

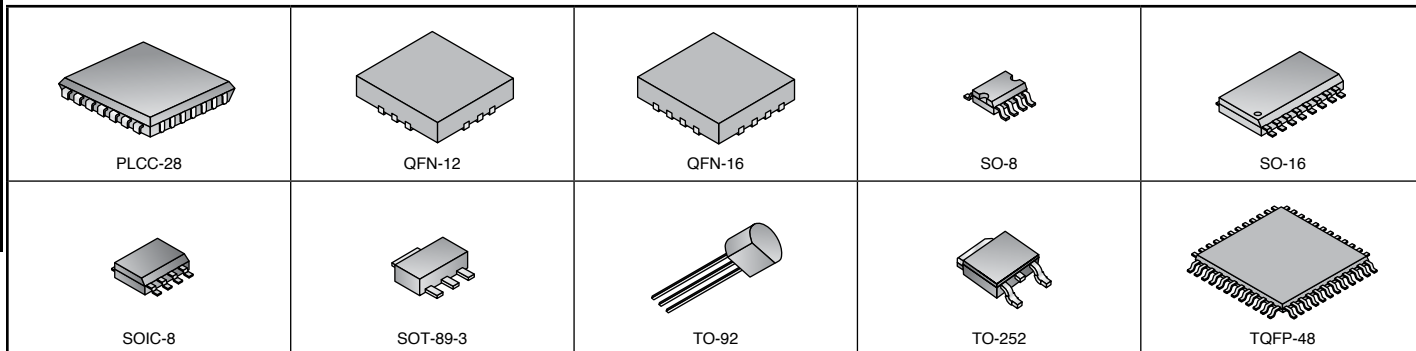
SUPERTEX Analog Integrated Circuits

Supertex

Products may be RoHS compliant. Check mouser.com for RoHS status.

Analog ICs

Supertex



SUPERTEX LINEAR REGULATOR INTEGRATED CIRCUITS

The LR6 is a high-input voltage linear regulator for simple functions such as SMPS start-up and high-voltage line conditioning/regulation. The LR7 is a high-input voltage SMPS start-up circuit. The LR8 has an adjustable output voltage. The SR036 and SR037 are dual output, off-line regulators. The LR12 is a high voltage, low output current, adjustable linear regulator. It has a wide operating input voltage range of 13.2V to 100V.

• For Evaluation/Design Shortcut see Demo Boards



RoHS Compliant
For quantities greater than listed, call for quote.

Surface Mount Device

MOUSER STOCK NO.	Supertex Part No.	Package	Input Voltage V_{IN} (+V)		Output Voltage HV_{OUT} (V) Typ.	Input Current I_{IN} Max. (mA)	Regulation Typical		Power Dissipation @TA=25°C (W)	Price Each			
			Min.	Max.			Line	Load		1	100	500	1000
			◆ 689-LR645LG-G	LR645LG-G			SOIC-8	15		450	10	3	0.0001%/V
◆ 689-LR745N8-G	LR745N8-G	SOT-89	25	450	20	2	0.0001%/V	0.5%/V	-	.72	.60	.55	.53
◆ 689-LR12K4-G	LR12K4-G	TO-252	13	100	1.2/88	50	0.003%/V	0.06%/mA	2	1.75	1.45	1.34	1.29
◆ 689-LR12LG-G	LR12LG-G	SO-8	13	100	1.2/88	50	0.003%/V	0.06%/mA	1.8	1.52	1.26	1.17	1.12
◆ 689-LR645N3-G	LR645N3-G	TO-92	15	450	10	3	0.0001%/V	0.5%/mA	0.74	.74	.615	.565	.539
◆ 689-LR645N8-G	LR645N8-G	SOT-89-3	15	450	10	3	0.0001%/V	0.5%/mA	1.6	.76	.63	.58	.56
◆ 689-LR745N3-G	LR745N3-G	TO-92	25	450	20	4	0.0001%/V	0.5%/mA	---	.79	.52	.49	.485
◆ 689-LR8K4-G	LR8K4-G	TO-252	12	450	1.2-440	10	0.003%/V	0.15%/mA	2.5	1.14	.95	.88	.84
◆ 689-LR8N8-G	LR8N8-G	SOT-89-3	12	450	1.2-440	10	0.003%/V	0.15%/mA	1.6	.76	.63	.58	.56
◆ 689-LR8N3-G	LR8N3-G	TO-92	12	450	1.2-440	10	0.003%/V	0.15%/mA	0.74	.72	.60	.55	.53
◆ 689-SR086SG-G	SR086SG-G	SOIC-8	80	285	9-50 and 3	100	---	0.02	---	1.41	1.17	1.08	1.04
◆ 689-SR087SG-G	SR087SG-G	SOIC-8	80	285	9-50 and 5	100	---	0.02	---	1.41	1.17	1.08	1.04

SUPERTEX MOSFET DRIVERS

High Voltage

Surface Mount Device

These are a family of single high voltage, low input current isolated drivers utilizing Supertex's proprietary HVCMOS® technology. They are designed to drive discrete MOSFETs configured as high side switches up to 400V. They do not require any external power supplies.



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MOUSER STOCK NO.	Supertex Part No.	Package	Channels	Input Voltage V_{IN}		Output Voltage HV_{OUT}		Input to Output Isolation (V)	Operating Temp. (°C)	Ext. Clock Frequency		Price Each			
				Low (V)	High (V)	Low (V)	High (V)			Min (MHz)	Max (MHz)	1	100	500	1000
				◆ 689-HT0440LG-G	HT0440LG-G	SOIC-8	2			3.15	5.5	6	10	±400	-40 to +85
◆ 689-HT0740LG-G	HT0740LG-G	SOIC-8	1	3.15	5.5	5	9	±400	-40 to +85	---	---	1.35	1.12	1.04	.99

High Speed

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Supertex Part No.	Package	Channels	Input Voltage V_{IN}		Output Voltage HV_{OUT}		Peak Output Sink Current Type (A)	Output Rise/Fall Typ. (ns)	Output Rise/Fall Typ. (ns)	Propagation Delay Match Typ (ns)	Price Each			
				Low (V)	High (V)	Low (V)	High (V)					1	100	500	1000
				◆ 689-MD1210K6-G	MD1210K6-G	QFN-12	2					4.5	13	0	13
◆ 689-MD1211LG-G	MD1211LG-G	SOIC-8	2	4.5	13	0	13	2	2	10/10	3	1.20	1.00	.92	.88
◆ 689-MD1711FG-G	MD1711FG-G	TQFP-48	12	1.8	5.5	-12	12.6	2(P-Ch)/1.5(N-Ch)	2(P-Ch)/1.5(N-Ch)	8.0/8.0	±3	11.04	9.18	8.48	8.13
◆ 689-MD1810K6-G	MD1810K6-G	QFN-16	4	1.2	5.0	---	---	2	2	6.0/6.0	±2	2.90	2.41	2.23	2.14
◆ 689-MD1811K6-G	MD1811K6-G	QFN-16	2	1.2	5.0	---	---	2	2	6.0/6.0	±2	2.89	2.40	2.22	2.13
◆ 689-MD1813K6-G	MD1813K6-G	QFN-16	4	1.2	5.0	---	---	2	2	6.0/6.0	±2	3.14	2.61	2.41	2.31

SUPERTEX RELAY DRIVER INTEGRATED CIRCUITS

The Supertex HV9901 is a BiCMOS/DMOS universal relay driver that employs PWM switching techniques. It is designed for efficient and energy-saving operation of a low voltage relay with supply voltages ranging from 10-450V DC through utilization of the relay coils' inductance.

Source/Sink Outputs - Push-Pull

Surface Mount Device

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Supertex Part No.	Package	Input Voltage V_{IN}		Input Current I_{IN} Max. (mA)	Oscillator Frequency			Current Sense		Ext. Adjustable Reg. Output		Price Each			
			Min. (V)	Max. (V)		Min. (KHz)	Max. (KHz)	Fsync-Max. (KHz)	Typ. Pull-In (V)	Hold	Voltage (V)	Current (mA)	1	100	500	1000
			◆ 689-HV9901NG-G	HV9901NG-G		SO-16	10	450	2	20	140	150	0.883	Adjustable	2.0-5.5	1

SUPERTEX HIGH VOLTAGE ANALOG SWITCH/MULTIPLEXER INTEGRATED CIRCUITS

These are low charge injection 8 or 16-channel high-voltage analog switch integrated circuit (IC) intended for use in applications requiring high voltage switching controlled by low voltage control signals, such as ultrasound imaging and printers.

Features:

- HVCMOS technology for high performance
- Very low quiescent power dissipation-10µA
- Output On-resistance typically 220ohms
- Low parasitic capacitances
- DC to 10MHz analog signal frequency
- -60dB typical output off isolation at 5MHz
- CMOS logic circuitry for low power
- Excellent noise immunity
- On-chip shift register, latch and clear logic circuitry
- Flexible high voltage supplies
- Surface mount package available



RoHS Compliant

Surface Mount Device

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Supertex Part No.	Package	Output Channels	Supply Voltage (V)	Analog Signal Voltage (V)	Switch Current (A)	Switch Resistance (Ω)	Power Dissipation @ TA=25°C (W)	Peak Analog Signal Current/Channel	Output Bleed Resistors	Price Each			
											1	100	500	1000
											◆ 689-HV2201FG-G	HV2201FG-G	TQFP-48	8
◆ 689-HV2201PJ-G	HV2201PJ-G	PLCC-28	8	200	180	±2	24	1.2	3	No	11.69	9.72	8.98	8.61
◆ 689-HV2301FG-G	HV2301FG-G	TQFP-48	8	200	180	±2	24	1.0	3	Yes	11.97	9.95	9.20	8.82
◆ 689-HV2301PJ-G	HV2301PJ-G	PLCC-28	8	200	180	±2	24	1.2	3	Yes	11.88	9.88	9.13	8.75
◆ 689-HV20220PJ-G	HV20220PJ-G	PLCC-28	8	200	180	±2	24	1.2	3	No	16.51	13.73	12.69	12.17
◆ 689-HV2601FG-G	HV2601FG-G	TQFP-48	16	200	180	±2	24	1.0	3	No	22.42	18.64	17.23	16.52
◆ 689-HV2701FG-G	HV2701FG-G	TQFP-48	16	200	180	±2	24	1.0	3	Yes	22.80	18.96	17.52	16.80

SUPERTEX ELECTRONIC LINE SWITCH INTEGRATED CIRCUITS

Surface Mount Device

These electronic switch ICs are designed as a replacement for the typical mechanical hook switch or electromechanical relays in telephones and answering machines. Multiple low-level inputs are provided for design versatility and may be controlled directly from logic circuitry or from mechanical switches. These ICs are line-powered and are especially useful in applications that require telephone operation when external power is lost or otherwise unavailable.

• For Evaluation/Design Shortcut see Demo Boards



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MOUSER STOCK NO.	Supertex Part No.	Package	Breakdown Voltage V_{TPG} (V)	Switch Resistance (Ω)	Output Voltage V_{TP} (V)		TPG Current Limiting (mA)		Input Voltage (V)	Price Each				
					Min.	Max.	Min.	Max.		1	100	500	1000	
					◆ 689-HT18LG-G	HT18LG-G	SOIC-8	350		18	16	20	200	300