

Leading the Digital Entertainment Revolution™

PRODUCT BULLETIN

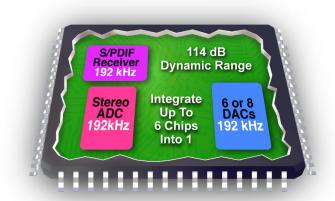
## New 6 & 8 Channel Surround Sound Codecs Deliver 192 kHz Perfect for AVRs, DVD Receivers and Automotive Systems

## **CS42516/18/26/28 Features**

|               | CS42516/26 | CS42518/28 |
|---------------|------------|------------|
| ADCs          | 2          | 2          |
| Dynamic Range | 114 dB     | 114 dB     |
| THD+N         | 100 dB     | 100 dB     |
| DACs          | 6          | 8          |
| Dynamic Range | 110/114 dB | 110/114 dB |
| THD+N         | 100 dB     | 100 dB     |

- Two 24-bit ADCs
- -100 dB THD+N
- 192 kHz sampling rates
- S/PDIF receiver compatible with EIAJ CP1201 and IEC-60958
- 8:2 S/PDIF input MUX
- Recovered S/PDIF CLK or OMCK system clock selection
- ADC high pass filter for DC offset calibration
- Digital output volume control with soft ramp
- Digital +/- 15 dB input gain adjust for ADC
- Differential analog architecture
- Supports logic levels between 1.8 V and 5 V
- Available in a 64-pin LQFP
- CS42516 price: \$3.93 (10 K)
  CS42518 price: \$4.65 (10 K)
  CS42526 Price: \$5.29 (10 K)
  CS42528 price: \$6.97 (10 K)





The CS42516/18/26/28 are highly integrated 24-bit, surround sound CODECs. These six or eight channel CODECs support 192 kHz making them an ideal choice for AVRs, DVD receivers, digital mixing consoles and automotive audio systems. By integrating two ADCs and six or eight DACs along with a S/PDIF receiver, all non-DSP functionality is on one chip—reducing overall system count from up to six parts to one in some cases. In fact, a two-chip AVR design is now a reality. And, this cost savings means manufacturers can now bring advanced features such as DVD-Audio into more affordable consumer systems.

This innovative CODEC family also provides optimum design flexibility and performance levels for a wide range of applications. Offered in six and eight channel versions, with each available in two performance categories—110 dB and 114 dB dynamic range—the devices deliver an effective solution with minimum design changes. Actually, the pin-compatible parts can be easily exchanged depending on the level of performance needed. You can take advantage of a variety of one-line data modes (OLMs) by adding two external ADCs. With the flexibility of the CS42516/26/18/28 family, one board design can be used to target various performance and price levels for your next AVR, DVR receiver, and automotive system applications. Integration and flexibility mean faster time to market for your next exciting entertainment product.

The CS42516/26/18/28 are Cirrus Total-E™ ICs specifically designed for consumer entertainment electronics.

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