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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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DA7219

The DA7219 is an audio CODEC with in-built advanced accessory detection (AAD) for mobile computing and accessory applications. This product contains a mono microphone to ADC path with audio activity detection, and a stereo DAC to HP path. The AAD block supports 3 and 4 pole jacks, allows the automatic polarity switching of MIC/GND on CTIA or OMTP headsets and also supports automatic button detection.

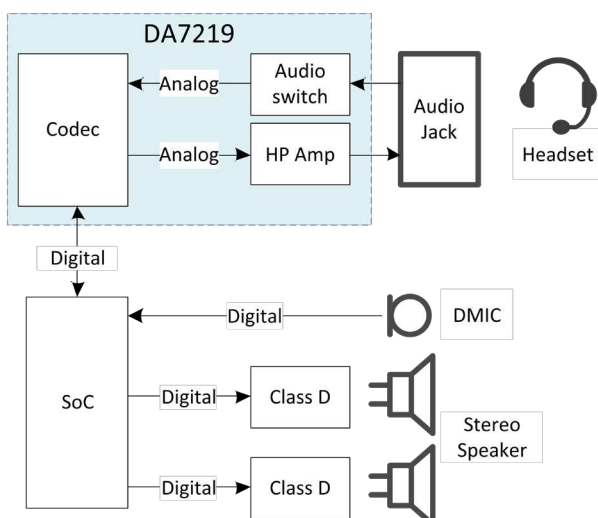


32 bump WL-CSP Package

Features

- ▶ High performance mono microphone to ADC record path with 90 dB SNR.
 - ADC digital filters with audio and voice mode high-pass characteristics
- ▶ High performance stereo DAC to headphone playback path with 100 dB SNR.
 - DAC digital filters with audio and voice mode high-pass cutoff and 5-band equaliser
- ▶ Advanced Accessory Detection supports
 - Three/four pole jack detection
 - MIC-Ground polarity switching
 - Multiple button detection
- ▶ A hybrid analogue/digital automatic level control to dynamically control record level.
- ▶ Digital Sidetone path with gain
- ▶ Digital Tonegen with S-Ramp
- ▶ System controller for simplified pop-free startup and shutdown.
- ▶ Separate 24 kHz ADC/48 kHz DAC sample rates available
- ▶ Shutdown mode for very low current consumption during standby
- ▶ Phase-locked loop with sample rate tracking to generate system clock.
- ▶ 4-wire digital audio interface with support for I2S, TDM and other audio formats.
- ▶ 2-wire I2C compatible with support for High Speed mode up to 3.4MHz

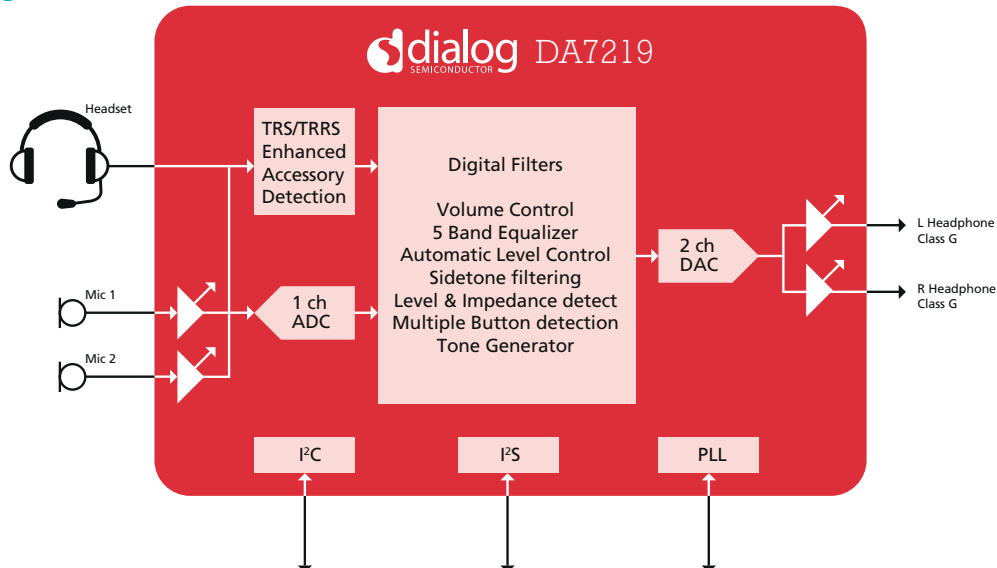
Audio System diagram



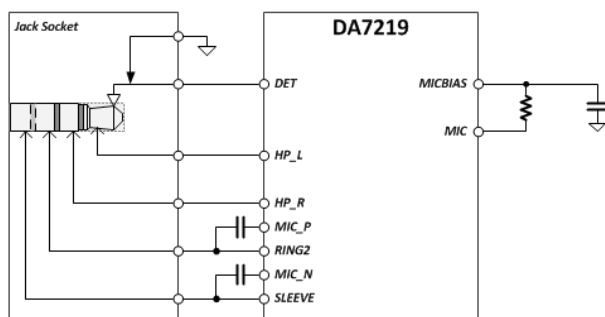
Applications

- ▶ Chromebooks
- ▶ Portable audio applications
- ▶ Tablets and eBooks
- ▶ Audio accessories

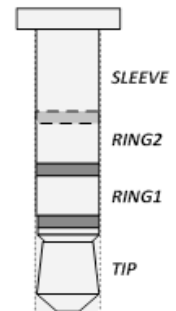
Block Diagram



Advanced Accessory Detection (AAD)



Position	Jack Type	
	CTIA	OMTP
SLEEVE	MIC	GND
RING2	GND	MIC
RING1	HP_R	HP_R
TIP	HP_L	HP_L



The AAD will detect a jack insertion/removal, detect the polarity of the jack (CTIA/OMTP), and will support the detection of impedance based buttons in parallel with the connected accessory microphone.

Feature highlights

- ▶ GNG/MIC polarity switch and multiple button detection for CTIA/OMTP audio jacks
- ▶ 7.5mm² package footprint enabling PCB space savings in area constrained applications
- ▶ Capless headphone driver eliminates large AC coupling capacitors
- ▶ Optimised ball-out conducive for low cost PCB manufacturing

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