

No Latency Delta-Sigma™ ADCs

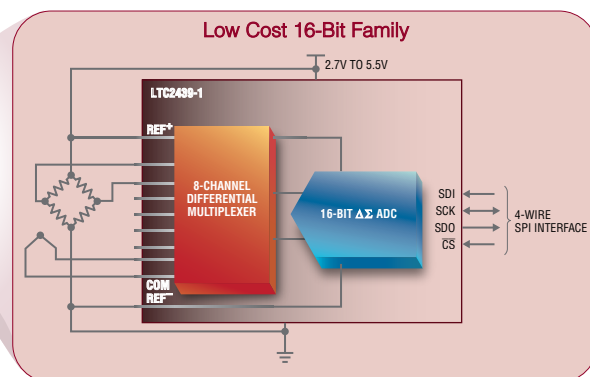
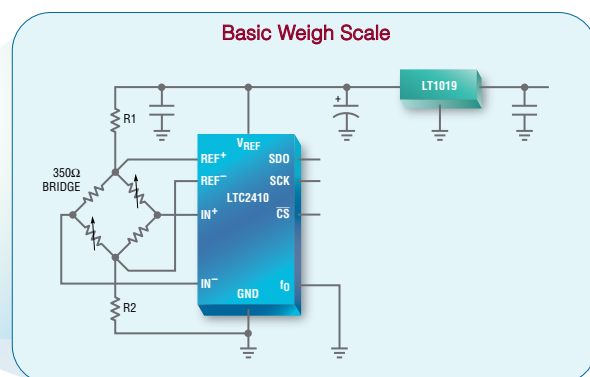
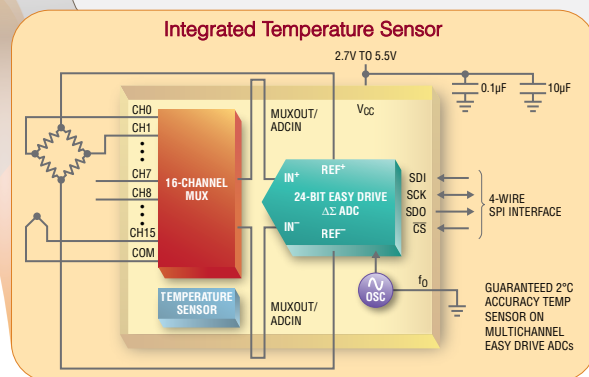
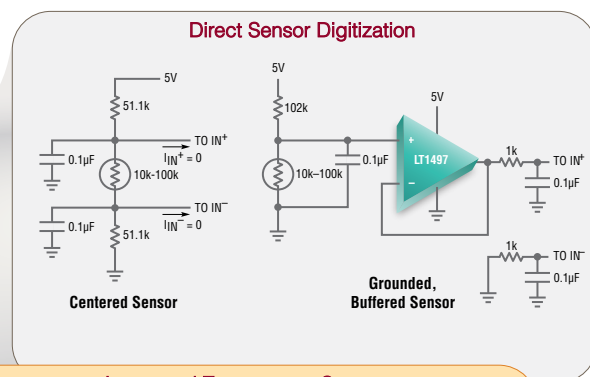
Easy Drive™ $\Delta\Sigma$ ADC Family 600nV _{RMS} Core, Matched Source RCs								
Part Number	Bits	# Ch	Speed (sps)	Noise (μ V)	INL (ppm)	I/O	50Hz/60Hz* Rejection	MUXOUT/ ADCIN
LTC®2480	16	1	7.5/15	0.6	2	SPI	Simultaneous	No
LTC2481	16	1	7.5/15	0.6	2	I²C	Simultaneous	No
LTC2482	16	1	6.8	0.6	2	SPI	Simultaneous	No
LTC2483	16	1	6.8	0.6	2	I²C	Simultaneous	No
LTC2484	24	1	7.5/15	0.6	2	SPI	Simultaneous	No
LTC2485	24	1	7.5/15	0.6	2	I²C	Simultaneous	No
LTC2486	16	4	7.5/15	0.6	2	SPI	Simultaneous	No
LTC2487	16	4	7.5/15	0.6	2	I²C	Simultaneous	No
LTC2488	16	4	6.8	0.6	2	SPI	Simultaneous	No
LTC2489	16	4	6.8	0.6	2	I²C	Simultaneous	No
LTC2492	24	4	7.5/15	0.6	2	SPI	Simultaneous	No
LTC2493	24	4	7.5/15	0.6	2	I²C	Simultaneous	No
LTC2494	16	16	7.5/15	0.6	2	SPI	Simultaneous	Yes
LTC2495	16	16	7.5/15	0.6	2	I²C	Simultaneous	Yes
LTC2496	16	16	6.8	0.6	2	SPI	Simultaneous	Yes
LTC2497	16	16	6.8	0.6	2	I²C	Simultaneous	Yes
LTC2498	24	16	7.5/15	0.6	2	SPI	Simultaneous	Yes
LTC2499	24	16	7.5/15	0.6	2	I²C	Simultaneous	Yes

24-Bit First Generation Differential $\Delta\Sigma$ ADC Family ≈ 1 μ V Noise Core								
Part Number	Bits	# Ch	Speed (sps)	Noise (μ V)	INL (ppm)	I/O	50Hz/60Hz* Rejection	MUXOUT/ ADCIN
LTC2410	24	1	7.5	0.8	1	SPI	Selectable	No
LTC2411	24	1	7.5	1.45	1	SPI	Selectable	No
LTC2411-1	24	1	7.5	1.45	1	SPI	Simultaneous	No
LTC2412	24	2	7.5	0.8	1	SPI	Selectable	No
LTC2413	24	1	6.9	0.8	1	SPI	Simultaneous	No
LTC2415	24	1	15	1.1	1	SPI	Selectable	No
LTC2415-1	24	1	13.7	1.1	1	SPI	Simultaneous	No
LTC2414	24	8	7.5	1	1	SPI	Selectable	No
LTC2418	24	16	7.5	1	1	SPI	Selectable	No

20-Bit First Generation Differential $\Delta\Sigma$ ADC Family Shrunk Sample Capacitor, Easier to Drive, Allows Overclocking								
Part Number	Bits	# Ch	Speed (sps)	Noise (μ V)	INL (ppm)	I/O	50Hz/60Hz* Rejection	MUXOUT/ ADCIN
LTC2430	20	1	7.5	2.8	2	SPI	Selectable	No
LTC2431	20	1	7.5	2.8	2	SPI	Selectable	No
LTC2435	20	1	15	4	2	SPI	Selectable	No
LTC2435-1	20	1	13.6	4	2	SPI	Simultaneous	No

16-Bit First Generation Differential $\Delta\Sigma$ ADC Family ≈ 1 μ V Noise Core								
Part Number	Bits	# Ch	Speed (sps)	Noise (μ V)	INL (ppm)	I/O	50Hz/60Hz* Rejection	MUXOUT/ ADCIN
LTC2433-1	16	1	6.8	1.45	1	SPI	Simultaneous	No
LTC2436-1	16	2	6.8	0.8	1	SPI	Simultaneous	No
LTC2439-1	16	16	6.8	1	1	SPI	Simultaneous	No

*Simultaneous 50Hz/60Hz rejection; Selectable 50Hz or 60Hz notch filter



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24-Bit First Generation Single-Ended $\Delta\Sigma$ ADC Family 12.5% Underrange and Overrange Capability								
Part Number	Bits	# Ch	Speed (sps)	Noise (μV)	INL (ppm)	I/O	50Hz/60Hz* Rejection	MUXOUT/ ADCIN
LTC2400	24	1	7.5	1.5	2	SPI	Selectable	No
LTC2401	24	1	7.5	3	2	SPI	Selectable	No
LTC2402	24	2	7.5	3	2	SPI	Selectable	No
LTC2404	24	4	7.5	1.5	2	SPI	Selectable	Yes
LTC2408	24	8	7.5	1.5	2	SPI	Selectable	Yes

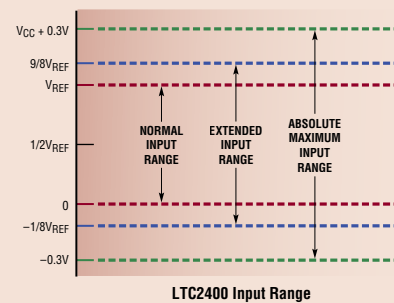
20-Bit First Generation Single-Ended $\Delta\Sigma$ ADC Family Shrunk Sample Capacitor, Easier to Drive, Allows Overclocking								
Part Number	Bits	# Ch	Speed (sps)	Noise (μV)	INL (ppm)	I/O	50Hz/60Hz* Rejection	MUXOUT/ ADCIN
LTC2420	20	1	7.5	6	4	SPI	Selectable	No
LTC2421	20	1	7.5	6	4	SPI	Selectable	No
LTC2422	20	2	7.5	6	4	SPI	Selectable	No
LTC2424	20	4	7.5	6	4	SPI	Selectable	Yes
LTC2428	20	8	7.5	6	4	SPI	Selectable	Yes

24-Bit High Speed $\Delta\Sigma$ ADC Family 200nV _{RMS} , 10-Speed Gearshift Core								
Part Number	Bits	# Ch	Speed (sps)	Noise (μV)	INL (ppm)	I/O	50Hz/60Hz* Rejection	MUXOUT/ ADCIN
LTC2440	24	1	4000	0.2	3	SPI	Simultaneous	No
LTC2445	24	8	8000	0.2	3	SPI	Simultaneous	Yes
LTC2447	24	8	8000	0.2	5	SPI	Simultaneous	Yes
LTC2449	24	16	8000	0.2	3	SPI	Simultaneous	Yes
LTC2442	24	4	8000	0.22	2	SPI	Simultaneous	Yes
LTC2444	24	8	8000	0.28	3	SPI	Simultaneous	No
LTC2446	24	8	8000	0.28	3	SPI	Simultaneous	No
LTC2448	24	16	8000	0.28	3	SPI	Simultaneous	No

Ultra-Tiny 16-Bit $\Delta\Sigma$ ADC Family Input Current Cancellation, Easy to Drive, Simple RC Filters with No Accuracy Penalty								
Part Number	Bits	# Ch	Speed (sps)	Noise (μV)	INL (LSB)	I/O	Differential Input	Internal Reference
LTC2450	16	1	30	1.4	2	SPI	No	No
LTC2450-1	16	1	60	1.4	2	SPI	No	No
LTC2451	16	1	60	1.4	2	I ² C	No	No
LTC2452	16	1	60	1.4	1	SPI	Yes	No
LTC2453	16	1	60	1.4	2	I ² C	Yes	No
LTC2460	16	1	60	2.2	1	SPI	No	Yes
LTC2461	16	1	60	2.2	1	I ² C	No	Yes
LTC2462	16	1	60	2.2	1	SPI	Yes	Yes
LTC2463	16	1	60	2.2	1	I ² C	Yes	Yes
LTC2470	16	1	833	3	8	SPI	No	Yes
LTC2471	16	1	833	3	8	I ² C	No	Yes
LTC2472	16	1	833	3	8	SPI	Yes	Yes
LTC2473	16	1	833	3	8	I ² C	Yes	Yes

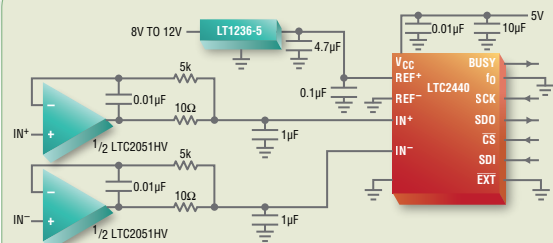
*Simultaneous 50Hz/60Hz rejection; Selectable 50Hz or 60Hz notch filter

0V to 5V Input Range

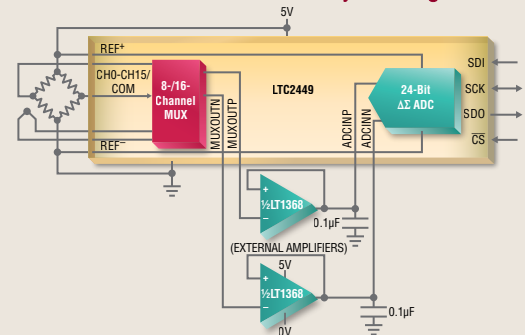


LTC2400 Input Range

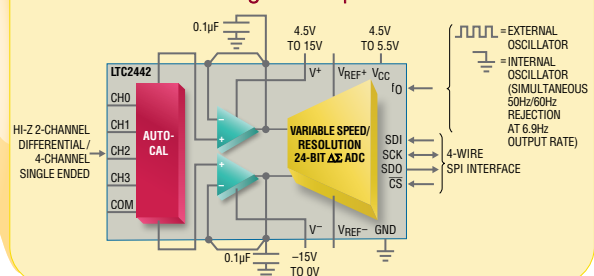
Buffer for Max Performance



MUXOUT/ADCIN for Easy Buffering



Integrated Amplifier



Built-In Reference

