

Analog ICs



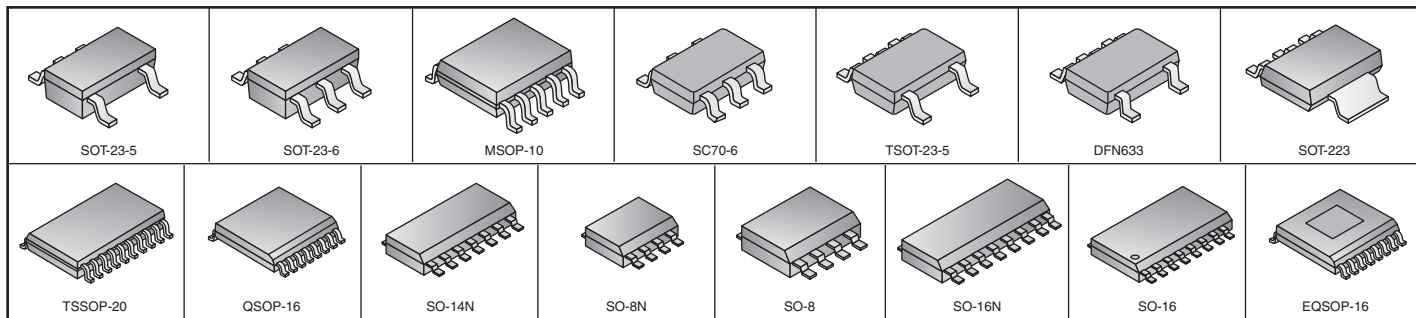
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Diodes Incorporated



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Analog ICs

Diodes Inc.



ZETEX LED/LCD DRIVER SOLUTIONS/LIGHTING ICs

The ZXLD1100/1101/1937 are regulated voltage mode boost converters for white LED driving for backlighting in color LCD displays. An integrated switch and over voltage clamp (ZXLD 1100) reduces the solution component count. The ZXSC400 is a regulated, voltage mode converter for white LED backlighting in color LCD displays. The LED current (which is programmed with a single resistor) changes by typically less than 1% over the Li-Ion supply range. The ZXSC300/310 are constant power converters primarily focused at single or dual cell (white) LED driving in flashlight and garden light applications. Both products feature a programmable peak current to optimize efficiency and supply requirements. The ZXSC300/310 features a pulse mode that eliminates the need for a rectifier diode, which provides the highest efficiencies available especially for single cell operation.

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| Features: <ul style="list-style-type: none"> • Internal 30V switch - ZXLD1100/1101 • Open circuit protection - ZXLD1100 • Low 0.1V feedback voltage for high efficiency - ZXL series • High efficiency: 94% - ZXSC3xx in pulse mode • 0.8V operation - ZXSC3xx • Programmable LED current • Drives up to 8 LEDs at 20mA - ZXSC400 • Series, parallel and series parallel combinations • <500nA shutdown current | Applications: <ul style="list-style-type: none"> • White LED backlighting for color LCD displays - ZXLD1100/1101 • Emergency/standby lighting - ZXSC400 • Solar powered traffic signs - ZXSC3xx • High performance LED flashlights - ZXSC400 • LED flashlights - ZXSC3xx • LED solar panel garden lights - ZXSC3xx | ◆ Surface Mount Device |
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For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Zetex Part No.	Package	Input Voltage Range (V)	Output Voltage Range (1) (V)	Shutdown Current (µA)	Typical Quiescent Current µA	Efficiency $V_{in}=3.0V$	Price Each			
								1	25	100	250
◆ 522-ZXSC300E5TA	ZXSC300E5TA	SOT-23-5	0.8-8.0	Vin to Vm	-	200	88 with 1 LED	.69	.60	.54	.47
◆ 522-ZXSC310E5TA	ZXSC310E5TA	SOT-23-5	0.8-8.0	Vin to Vm	4	200	88 with 1 LED	.83	.72	.642	.53
◆ 522-ZXSC380FHTA	ZXSC380FHTA	SOT-23-5	0.8-6.0	Vin to 20	-	-	80 @ 1.5V	.62	.50	.40	.30
◆ 522-ZXSC400E6TA	ZXSC400E6TA	SOT-23-6	1.8-8.0	Vin to Vm	3	150	80 with 4 LEDs	.84	.73	.65	.57
◆ 522-ZXLB1600X10TA	ZXLB1600X10TA	MSOP-10	1.6 - 5.5	28	5	85	75	1.62	1.41	1.25	1.10
◆ 522-ZXLD1100H6TA	ZXLD1100H6TA	SC70-6	2.5-5.5	28	0.5	60	80 with 3 LEDs	1.55	1.35	1.20	1.05
◆ 522-ZXLD1101ET5TA	ZXLD1101ET5TA	TSOT-23-5	2.5-5.5	28	0.5	60	80 with 3 LEDs	1.27	1.11	.98	.86
◆ 522-ZXLD1320DCATC	ZXLD1320DCATC	TDFN-14-43	4 - 18	Vin to 18	-	12	85 with 4 LEDs	4.21	3.12	2.18	1.95
◆ 522-ZXLD1321DCATC	ZXLD1321DCATC	TDFN-14-43	1.2 - 12	Vin to 18	-	12	85 with 5 LEDs	4.32	3.20	2.24	2.00
◆ 522-ZXLD1322DCCTC	ZXLD1322DCCTC	DFN-14-43	2.5 - 15	Vin to 18	-	12	80 with 3 LEDs	4.43	3.28	2.30	2.05
◆ 522-ZXLD1350ET5TA	ZXLD1350ET5TA	TSOT-23-5	7.0-30.0	30	-	250	95	1.72	1.50	1.33	1.17
◆ 522-ZXLD1360E5TA	ZXLD1360E5TA	SOT-23-5	7.0-30.0	30	-	20	95	2.79	2.43	2.16	1.89
◆ 522-ZXLD1362ET5TA	ZXLD1362ET5TA	TSOT-23-5	6 - 60	Vin to 60	-	65	95	5.70	3.75	3.24	2.73
◆ 522-ZXLD1601H6TA	ZXLD1601H6TA	SC70-6	2.5-5.5	Vin to 28	0.1	60	85	1.65	1.25	1.00	.919
◆ 522-ZXLD1615ET5TA	ZXLD1615ET5TA	TSOT-23-5	2.5-5.5	Vin to 28	0.1	60	85	1.35	1.18	1.04	.92
◆ 522-ZXLD1937ET5TA	ZXLD1937ET5TA	TSOT-23-5	2.5-5.5	Vin to 28	0.1	60	85	1.52	1.28	1.02	.769

ZETEX LED DRIVER ICs

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| Features: <ul style="list-style-type: none"> • 1000:1 PWM dimming range • Inherent open-circuit LED protection • High switching frequency • Output shut down | Applications: <ul style="list-style-type: none"> • Low voltage halogen replacement LEDs • Automotive lighting • Illuminated signs • Low voltage industrial lighting | ◆ Surface Mount Device |
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MOUSER STOCK NO.	Zetex Part No.	Package	Min - Max Input Volt (V)	Output Voltage (V)	Typ Peak Output Current (A)	Frequency (kHz) typ	Efficiency (%)	Dimming Type	Price Each			Reel Qty.	Price Per Piece
									1	25	100		
◆ 522-ZXLD1352ET5TA	ZXLD1352ET5TA	TSOT23-5	7 - 30	30	0.35	1000	97	DC/PWM	1.72	1.50	1.16	3000	.86
◆ 522-ZXLD1356DACTC	ZXLD1356DACTC	DFN633	6 - 60	60	0.55	1000	97	DC/PWM	2.41	2.11	1.64	3000	1.22
◆ 522-ZXLD1356ET5TA	ZXLD1356ET5TA	TSOT23-5	6 - 60	60	0.55	1000	97	DC/PWM	2.14	1.87	1.46	3000	1.08
◆ 522-ZXLD1366DACTC	ZXLD1366DACTC	DFN633	6 - 60	60	1.00	500	95	DC/PWM	4.02	3.51	2.73	3000	2.03
◆ 522-ZXLD1366ET5TA	ZXLD1366ET5TA	TSOT23-5	6 - 60	60	1.00	500	95	DC/PWM	3.35	2.93	2.28	3000	1.69

ZETEX VARIABLE SPEED BRUSHLESS FAN MOTOR CONTROLLER

The ZXBM1004 is a single phase BLDC motor pre-driver providing variable speed control. Suitable for DC fans and blowers the IC can take inputs from an external PWM source or a thermistor to adjust the speed characteristics.

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| Features: <ul style="list-style-type: none"> • Single-phase pre-driver with variable speed control • PWM output drive for speed control, variable by external thermistor or PWM inputs • Adjustable minimum speed setting • Ability to be able to remove any speed change against supply voltage variation • Low noise | Applications: <ul style="list-style-type: none"> • Telecom mainframe fans and blowers • Mainframe and PC computer fans and blowers • Industrial fans and blowers | ◆ Surface Mount Device |
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For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Zetex Part No.	Package	Type	Quiescent Current Max. (mA)	Output Drive Current Max. (mA)	PWM Frequency (kHz)	Output Flag	Price Each			
								1	25	100	250
◆ 522-ZXBM1004Q16TA	ZXBM1004Q16TA	SOT-223	Single	8	5	24	Rotor lock & Speed Pulse	1.14	1.08	1.03	.98
◆ 522-ZXBM1015ST20TC	ZXBM1015ST20TC	TSSOP-20	Single	15	16	24	Rotor lock & Speed Pulse	1.34	1.28	1.23	1.17
◆ 522-ZXBM2004Q16TA	ZXBM2004Q16TA	QSOP-16	Dual	7.5	5	24	Rotor lock & Speed Pulse	1.78	.90	.85	.79
◆ 522-ZXBM2001X10TA	ZXBM2001X10TA	MSOP-10	Dual	3	80	1-50	Rotor lock & Speed Pulse	.90	.86	.83	.794
◆ 522-ZXBM2002X10TA	ZXBM2002X10TA	MSOP-10	Dual	3	80	1-50	Rotor lock only	.85	.80	.759	.714
◆ 522-ZXBM2003X10TA	ZXBM2003X10TA	MSOP-10	Dual	3	80	1-50	Speed pulse only	1.35	.68	.642	.599

ZETEX ANALOG VIDEO PRODUCTS

The Zetex range of video solutions has been expanded by the addition of a sync separator and a DC restore amplifier. The ZXFV4089 uses a sync pulse (typically from a sync separator) to restore the video black level to the correct DC voltage. The high speed amplifiers/buffers include quad and single amplifiers plus multi-channel unity-gain buffers. The ZXFV202, single video amplifier, is available in SOT23 offering superb differential gain and phase performance of 0.01%/0.01" respectively. ZXFV301N16 and ZXFV302N16 4:1 multiplexers are for use in video and other high speed applications.

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Zetex Part No.	Package	Type	Supply Voltage (V)	Supply Current (mA)	Price Each			
						1	25	100	250
◆ 522-ZXFV202N8EV	ZXFV202N8EV	-	Eval Board For ZXFV202N8TA	±5	7	78.75	-	-	-
◆ 522-ZXFV203EV	ZXFV203EV	-	Eval Board For ZXFV203N14TA	±5	21	78.75	-	-	-
◆ 522-ZXFV203N14TA	ZXFV203N14TA	SO-14N	Triple Video Amp	±5	21	2.31	2.05	1.79	1.62
◆ 522-ZXFV302EV	ZXFV302EV	-	Eval Board For ZXFV302N16	±5	17	78.75	-	-	-