

# SILICON LABORATORIES Current/Optical Sensors & Drivers



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

## AC CURRENT SENSORS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	SiLabs Part No.	Package	Full Scale Current (A)	Full Scale Error (% of Reading)	Isolation Rating	Output Mode	Price Each			
							1	25	100	1000
634-SI8501-C-IM	SI8501-C-IM	QFN-12	5	±5%	1 kV RMS	Single	1.03	.95	.89	.73
634-SI8502-C-IM	SI8502-C-IM	QFN-12	10	±5%	1 kV RMS	Single	1.07	.99	.92	.77
634-SI8503-C-IM	SI8503-C-IM	QFN-12	20	±5%	1 kV RMS	Single	1.12	1.03	.96	.80
634-SI8501-C-IS	SI8501-C-IS	SOIC-20	5	±5%	5 kV RMS	Single	1.39	1.29	1.20	1.00
634-SI8502-C-IS	SI8502-C-IS	SOIC-20	10	±5%	5 kV RMS	Single	1.45	1.35	1.25	1.04
634-SI8503-C-IS	SI8503-C-IS	SOIC-20	20	±5%	5 kV RMS	Single	1.52	1.41	1.31	1.10
634-SI8511-C-IM	SI8511-C-IM	QFN-12	5	±5%	1 kV RMS	Ping-Pong	1.12	1.03	.96	.80
634-SI8512-C-IM	SI8512-C-IM	QFN-12	10	±5%	1 kV RMS	Ping-Pong	1.16	1.08	1.00	.83
634-SI8511-C-IS	SI8511-C-IS	SOIC-20	5	±5%	5 kV RMS	Ping-Pong	1.52	1.41	1.31	1.10
634-SI8512-C-IS	SI8512-C-IS	SOIC-20	10	±5%	5 kV RMS	Ping-Pong	1.59	1.47	1.34	1.14
634-SI8513-C-IS	SI8513-C-IS	SOIC-20	20	±5%	5 kV RMS	Ping-Pong	1.66	1.54	1.43	1.19
634-SI8517-C-IM	SI8517-C-IM	QFN-12	5	±5%	1 kV RMS	Ping-Pong	1.12	1.03	.96	.80
634-SI8518-C-IM	SI8518-C-IM	QFN-12	10	±5%	1 kV RMS	Ping-Pong	1.16	1.08	1.00	.83
634-SI8519-C-IM	SI8519-C-IM	QFN-12	20	±5%	1 kV RMS	Ping-Pong	1.21	1.12	1.04	.87
634-SI8517-C-IS	SI8517-C-IS	SOIC-20	5	±5%	5 kV RMS	Ping-Pong	1.52	1.41	1.31	1.10
634-SI8518-C-IS	SI8518-C-IS	SOIC-20	10	±5%	5 kV RMS	Ping-Pong	1.59	1.47	1.37	1.14
634-SI8519-C-IS	SI8519-C-IS	SOIC-20	20	±5%	5 kV RMS	Ping-Pong	1.66	1.54	1.43	1.19

## Current Sensor Evaluation Kit

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	SiLabs Part No.	Description	Price Each
634-SI85XX-EVB	SI85XX-EVB	SI85xx Universal AC Current Sensor Evaluation Kit	19.95

## Target Board



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	SiLabs Part No.	Description	Price Each
634-SI85XX20AQFN-EVB	SI85XX20AQFN-EVB	Unidirectional AC Current Sensor Target Board	19.95

## QUICKSENSE™ INFRARED PROXIMITY SENSORS

The QuickSense Si1102 and Si1120 are the industry's most sensitive active infrared proximity sensor ICs enabling innovative touchless human interface applications with ultra-low power advantages. Comprised of an infrared LED driver, an infrared photodiode, an ambient light sensor (Si1120) and control logic, the devices are packaged in a 3x3 mm clear DFN. The high sensitivity infrared photodiode provides a single-pulse infrared proximity measurement offering customers an opportunity to implement infrared light emitting diodes with unusually low power levels.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	SiLabs Part No.	Package	Infrared Range (cm)	Ambient Light Sensor	Output Type	Price Each			
						1	25	100	1000
634-SI1102-A-GMR	SI1102-A-GMR	ODFN-8	40	No	Logic 0/1	2.78	2.58	2.39	1.75
634-SI1120-A-GM	SI1120-A-GM	ODFN-8	50	Yes	PWM	3.03	2.92	2.80	2.80

## Evaluation Kits

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	SiLabs Part No.	Description	Price Each
634-SI1102EK	SI1102EK	QuickSense™ Si1102 Mini-Proximity Sensing Demonstration Board	39.99
634-SI1120EK	SI1120EK	QuickSense™ Si1120 Evaluation Kit	199.99
634-IRSLIDEREK	IRSLIDEREK	QuickSense™ Si1120 Touchless Slider Evaluation Kit	49.99
634-KEYMATEK	KEYMATEK	QuickSense™ ITO Capacitive Film Evaluation Kit	79.99

## QUICKSENSE™ PROXIMITY AND AMBIENT LIGHT SENSORS



The QuickSense Si114x family features the industry's most sensitive and lowest power active infrared proximity and ambient light sensor ICs. The monolithic Si114x sensors include an all digital I2C control interface and up to three infrared LED drivers in an impressively small 2 mm x 2 mm clear QFN package. Capable of controlling one, two and three-infrared LED systems, the sensors enable developers to implement one-dimensional systems with a range of up to 50 cm or multi-dimensional systems capable of advanced motion sensing with a range of up to 50 cm or multi-dimensional systems capable of advanced motion sensing with a range of up to 50 cm or multi-dimensional systems capable of advanced motion sensing with a range of up to 15 cm. The robust infrared sensing architecture works in direct sunlight and includes an ambient light sensor capable of sensing light levels up to 128 kLux.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	SiLabs Part No.	Package	Supply Voltage	IrLED Emission Wavelength (nm)	LED Drivers	Rise Time (Min/Max) (ns)	Fall Time (Min/Max) (ns)	Max Total Current (mA)	Price Each			
									1	25	100	1000
634-SI1141-A10-GMR	SI1141-A10-GMR	QFN-10	1.8-3.6	850	1	10/40	10/40	500	2.88	2.76	2.50	2.30
634-SI1142-A10-GMR	SI1142-A10-GMR	QFN-10	1.8-3.6	850	2	10/40	10/40	500	4.00	3.54	3.25	2.95
634-SI1143-A10-GMR	SI1143-A10-GMR	QFN-10	1.8-3.6	850	3	10/40	10/40	500	4.49	4.25	3.91	3.74

## Evaluation Kits



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	SiLabs Part No.	Description	Price Each
634-SI1140DK	SI1140DK	QuickSense™ Si1140 Infrared Proximity & Ambient Light Sensor Demonstration Board	59.99
634-IRMF-B-EK	IRMF-B-EK	QuickSense™ Infrared Multi-Function Board Evaluation Kit demonstrates the flexibility and configurability of the Si114x product family	59.99
634-IRSLIDER2EK	IRSLIDER2EK	QuickSense™ Si1140 Touchless Slider Evaluation Kit	49.99

## AUDIO DRIVERS

Silicon Labs' Si824x audio drivers are isolated Class D gate drivers that power audio systems delivering from 30 W up to 1000 W of audio power. Based on Silicon Labs' proprietary isolation technology, the Si824x Class D audio drivers incorporate input-to-output isolation which enables level-translation of signals without additional external circuits. The Si824x audio drivers feature adjustable dead-time control for achieving optimal THD, overlap protection that safeguards against shoot-through current damage, robust immunity to latch-up and high-voltage transients and lower BOM costs and PCB footprints compared to non-isolated gate drive solutions.

### Features:

- PWM input
- High precision and linear programmable dead-time generator
- High latch-up immunity, > 100V/ns
- Built-in isolation and level translation in one package
- 1500 Vrms output-to-output isolation
- 2500 Vrms input-to-input isolation
- Up to 6MHz operation
- Wide Operating Range: -40C to +125C
- Transient immunity > 30kV/us

### Applications:

- Home theatre systems
- PA systems
- Car audio
- Guitar amps



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	SiLabs Part No.	Package	Input Type	Outputs	UVLO Voltage (V)	Isolation Rating (kVrms)	Peak Output (A)	Output Sink Resistance (Ω)	Output Source Resistance (Ω)	Price Each		
										1	25	100
634-SI8241BB-B-IS1	SI8241BB-B-IS1	SOIC-16	PWM	High Side/Low Side	8	2.5	0.5	5	15	2.91	2.65	2.40
634-SI8241CB-B-IS1	SI8241CB-B-IS1	SOIC-16	PWM	High Side/Low Side	10	2.5	0.5	5	15	2.91	2.65	2.40
634-SI8244BB-C-IS1	SI8244BB-C-IS1	SOIC-16	PWM	High Side/Low Side	8	2.5	4	1	2.7	3.23	2.93	2.66
634-SI8244CB-C-IS1	SI8244CB-C-IS1	SOIC-16	PWM	High Side/Low Side	10	2.5	4	1	2.7	3.23	2.93	2.66

## Demonstration Kit

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	SiLabs Part No.	Description	Price Each
634-SI824XCLASSD-KIT	SI824XCLASSD-KIT	Reference Design for the Si824x Series Class D Audio Amplifiers Drivers	281.25