 2.15mm x 2.4mm
TPS22942	1.62V to 5.5V	1	500mΩ	10μs	No	100mA	200mA	active low	SC70, 2.15mm x 2.4mm
TPS22943	1.62V to 5.5V	1	500mΩ	10μs	No	40mA	200mA	active high	SC70, 2.15mm x 2.4mm
TPS22944	1.62V to 5.5V	1	500mΩ	10μs	No	100mA	80mA	active high	SC70, 2.15mm x 2.4mm
TPS22945	1.62V to 5.5V	1	500mΩ	10μs	No	100mA	200mA	active high	SC70, 2.15mm x 2.4mm
TPS22946	1.62V to 5.5V	1	400mΩ	10μs	No	155, 70, 30mA	235mA	active high	CSP, 0.9mm x 1.4mm
TPS22949/A	1.62V to 4.5V	2 (1 Switch, 1 LDO)	350mΩ	25μs	No	100mA	200mA	active high	CSP, 0.9mm x 1.9mm or SON, 3mm x 3mm
TPS22951	2.8V to 5.3V	1	1000mΩ max	41μs	No	300mA	600mA	active high	CSP, 0.8mm x 1.2mm
TPS22960	1.62V to 5.5V	2	435mΩ	75μs or 660μs	Yes	—	500mA	active high	SOT23-8, 3mm x 3mm or μQFN, 1.5mm x 1.5mm

<sup>1</sup>QOD: Quick Output Discharge. This feature discharges the output of the switch to ground through a resistor, preventing the output from floating.

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