



ANALOG HBLED

► Product Portfolio:

- Target commercial, residential, and automotive markets
- LED drivers can be used in a variety of topologies such as buck mode, boost-mode, flyback mode etc.

► General Features:

- DC/DC and AC/DC driver ICs
- Active power factor correction
- Non-Dimmable and Dimmable [Analog, PWM, Switch & Triac Dimming]
- Extended operating temperature range
- Compliant with worldwide EMI regulations; Energy Star

► Applications:

- General lighting
- Medical
- Automotive Lighting
- Interior

► Customer Benefits:

- Broad portfolio of products to address a range of general lighting applications
- Monolithic (integrated power MOSFET) and controller (external MOSFET) based solutions offer flexibility in design
- Robust built in protections for extended life operation

Product Selector Guide

Switching [AC/DC & DC/DC]

Part No.	Driver	VIN [V]	IOUT Accuracy	Effcy [%]	Power Transistor	Typical Applications	Package	Key Feature	Status
IS31LT3350	DC/DC Buck	6-40	750mA ±5%	95	Built-in	Low voltage LED lighting, MR16 replacement	SOT23-5, SOT89-5	Single pin ON/OFF or brightness control with DC/PWM, thermal shutdown	Prod
IS31LT3352	DC/DC Buck	6-40	750mA ±5%	95	Built-in	Low voltage LED lighting, MR16 replacement	SOP-8	Cascadable, temp. compensation and one pin ON/OFF/dimming control	Prod
IS31LT3353	DC/DC Buck	6-40	Iout: 1A +/-3%	95	Built-in	Low voltage LED lighting, MR16 replacement	SOT23-5, SOT89-5	Single pin ON/OFF or brightness control with DC/PWM, thermal shutdown	Prod
IS31LT3354	DC/DC Buck	6-40	< 2.5A ±5%	98	External	Low volt. LED lighting, Illuminated sign	SOT23-5	1200:1 dimming ratio LED driver with thermal shutdown protection	Prod
IS31LT3360*	DC/DC Buck	6-40	1.2A ±3%	98	Built-in	MR16, MR11 spot light, PAR light	SOT89-5	High efficiency with buck converter, with analog or PWM dimming	Prod
IS31LT3380	DC/DC Buck	8.5-40	1.2A ±5%	98	Built-in	MR16, MR11 spot light, PAR light	SOP-8	3-level switch dimming control, open/short and thermal shutdown protection	Prod
IS31LT3505	DC/DC Boost	6-30	24W ±5%	90	Built-in	Battery powered LED, solar light	MSOP-10	1MHz Boost Converter with 30V Internal NMOS	Prod
IS31LT3515	DC/DC	5-35	±3%	90	External	Industrial, street lighting	SOP-16	35V Buck/Boost, Buck/Boost operation	S=Q2/15
IS31LT3948	DC/DC Boost	5-100	-	90	External	Street lamp, LED lighting, Gen. illum.	SOP-8	Wide input voltage range, Boost, over-voltage/temperature protection	Prod
IS31LT3910	AC/DC	8-450 DC 110/220 AC	500mA ±7%	90	External	T8, PAR light	SOP-8	Non-isolation, linear/PWM dimming, temperature compensation	Prod
IS31LT3916	AC/DC	90-260 AC	PF > 0.9	85	External	T8, Bulb Replacement, PAR light	MSOP-8	Isolated and Non-Isolated; Offline LED Driver with Active PFC	Prod
IS31LT3953	DC/DC Buck	6-48V	-		Integrated	3A, PWM Dimmable Lighting	SOP-8EP	200kHz to 2Mhz DC/DC 3.0A dimmable buck regulator with robust protection features	S=Q2/15

*-40C to +125C: Extended temperature range option available

Switching [AC/DC & DC/DC]

Part No.	Driver	VIN [V]	IOUT Accuracy	Effcy [%]	Power Transistor	Typical Applications	Package	Key Feature	Status
IS31LT3918	DC/DC AC/DC	6-450 DC 85-265 AC	- ±3%	95	External	LED Lighting; Signal & decor. lighting, T8	SOP-8	High voltage LED driver with 3-level Switch Dimming	Prod
IS31LT3932	AC/DC	85-265 AC	PF > 0.95	>85	External	Retrofit Bulb, Tube, PAR Lighting	SOP-8	High Power factor, Low THD Universal Constant Current	Prod
IS31LT3933	AC/DC	85-305 AC	PF > 0.95	>85	External	Retrofit Bulb, Tube, PAR Lighting	SOP-8	High Power factor, Low THD Universal Constant Current	S=Q1/15
IS31LT3935	AC/DC	110/220 AC	PF > 0.95	87	External	Bulb Replacement, spot light, PAR light	DFN10 eTSSOP-16	25W Triac Dimmable Active PF Isolated and Non-Isolated	Prod
IS31LT3938	DC/DC, AC/DC	10-450 DC 85-265 AC	- ±3%	95	External	LED Lighting; Signal & decorative lighting	SOP-8	High voltage LED driver with Switch Dimming, Single External FET	Prod

Automotive Industrial

Part No.	Driver	VIN [V]	IOUT Accuracy	Power Transistor	Typical Applications	Package	Key Feature	Status
IS32BL3552	DC/DC Boost	4.5 - 33V	±1.5%	External	Automotive lighting, LCD display backlight	eTSSOP-16	Two channel LED current sinks, 40 to 360mA per string. String-to-string accuracy 1.5%	AECQ100 qualified
IS32BL3554	DC/DC Boost	4.5 - 33V	±1.5%	External	Automotive lighting, LCD display backlight	eTSSOP-16	Four 20 to 180mA channel current sinks. String-to-string accuracy 1.5%	AECQ100 qualified
IS32BL3556	DC/DC Boost	4.75 - 40V	±0.8%	External	Automotive lighting, LCD monitor backlight	eTSSOP-24	Four 100mA channel current sinks. String-to-string accuracy 0.8%	S=Q3/15
IS32LT3953	DC/DC Buck	6 - 48V	-	Integrated	Automotive lighting, dimmable cabin light	SOP-8EP	200kHz to 2Mhz DC/DC 3.0A dimmable buck regulator with robust protection features	S=Q2/15
IS32LT3120	Linear	5 - 45V	-	Integrated	Automotive cabin lighting, map & dome light	SOP-8EP	Two channel CCR with two debounced switch inputs, LED fade IN/OUT	Sample
IS32LT3170/1	Linear	2.8 - 42V	-	Integrated	Automotive lighting, emergency lighting, retail lighting	SOT23-6	Adjustable CCR 10 to 150mA, negative thermal coeff., low / high side, IS32LT3171 PWM dimming	S=Q2/15
IS32LT3172/3	Linear	2.8 - 42V	-	Integrated	Automotive cabin lighting, map & dome light	SOP-8EP	Adjustable CCR 10 to 200mA, negative thermal coeff., low / high side, IS32LT3173 PWM dimming	S=Q2/15
IS32LT3180	Linear	6 - 60V	±5.0%	Integrated	Automotive RCL, CHMSL, fog lamps, turn signal	eTSSOP-16	Eight channel, dual intensity, CCR with fault reporting, 10-75mA	Sample

Linear

Part No.	Driver	VIN [V]	IOUT Accuracy	Power Transistor	Typical Applications	Package	Key Feature	Status
IS31LT3135	Constant Current	2.7-5.5	500mA ±5%	Built-in	Miner lamp, Torch, Battery powered LED lighting	SOP-8	Main/sub dual-channel driver with short circuit and over temp. protection	Prod
IS31LT3117	Linear	6 - 53V	±5.0%	Integrated	Low-side CCR	eTSSOP-16	Four 350 mA channel current sinks. Support for external ballast transistor	Prod
IS31LT3170/1	Linear	2.8 - 42V	-	Integrated	Emergency lighting, retail lighting	SOT23-6	Adjustable CCR 10 to 150mA, negative thermal coeff., low / high side, IS31LT3171 PWM dimming	S=Q2/15
IS31LT3172/3	Linear	2.8 - 42V	-	Integrated	Emergency lighting, retail lighting	SOP-8EP	Adjustable CCR 10 to 200mA, negative thermal coeff., low / high side, IS31LT3173 PWM dimming	S=Q2/15