V3/04.11.20

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INSPIRED ENGINEERING

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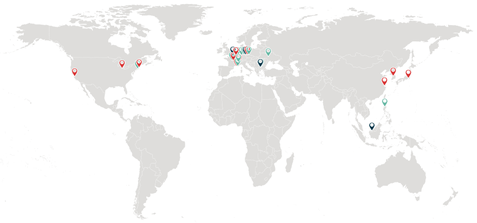

Research & Development
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SELECTION GUIDE

CURRENT SENSORS

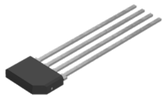
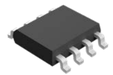
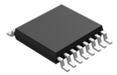
The snout of the platypus is a sensory organ with electroreceptors in the skin of the bill, which allow him to detect the electrical field that gets generated when his prey contracts its muscles. With his 40,000 sensitive electronic sensors, this unique semi aquatic egg-laying mammal represents our current sensors.

Our current sensors rely on cutting-edge implementation of Hall Effect technology for leading accuracy current monitoring in cars, domestic and industrial environments.

Current Sensors IC Portfolio

Type	Status	Part No.	Grade [4]	Temp	Supply Voltage	Supply Current	Output	Magnetic Saturation [2]	Sensitivity [1]		Over-current detection	Programming Range	Programmable [Daughter Board] [3]	Package	Bandwidth	Overvoltage / reverse polarity protection	Sensing Range [4]	Voltage Isolation
				°C	V	mA	Type	mT	mV/mT	mV/A	A	mV/mT			kHz	V		UL/IEC62368
IMC-HALL®	EoL	MLX91205KDC-AAL-003	IC	-40...125 °C	5V +/-10%	11	Analog Differential	10	280	-		-	-	SOIC8	100	+ 6 / 0	B	-
	EoL	MLX91205KDC-AAH-003	AIC	-40...125 °C	5V +/-10%	11	Analog Differential	25	100	-		-	-	SOIC8	100	+ 6 / 0	B	-
	Prod	MLX91206LDC-CAL-001	IC	-40...150 °C	5V +/-10%	7-9	Analog Ratiometric	10	580	-		460 - 700	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91206LDC-CAL-002	IC	-40...150 °C	5V +/-10%	7-9	Analog Ratiometric	10	380	-		300 - 470	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91206LDC-CAL-003	IC	-40...150 °C	5V +/-10%	7-9	Analog Ratiometric	10	250	-		200 - 310	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91206LDC-CAH-001	AIC	-40...150 °C	5V +/-10%	7-9	Analog Ratiometric	25	270	-		210 - 330	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91206LDC-CAH-002	AIC	-40...150 °C	5V +/-10%	7-9	Analog Ratiometric	25	170	-		130 - 220	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91206LDC-CAH-003	AIC	-40...150 °C	5V +/-10%	7-9	Analog Ratiometric	25	110	-		80 - 140	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91206LDC-CAH-004	AIC	-40...150 °C	5V +/-10%	7-9	Analog Ratiometric	25	77,5	-		60 - 110	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91206LDC-CAH-005	AIC	-40...150 °C	5V +/-10%	7-9	Analog Ratiometric	25	65	-		65	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91206LDC-CAH-021	AIC	-40...150 °C	5V +/-10%	7-9	Analog Ratiometric	25	270	-		210 - 330	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91206LDC-CAH-104	AIC	-40...150 °C	5V +/-10%	7-9	PWM	25	2,2	-		0.5 - 5% DC/mT	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91208LDC-CAL-000	AIC	-40...150 °C	5V +/-10%	12	Analog Ratiometric	10	250	-		100 - 700	Hall05	SOIC8	250	+10 / -0.3	UB	-
	Prod	MLX91208LDC-CAH-000	AIC	-40...150 °C	5V +/-10%	12	Analog Ratiometric	25	100	-		50 - 300	Hall05	SOIC8	250	+10 / -0.3	UB	-
	Prod	MLX91208LDC-CAV-000	AIC	-40...150 °C	5V +/-10%	12	Analog Ratiometric	60	40	-		30 - 200	Hall05	SOIC8	250	+10 / -0.3	UB	-
	Prod	MLX91208LDC-CAV-001	AIC	-40...150 °C	5V +/-10%	12	Analog Ratiometric	60	60	-		30 - 200	Hall05	SOIC8	250	+10 / -0.3	UB	-
	Prod	MLX91216LDC-ACH-000	AIC	-40...150 °C	5V +/-10%	10 / 12.5	Analog Ratiometric	25	100	-		50 - 300	Hall05	SOIC8	250 (prog)	+10 / -0.3	UB	-
	Prod	MLX91216LDC-ACV-000	AIC	-40...150 °C	5V +/-10%	10 / 12.5	Analog Ratiometric	60	40	-		30 - 200	Hall05	SOIC8	250 (prog)	+10 / -0.3	UB	-
	Prod	MLX91216LDC-ACV-001	AIC	-40...150 °C	5V +/-10%	10 / 12.5	Analog Ratiometric	60	60	-		30 - 200	Hall05	SOIC8	250 (prog)	+10 / -0.3	UB	-
CONVENTIONAL HALL	Prod	MLX91207LDC-CAA-005	AIC	-40...150 °C	5V +/-10%	9	Analog Ratiometric	-	25	-		15 - 45	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91207LDC-CAA-007	AIC	-40...150 °C	5V +/-10%	9	Analog Ratiometric	-	10	-		5 - 20	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91207LDC-CAA-015	AIC	-40...150 °C	5V +/-10%	9	Analog Ratiometric	-	25	-		15 - 45	Hall03	SOIC8	70	+20 / -10	UB	-
	Prod	MLX91209LVA-CAA-000	AIC	-40...150 °C	5V +/-10%	12	Analog Ratiometric	-	50	-		5 - 150	Hall05	SIP4-VA	250	+10 / -0.3	UB	-
	Prod	MLX91209LVA-CAA-001	AIC	-40...150 °C	5V +/-10%	12	Analog Ratiometric	-	15	-		5 - 150	Hall05	SIP4-VA	250	+10 / -0.3	UB	-
	Prod	MLX91209LVA-CAA-002	AIC	-40...150 °C	5V +/-10%	12	Analog Ratiometric	-	7,3	-		5 - 150	Hall05	SIP4-VA	250	+10 / -0.3	UB	-
	Prod	MLX91209LVA-CAA-003	AIC	-40...150 °C	5V +/-10%	12	Analog Ratiometric	-	19	-		5 - 150	Hall05	SIP4-VA	250	+10 / -0.3	UB	-
	Prod	MLX91217LVA-ACA-000	AIC	-40...150 °C	5V +/-10%	10 / 12.5	Analog Ratiometric	-	10	-		5 - 150	Hall05	SIP4-VA	250 (prog)	+10 / -0.3	UB	-
	Prod	MLX91217LVA-ACA-003	AIC	-40...150 °C	5V +/-10%	10 / 12.5	Analog Ratiometric	-	9	-		5 - 150	Hall05	SIP4-VA	250 (prog)	+10 / -0.3	UB	-
	Prod	MLX91217LVA-ACA-005	AIC	-40...150 °C	5V +/-10%	10 / 12.5	Analog Ratiometric	-	13	-		5 - 150	Hall05	SIP4-VA	250 (prog)	+10 / -0.3	UB	-
	Prod	MLX91211LUA-ABA-500	AIC	-40...150 °C	5V +/-10%	5	Analog Ratiometric	-	18,8	-		-	-	TO92-3L	40	+6.5 / -0.3	B	-
	Prod	MLX91211LUA-ABA-510	AIC	-40...150 °C	5V +/-10%	5	Analog Ratiometric	-	25	-		-	-	TO92-3L	40	+6.5 / -0.3	B	-
	Prod	MLX91211LUA-ABA-520	AIC	-40...150 °C	5V +/-10%	5	Analog Ratiometric	-	31,25	-		-	-	TO92-3L	40	+6.5 / -0.3	B	-
	Prod	MLX91211LUA-ABA-530	AIC	-40...150 °C	5V +/-10%	5	Analog Ratiometric	-	50	-		-	-	TO92-3L	40	+6.5 / -0.3	B	-
	Prod	MLX91211LUA-ABA-540	AIC	-40...150 °C	5V +/-10%	5	Analog Ratiometric	-	100	-		-	-	TO92-3L	40	+6.5 / -0.3	B	-
	Prod	MLX91211LUA-ABT-500	AIC	-40...150 °C	5V +/-10%	5	Analog Ratiometric	-	18,8	-		-	-	TO92-3L	40	+6.5 / -0.3	B	-
	Prod	MLX91211LUA-ABT-510	AIC	-40...150 °C	5V +/-10%	5	Analog Ratiometric	-	25	-		-	-	TO92-3L	40	+6.5 / -0.3	B	-
	Prod	MLX91211LUA-ABT-520	AIC	-40...150 °C	5V +/-10%	5	Analog Ratiometric	-	31,25	-		-	-	TO92-3L	40	+6.5 / -0.3	B	-
	Prod	MLX91211LUA-ABT-530	AIC	-40...150 °C	5V +/-10%	5	Analog Ratiometric	-	50	-		-	-	TO92-3L	40	+6.5 / -0.3	B	-
	Prod	MLX91211LUA-ABT-540	AIC	-40...150 °C	5V +/-10%	5	Analog Ratiometric	-	100	-		-	-	TO92-3L	40	+6.5 / -0.3	B	-
	Prod	MLX91211LSE-ABA-510	AIC	-40...150 °C	5V +/-10%	5	Analog Ratiometric	-	25	-		-	-	TSOT-3L	40	+6.5 / -0.3	B	-
	Prod	MLX91211LSE-ABA-310	AIC	-40...150 °C	3.3V +/-5%	5	Analog Ratiometric	-	16,5	-		-	-	TSOT-3L	40	+6.5 / -0.3	B	-
INTEGRATED PRIMARY	Sample	MLX91220KDC-ABF-025 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Fixed	-	-	80	29,3	-	-	SOIC8	300	+8 / -0.3	B	2.4 kV
	Sample	MLX91220KDC-ABF-050 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Fixed	-	-	40	58,6	-	-	SOIC8	300	+8 / -0.3	B	2.4 kV
	Sample	MLX91220KDC-ABR-020 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Ratiometric	-	-	100	23,4	-	-	SOIC8	300	+8 / -0.3	B	2.4 kV
	Sample	MLX91220KDC-ABR-025 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Ratiometric	-	-	80	29,3	-	-	SOIC8	300	+8 / -0.3	B	2.4 kV
	Sample	MLX91220KDC-ABR-030 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Ratiometric	-	-	66	35,5	-	-	SOIC8	300	+8 / -0.3	B	2.4 kV
	Sample	MLX91220KDC-ABR-050 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Ratiometric	-	-	40	58,6	-	-	SOIC8	300	+8 / -0.3	B	2.4 kV
	Sample	MLX91220KDF-ABF-117 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Fixed	-	-	120	15,7	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91220KDF-ABF-025 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Fixed	-	-	80	29,3	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91220KDF-ABF-050 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Fixed	-	-	40	58,6	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91220KDF-ABF-075 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Fixed	-	-	26,67	87,9	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91220KDF-ABR-025 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Ratiometric	-	-	80	29,3	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91220KDF-ABR-050 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Ratiometric	-	-	40	58,6	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91220KDF-ABR-075 RE	AIC	-40...125 °C	5V +/-10%	20	Analog Ratiometric	-	-	26,7	87,9	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91221KDC-ABF-025 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Fixed	-	-	50	26,9	-	-	SOIC8	300	+8 / -0.3	B	2.4 kV
	Sample	MLX91221KDC-ABF-050 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Fixed	-	-	25	61	-	-	SOIC8	300	+8 / -0.3	B	2.4 kV
	Sample	MLX91221KDC-ABR-020 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Ratiometric	-	-	62,5	21,5	-	-	SOIC8	300	+8 / -0.3	B	2.4 kV
	Sample	MLX91221KDC-ABR-050 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Ratiometric	-	-	25	61	-	-	SOIC8	300	+8 / -0.3	B	2.4 kV
	Sample	MLX91221KDF-ABF-010 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Fixed	-	-	120	10,76	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91221KDF-ABF-020 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Fixed	-	-	62,5	21,5	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91221KDF-ABF-025 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Fixed	-	-	50	26,9	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91221KDC-ABR-038 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Ratiometric	-	-	33,3	45,7	-	-	SOIC8	300	+8 / -0.3	B	2.4 kV
	Sample	MLX91221KDF-ABR-050 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Ratiometric	-	-	25	61	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91221KDF-ABF-050 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Fixed	-	-	25	61	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91221KDF-ABF-075 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Fixed	-	-	16,67	91,5	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91221KDF-ABR-020 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Ratiometric	-	-	62,5	21,52	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	Sample	MLX91221KDF-ABF-120 RE	AIC	-40...125 °C	3.3V +/-5%	20	Analog Fixed	-	-	62,5	30	-	-	SOIC16WB	300	+8 / -0.3	B	4.8 kV
	EoL	MLX91210KDC-CAS-101	IC	-40...125 °C	5V +/-10%	12	Analog Ratiometric	-	-	80		-	-	SOIC8	100	+10 / -0.3	B	2.1kV
	EoL	MLX91210KDC-CAS-102	IC	-40...125 °C	5V +/-10%	12	Analog Ratiometric	-	-	40		-	-	SOIC8	100	+10 / -0.3	B	2.1kV
	EoL	MLX91210KDC-CAS-104	IC	-40...125 °C	5V +/-10%	12	Analog Ratiometric	-	-	32		-	-	SOIC8	100	+10 / -0.3	B	2.1kV
	EoL	MLX91210KDC-CAS-105	IC	-40...125 °C	5V +/-10%	12	Analog Ratiometric	-	-	667		-	-	SOIC8	100	+10 / -0.3	B	2.1kV
	EoL	MLX91210KDC-CAS-106	IC	-40...125 °C	5V +/-10%	12	Analog Ratiometric	-	-	50		-	-	SOIC8	100	+10 / -0.3	B	2.1kV
	EoL	MLX91210KDF-CAS-101	IC	-40...125 °C	5V +/-10%	12	Analog Ratiometric	-	-	80		-	-	SOIC16WB	100	+10 / -0.3	B	2.5kV
	EoL	MLX91210KDF-CAS-102	IC	-40...125 °C	5V +/-10%	12	Analog Ratiometric	-	-	40		-	-	SOIC16WB	100	+10 / -0.3	B	2.5kV
	EoL	MLX91210KDF-CAS-103	IC	-40...125 °C	5V +/-10%	12	Analog Ratiometric	-	-	267		-	-	SOIC16WB	100	+10 / -0.3	B	2.5kV
	EoL	MLX91210KDF-CAS-104	IC	-40...125 °C	5V +/-10%	12	Analog Ratiometric	-	-	32		-	-	SOIC16WB	100	+10 / -0.3	B	2.5kV

PACKAGES

	VISUAL APPEARANCE	GREEN COMPLIANCE
THROUGH-HOLE PACKAGE	 SIP4 (VA)	✓
	 TO92-3L flat (UA)	
SURFACE MOUNT PACKAGE	 SOIC8 (DC)  SOIC16WB (DF)	✓
	 TSOT-3L (SE)	

(1) Sensitivity at nominal supply voltage, can scale with ratiometry.

(2) *(3)*

(4) Explanation

A = Automotive (AEC - Q100)
I = Industrial
C = Consumer
U = Unipolar
B = Bipolar
SOIC16WB = SOIC16 Wide Body
EoL = End of life
Prod = In production

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