

# Power Supply Products Selection Guide

## Battery Management and Charging

PART NUMBER	DESCRIPTION	PACKAGE OPTIONS	FEATURES
LTC1325	μProcessor Controlled Battery Management System	N18, SW18	Fast Charge NiCd, NiMH, Li-Ion, or Pb-Acid Batteries Under μP Control Also Provides Full Charge/Discharge Management
LT1510	Constant-Voltage, Constant-Current Battery Charger	S8, N16, S16	Charges NiCd, NiMH and Li-Ion Batteries, 1 Resistor Required to Program Charge Current, Step-Down Topology, 200kHz Switching
LT1512	SEPIC Constant Current/Voltage Battery Charger	N8, S8	SEPIC Topology Means Charger $V_{IN}$ can be Higher or Lower than Battery Voltage

## Power Factor Correction Controllers

PART NUMBER	DESCRIPTION	PACKAGE OPTIONS	FEATURES
LT1248	Average Current Mode Power Factor Corrector	N16, S16	Low Line Current Distortion, >0.99 Power Factor, Synchronization, Overvoltage Protection
LT1249	Average Current Mode Power Factor Corrector	N8, S8	Low Parts Count, Full Feature Power Factor Correction
LT1508/09	Combined PFC, PWM	N20, SW20	Combined PFC, PWM, Synchronized, Controlled Soft Start, 99% Power Factor Over 20:1 Load Current Range

## Regulating Pulse-Width Modulators

PART NUMBER	DESCRIPTION	PACKAGE OPTIONS	FEATURES
LT1105	Off-Line Regulating Pulse Width Modulator	N8, N14	Designed for AC Line Powered Applications
LT1241 Series	500kHz Regulating Pulse Width Modulators	J8, N8, S8	Improved Replacements for UC1842, 1843, 1844, 1845
LT1246/LT1247	1MHz Regulating Pulse Width Modulators	N8, S8	1MHz Current Mode PWM, 1.5% $V_{REF}$ , 30ns Current Sense
LT1524/LT3524	Regulating Pulse Width Modulator	J, N, S	Improved SG1524, 2% $V_{REF}$ , Guaranteed Oscillator Accuracy
LT1525A/LT3525A LT1527A/LT3527A	Regulating Pulse Width Modulator	J, N	Improved SG1525A/1527A Switching Regulator with Undervoltage Lockout, Guaranteed Long Term Stability
SG1524/SG3524	Regulating Pulse Width Modulator	J, N	Industry Standard Switching Power Supply Control Circuit
SG1525A/SG3525A	Regulating Pulse Width Modulator	J, N	More Features Than 1524 Series, 100mA Source/Sink Outputs
SG1527A/SG3527A	Regulating Pulse Width Modulator	J, N	Same as SG1525A with Inverted Output Logic
LT1846/3846 LT1847/3847	Current Mode Regulating Pulse Width Modulator	J, N	Current Mode PWM with UV Lockout, Soft Start, 1% $V_{REF}$ , 500kHz Operation, 200mA Totem Pole Outputs

## Ultra-High Efficiency Switching Regulator Controllers

PART NUMBER	DESCRIPTION	PACKAGE OPTIONS	FEATURES
LTC1142	Dual Step-Down Switching Regulator Controller	SSOP	Dual Synchronous Switching Regulator Controllers with both 3.3V and 5V Outputs
LTC1142HV	Dual Step-Down Switching Regulator Controller	SSOP	20V Max Input Voltage Dual 3.3V/5V or Adjustable Output Synchronous Switching Regulator
LTC1143	Dual Step-Down Switching Regulator Controller	SW16	Dual Switching Regulator Controller with Low Parts Count and Both 3.3V and 5V Outputs
LTC1147, LTC1147L	Step-Down Switching Regulator Controller	N8, S8	Low Parts Count, 90% Efficiency Using a Single External P-Channel MOSFET
LTC1148, LTC1148L	Step-Down Switching Regulator Controller	N, S	Synchronized Switching Regulator Controller Using Two External MOSFETs for 95% Efficiency. Up to 16V Inputs
LTC1148HV	Step-Down Switching Regulator Controller	N, S	Synchronized Switching Regulator Controller Using Two External MOSFETs for 95% Efficiency. Up to 20V Inputs
LTC1149	Step-Down Switching Regulator Controller	N, S	Synchronized Switching Regulator Controller Using Two External MOSFETs for 95% Efficiency. Up to 48V Inputs
LTC1159	Step-Down Switching Regulator Controller	G, N, S	Synchronized Switching Regulator Controller Using Two External MOSFETs for 95% Efficiency. Operation to 5V Min, 40V Max Inputs
LTC1266	Step-Down Switching Regulator Controller	S	Synchronized Switching Regulator Using Two External N-Channel MOSFETs for 95% Efficiency. Ideal for 5V to 3.3V Applications
LTC1267	Dual Step-Down Switching Regulator Controller	SSOP	40V Max Input Voltage Dual 3.3V, 5V or Adjustable Output Synchronous Switching Regulator Controller
LTC1430	Step-Down Switching Regulator Controller for PCs	S8, S16	High Current Synchronous Switching Regulator for High Current, 5V to 3.XX or 2.XX Supplies

## CCFL Backlight Inverters and LCD Contrast Switching Regulator

Part Number	Package	CCFL Supply?		Brightness Control
		Floating Bulb	Grounded Bulb	
LT1182	SO16	Y	Y	I, V, PWM
LT1183	SO16	Y	Y	I, V, PWM
LT1184F	SO16	Y	Y	I, V, PWM
LT1184	SO16	N	Y	I, V, PWM
LT1186	SO16	Y	Y	Digital

## Regulator Drivers

BASE DRIVE CURRENT	PART NUMBER	PACKAGE TYPE	$V_{IN}$ MAX (V)	$V_O$ NOMINAL REGULATED OUTPUT VOLTAGE	FEATURES/ COMMENTS
150mA	LT1123CZ	TO-92	30	5.0	Requires External PNP, 1% Output Tolerance, 600μA Quiescent Current

## LT1103/1105 Off-Line Switching Regulators

APPLICATION	LT1105	LT1103 (Internal Sense Resistor)
Universal Off-Line	10W to Over 100W	10W to 50W
Battery Charger, Isolated Off-Line	OK	OK
Telecom, -48V Input Isolated	OK	OK
Low Voltage Isolated DC/DC ( $\leq 24V$ )	Requires External MOSFET	Needs No MOSFET
High Voltage Isolated DC/DC	OK	OK