

Prosumer Audio Portfolio



CIRRUS LOGIC®

Applications

Cirrus Logic is an expert in high-performance audio analog-to-digital converters (ADCs), digital-to-analog converters (DACs), and audio codecs. These converters, together with our clocking devices, serve a number of key applications.

Pro audio



Audio interfaces



HiFi playback



Installed AV



Musical instruments



Converters

High Performance - The latest Cirrus Logic portfolio of high-performance audio converters—featuring the CS430xP/S DACs, CS530xP/S ADCs, and CS4282P stereo codec—extends our legacy of best-in-class audio performance across a broader range of professional applications. These devices are designed to deliver a transparent audio experience, accurately recording and reproducing audio.

ADC

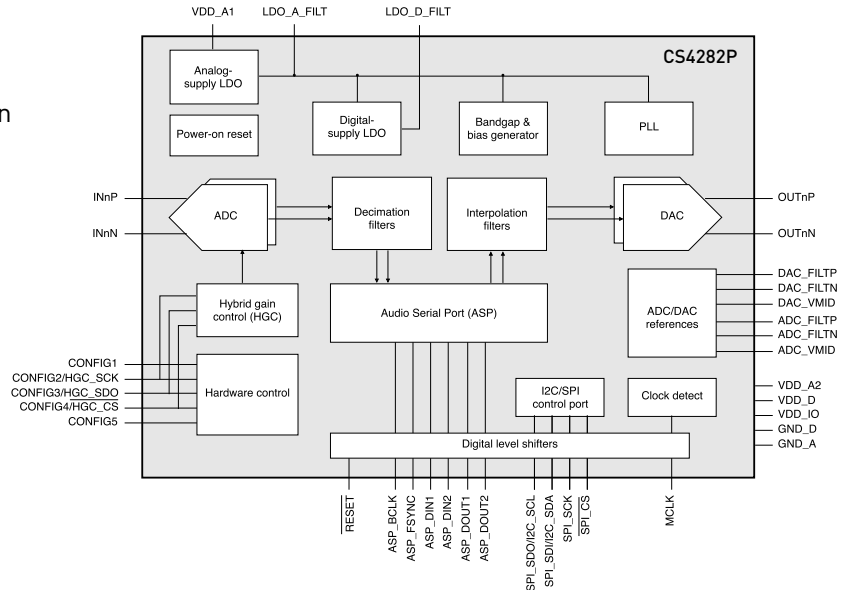
- High performance differential analog ADC
- Enhanced hybrid gain control
 - New feature, simpler mic preamp gain design
 - Reduces pops and clicks

DAC

- High performance differential DAC
 - Current mode output
- Advanced digital filters
 - Sample-rate-optimized digital filters, delivering excellent listening experience

Device control

- PLL for flexible clocking configuration
- Simple register map
- Hardware mode control
- Single supply



	Device	Channels	DNR	THD+N	Production Status
ADCs	CS5308P, Auto available	8	123 dB	-110 dB	In Production
	CS5308S	8	118 dB	-105 dB	
	CS5304P, Auto available	4	123 dB	-110 dB	
	CS5304S	4	118 dB	-105 dB	
	CS5302P	2	126 dB	-110 dB	
DACs	CS4308P	8	123 dB	-110 dB	
	CS4304P	8	118 dB	-115 dB	
	CS4304S	4	123 dB	-110 dB	
	CS5304S	4	118 dB	-115 dB	
	CS5302P	2	129 dB	-115 dB	
CODECs	CS4282P	2 ADC	123 dB ADC	-110 dB ADC	
		2 DAC	129 dB DAC	-115 dB DAC	

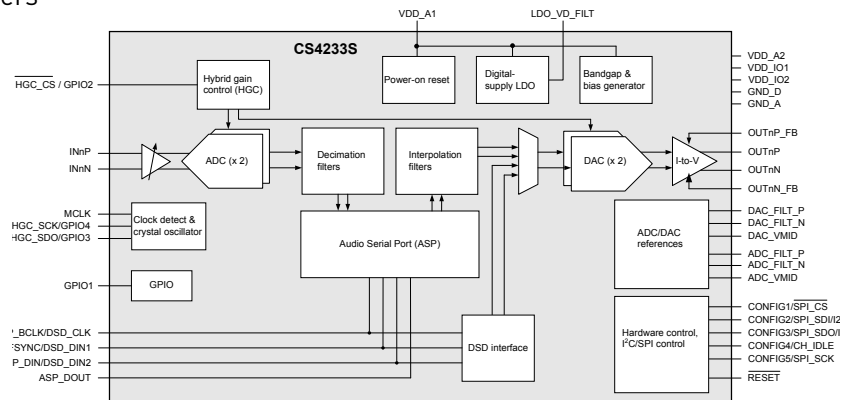
Mid Performance - The latest Cirrus Logic portfolio of mid-performance audio converters—including the CS4332x DACs, CS5312x ADCs, and CS4233x stereo codecs—extends our legacy of delivering devices that balance performance, features, and cost for a broad range of professional and consumer applications.

ADC

- High performance differential/single-ended analog ADC
- Enhanced hybrid gain control
 - Internal analog gain -- new feature, optimizing the cost of mic preamp design
 - GPIO external gain control -- new feature, offers design flexibility for scalability or simplicity.
 - Simpler mic preamp gain design
 - Reduces pops and clicks
- Virtual PAD
 - New feature, minimizing external components required
- Signal activity detection
 - New feature, optimizing system power consumption

Device control

- Simple register map
- Hardware mode control
- Single supply, optional separate digital supply for HGC



DAC

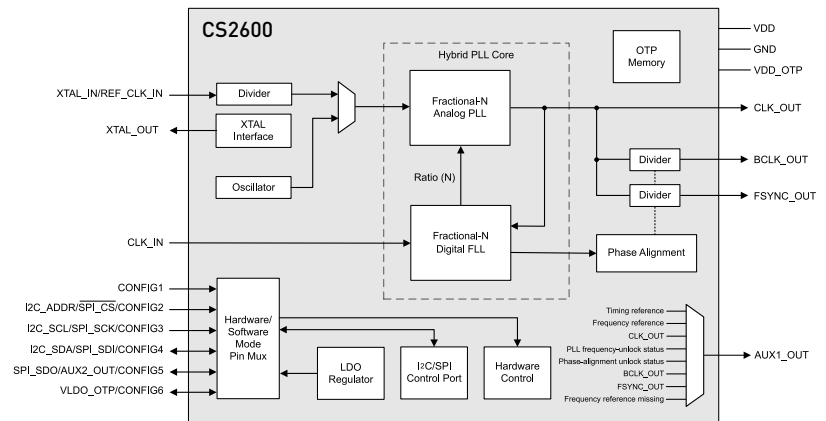
- High performance differential/single-ended DAC
 - Voltage output with configurable roll-off filter
- Enhanced hybrid gain control
 - Synchronized, zero-cross aligned analog gain
 - GPIO external gain control -- new feature, offers design flexibility for scalability or simplicity.
- Advanced digital filters
 - Sample-rate optimized digital filters, delivering excellent listening experience
- Signal activity detection
 - New feature, optimizing system power consumption

	Device	Channels	DNR	THD+N	Production Status
ADCs	CS5312S, Auto available	2	115 dB	-105 dB	Sampling
	CS5312B	2	110 dB	-100 dB	
	CS5312BSE	2	110 dB	-100 dB	
DACs	CS4332S, Auto available	2	115 dB	-105 dB	
	CS4332B	2	110 dB	-100 dB	
	CS4332BSE	2	110 dB	-100 dB	
CODECs	CS4233S, Auto available	2 ADC 2 DAC	115 dB ADC 115 dB DAC	-105 dB ADC -105 dB DAC	
	CS4233B	2 ADC 2 DAC	110 dB ADC 110 dB DAC	-100 dB ADC -100 dB DAC	
	CS4233BSE	2 ADC 2 DAC	110 dB ADC 110 dB DAC	-100 dB ADC -100 dB DAC	
		2 ADC 2 DAC	110 dB ADC 110 dB DAC	-100 dB ADC -100 dB DAC	

Timing Devices

Cirrus Logic's timing portfolio—including the CS2600/CS2500 clock synthesizer/multipliers and the CS2501 clock multiplier—delivers the low-jitter, high-accuracy clocking required for today's demanding audio applications, including professional audio and automotive systems.

- CS2500 and CS2501 are pin-to-pin replacements of current devices
 - Excellent jitter performance
 - Reference frequency down to 50 Hz
 - Holdover Mode provides constant clock output if reference is missing or unstable
- CS2600 provides additional features
 - Multiple clock outputs (MCLK, BCLK, LRCLK)
 - Phase synchronization
 - Automatic sample-rate detection
 - Hardware Mode and customer-programmable OTP



Device	Input Frequency	Output Frequency	Period Jitter	Baseband Jitter	Number of Outputs	Production Date
CS2500, Auto available	50 Hz – 30 MHz	6 MHz – 75 MHz	18 ps	21 ps	1	In Production
CS2501, Auto available	50 Hz – 30 MHz	6 MHz – 75 MHz	18 ps	21 ps	1	
CS2600, Auto available	50 Hz – 30 MHz	6 MHz – 75 MHz	18 ps	21 ps	3	



About Cirrus Logic

Cirrus Logic, Inc. develops high-precision, low-power analog and mixed-signal processing solutions for a broad range of consumer and industrial applications. With a focus on power efficiency, performance, and system integration, Cirrus Logic enables next-generation devices across audio, sensing, haptics, and emerging application markets. The company is headquartered in Austin, Texas.



Scan to learn more about Cirrus Logic's Pro Audio solutions.



Contacting Cirrus Logic Support

For all product questions and inquiries, contact a Cirrus Logic Sales Representative.
To find the one nearest you, go to www.cirrus.com.

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