Application Report
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Recommended Power Solutions for TMS320x2810/1/2 DSPs

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ABSTRACT

This application report provides a table to assist users in selecting the best power solution for their specific TMS320x281x application.

Table 1. Selection Table

Power Design Description	Intended Input Voltage (V)	V_{CORE} (V)	$I_{CORE(max)}$ (mA)(1)	V_{IO} (V)	$I_{IO(max)}$ (mA)(1)	$\overline{RESET}$ Delay (ms)	Temperature Range
Dual Linear Regulator Solution with Programmable Reset Circuitry	5	1.8 or 1.9	1000	3.3	1000	Programmable	Industrial or commercial
Reduced Cost Dual Linear Regulator Solution	5	1.8 or 1.9	500	3.3	250	120	Commercial(2)
Single Linear Regulator Solution	3.3	1.8 or 1.9	400	Vin	Iin	Programmable	Commercial(2)
Dual Linear Regulator Solution	5	1.8 or 1.9	1000	3.3	1000	200	Industrial or commercial

(1) Depending on ambient conditions, the linear regulator output current may be limited due to power dissipation limitations of the regulator's package.
(2) Requalification of the IC's operation in the industrial temperature range may be possible. Contact factory representative.

For more information on power design for TI DSPs, see http://www.ti.com/dsppower.

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