

Energy Harvesting

Linear Technology manufactures a wide range of ultralow power products targeted for Energy Harvesting applications. Power management products that convert energy from Vibration (Piezo), PhotoVoltaic (Solar) and Thermal (TEC, TEG, Thermopiles, Thermocouples) sources provide high efficiency conversion to regulated voltages or to charge batteries and super capacitor storage elements. Boost converters that operate from as little as 20mV or battery chargers with Maximum Power Point capability expand the possibilities for a wide variety of industrial automation and control, wireless sensor, transportation, automotive and building management applications.

Ultralow quiescent current linear regulators, op amps, comparators, voltage supervisors, analog-to-digital converters, digital-to-analog converters and micropower voltage references provide additional fundamental building blocks required for autonomous systems.

Part Number	Comments	Features	Number of Outputs	Energy Source	Packages	Topology	V _{IN} MIN (V)	V _{IN} MAX (V)
LTC4071	Li-Ion/Polymer Shunt Battery Charger System with Low Battery Disconnect	Nanopower, <0.1nA Pin-Selectable Low Battery Disconnect	1	-	DFN-8, MSOP-8	Shunt Battery Charger		None
LTC4070	Li-Ion/Polymer Shunt Battery Charger System	Low Power Battery Charger	1	-	DFN-8, MSOP-8E	Shunt Battery Charger		None
LTC3588-2	Piezoelectric Energy Harvesting Power Supply with 14V Minimum V _{IN}	Full Wave Bridge Rectifier	1	Piezoelectric	MS-10, DFN-10	Buck	14	20
LTC3588-1	Piezoelectric Energy Harvesting Power Supply	Full Wave Bridge Rectifier	1	Piezoelectric	MS-10, DFN-10	Buck	2.7	20
LTC3535	Dual Channel 550mA 1MHz Synchronous Step-Up DC/DC Converter	Output Disconnect, Soft-Start, Burst Mode [®]	2	-	DFN-12	Boost	0.5	5
LTC3534	7V, 500mA Synchronous Buck-Boost DC/DC Converter	Burst Mode, Output Disconnect, Soft-Start	1	-	DFN-16, SSOP-16	Buck-Boost, Boost	2.4	7
LTC3526L	550mA 1MHz Synchronous Step-Up DC/DC Converters in 2mm × 2mm DFN	Output Disconnect, Soft-Start, Burst Mode	1	-	DFN-6	Boost	0.5	5
LTC3109	Auto-Polarity, Ultralow Voltage Step-Up Converter and Power Manager	Auto-Polarity Detect, LDO, Power Good, PowerPath™	3	Thermoelectric	QFN-20, SSOP-20	Boost	0.02	0.5
LTC3108-1	Ultralow Voltage Step-Up Converter and Power Manager, Fixed V _{OUT} of 2.5V, 3V, 3.7V or 4.5V	LDO, Power Good, PowerPath	3	Thermoelectric	DFN-12, SSOP-16	Boost	0.02	0.5
LTC3108	Ultralow Voltage Step-Up Converter and Power Manager	LDO, Power Good, PowerPath	3	Thermoelectric	DFN-12, SSOP-16	Boost	0.02	0.5
LTC3105	400mA Step-Up DC/DC Converter with Maximum Power Point Control and 250mV Start-Up	Maximum Power Point Control, Burst Mode, Output Disconnect, Soft- Start, Power Good	1	Solar	DFN-10, MS-12	Boost	0.2	5
LT3652HV	Power Tracking 2A Battery Charger	Solar Input Voltage Regulation	1	Solar	DFN-12, MS-12	Buck	4.95	34
LT3652	Power Tracking 2A Battery Charger for Solar Power	Solar Input Voltage Regulation	1	Solar	DFN-12, MS-12	Battery Charger	4.95	32