

CADEKA[®] Data Converter Products



CADEKA provides leading-edge data converter products designed for a variety of commercial, industrial, and military applications including: video capture, medical ultrasound, wireless communications, automated test equipment, digital oscilloscopes, radar, navigation, and guidance systems. In addition, CADEKA supplies conversion products with top-notch competitive resolution, sampling rate, power, and cost.

OFFERING TECHNOLOGY & SUPPORT

- Application specific features to minimize engineering costs and reduce development time
- Low power consumption and dynamic performance to enable designers to minimize power consumption without sacrificing performance
- Design and applications support that provide engineers with fast and accurate solutions, allowing designers to minimize their time-to-market.

Analog-to-Digital Converters (ADCs)

Part Number	# of Input Ch	Resolution (Bits)	Sample Rate (max) (MSPS)	SNR (dBFS)	SINAD (dBFS)	SFDR (dBc)	ENOB (Bits)	Power Consumption per Ch (mW)	Total Power Dissipation (mW)	Input Type	Architecture	Operating Temp Range (°C)	Packages
CDK1300	1	8	250	43.0	40.0	43	6.4	310	310	Diff	Folding	-40 to 85	TQFP-44
CDK1301	1	8	250	46.1	43.7	47	7.0	425	425	Diff	Fold/Interpolation	-40 to 85	TQFP-44
CDK1302	1	8	750	44.0	41.0	43	6.5	5500	5500	SE	Flash	-25 to 85	MQUAD-80
CDK1303	1	8	1000	43.0	40.0	43	6.5	5500	5500	SE	Flash	-25 to 85	MQUAD-80
CDK1304	1	10	25	57.0	55.0	63	8.8	135	135	SE	Interleaved	0 to 70	TQFP-32, SOIC-28
CDK1305	1	10	40	54.0	54.0	63	8.7	175	175	SE	Interleaved	0 to 70	TQFP-32, SOIC-28
CDK1306	1	10	40	58.0	57.0	64	9.2	160	160	SE	Interleaved	0 to 70	TQFP-32, SOIC-28
CDK1307A	1	12	20	72.2	72.0	85	11.7	19	19	Diff	Pipeline	-40 to 85	QFN-40
CDK1307B	1	12	40	72.7	72.1	81	11.7	33	33	Diff	Pipeline	-40 to 85	QFN-40
CDK1307C	1	12	65	72.6	71.7	81	11.6	50	50	Diff	Pipeline	-40 to 85	QFN-40
CDK1307D	1	12	80	72.0	70.5	77	11.4	60	60	Diff	Pipeline	-40 to 85	QFN-40
CDK2307A	2	12	20	72.2	72.0	85	11.7	15	30	Diff	Pipeline	-40 to 85	QFN-64, TQFP-64
CDK2307B	2	12	40	72.7	72.1	81	11.7	28	55	Diff	Pipeline	-40 to 85	QFN-64, TQFP-64
CDK2307C	2	12	65	72.6	71.7	81	11.6	43	85	Diff	Pipeline	-40 to 85	QFN-64, TQFP-64
CDK2307D	2	12	80	72.0	70.5	77	11.4	51	102	Diff	Pipeline	-40 to 85	QFN-64, TQFP-64
CDK1308A	1	10	20	61.6	61.6	81	9.9	15	15	Diff	Pipeline	-40 to 85	QFN-40
CDK1308B	1	10	40	61.6	61.6	81	9.9	25	25	Diff	Pipeline	-40 to 85	QFN-40
CDK1308C	1	10	65	61.6	61.6	77	9.9	38	38	Diff	Pipeline	-40 to 85	QFN-40
CDK1308D	1	10	80	61.6	61.3	75	9.9	46	46	Diff	Pipeline	-40 to 85	QFN-40
CDK2308A	2	10	20	61.6	61.6	81	9.9	12	24	Diff	Pipeline	-40 to 85	QFN-64
CDK2308B	2	10	40	61.6	61.6	81	9.9	22	43	Diff	Pipeline	-40 to 85	QFN-64

Notes: Diff = Differential, SE = Single-Ended, Folding = Folding & Interpolation.

Analog-to-Digital Converters (ADCs) (Continued)

Part Number	# of Input Ch	Resolution (Bits)	Sample Rate (max) (MSPS)	SNR (dBFS)	SINAD (dBFS)	SFDR (dBc)	ENOB (Bits)	Power Consumption per Ch (mW)	Total Power Dissipation (mW)	Input Type	Architecture	Operating Temp Range (°C)	Packages
CDK2308C	2	10	65	61.6	61.6	77	9.9	33	65	Diff	Pipeline	-40 to 85	QFN-64
CDK2308D	2	10	80	61.6	61.6	75	9.9	39	78	Diff	Pipeline	-40 to 85	QFN-64
CDK4320†	1	8	1000	49.5	46.8	55	7.5	432	432	Diff	Pipeline	-40 to 85	QFN-48
	2	8	500	49.9	49.7	65	8.0	216	432	Diff	Pipeline	-40 to 85	QFN-48
	4	8	250	49.5	46.8	55	7.5	108	432	Diff	Pipeline	-40 to 85	QFN-48
CDK4321†	1	12	640	71.0	62.0	65	10.0	531	531	Diff	Pipeline	-40 to 85	QFN-48
	2	12	320	71.0	66.0	65	10.6	265	531	Diff	Pipeline	-40 to 85	QFN-48
	4	12	160	71.0	67.0	65	10.8	133	531	Diff	Pipeline	-40 to 85	QFN-48
	4	14	80	75.0	73.5	85	11.9	124	495	Diff	Pipeline	-40 to 85	QFN-48
CDK4330†	4	14	80	75.0	73.5	85	11.9	128	513	Diff	Pipeline	-40 to 85	QFN-48
CDK8307A*	8	12	20	72.2	71.5	82	11.6	22	175	Diff	Pipeline	-40 to 85	QFN-64, TQFP-80
CDK8307B*	8	12	40	72.2	71.5	82	11.6	34	272	Diff	Pipeline	-40 to 85	QFN-64, TQFP-80
CDK8307C*	8	12	50	72.2	71.5	82	11.6	40	321	Diff	Pipeline	-40 to 85	QFN-64, TQFP-80
CDK8307D*	8	12	65	72.2	71.5	82	11.6	48	382	Diff	Pipeline	-40 to 85	QFN-64, TQFP-80

Notes: * Preliminary, † Advance Information, Diff = Differential, SE = Single-Ended, Folding = Folding & Interpolation.

Digital-to-Analog Converters (DACs)

Part Number	Number of Converters	Resolution (Bits)	Conversion Rate (MWPS)	Settling Time (ns)	DNL (max) (%/FS)	INL (max) (%/FS)	Power Dissipation (max) (mW)	Packages
CDK3400	3	10	100	n/a	±0.25	±0.25	655	TQFP-48
CDK3401	3	10	150	n/a	±0.25	±0.25	655	TQFP-48
CDK3402	3	8	100	n/a	±0.3	±0.3	655	TQFP-48
CDK3403	3	8	150	n/a	±0.3	±0.3	655	TQFP-48
CDK3404	3	8	180	2.5	±0.5 LSB	±0.5 LSB	300	TQFP-48
CDK3405	3	8	180	2.5	±0.5 LSB	±0.5 LSB	300	TQFP-48

Note: CDK3405 matches ADV7125 pinout.

For additional information regarding our products, please visit us at: cadeka.com

CADEKA Headquarters Loveland, Colorado
T: 970.663.5452
T: 877.663.5452 (toll free)

CADEKA, the CADEKA logo design, COMLINEAR and the COMLINEAR logo design are trademarks or registered trademarks of CADEKA Microcircuits LLC. All other brand and product names may be trademarks of their respective companies.

CADEKA reserves the right to make changes to any products and services herein at any time without notice. CADEKA does not assume any responsibility or liability arising out of the application or use of any product or service described herein, except as expressly agreed to in writing by CADEKA; nor does the purchase, lease, or use of a product or service from CADEKA convey a license under any patent rights, copyrights, trademark rights, or any other of the intellectual property rights of CADEKA or of third parties.

©2007-2010 CADEKA Microcircuits LLC. All rights reserved.

