Parameter	Test Conditions/Comments	Min	Typ	Max	Unit
Total Harmonic Distortion + Noise					
	8 Ω, 1 nF load, AVDD = 1.8 V, P_O = 50 mW		−60		dB
	AVDD = 3.3 V, P_O = 175 mW		−60		dB
Dynamic Range	−60 dB input				
With A-Weighted Filter (RMS)	AVDD = 1.8 V		97		dB
	AVDD = 3.3 V		103		dB
No Filter (RMS)	AVDD = 1.8 V		94		dB
	AVDD = 3.3 V		100		dB
Signal-to-Noise Ratio					
With A-Weighted Filter (RMS)	AVDD = 1.8 V		98		dB
	AVDD = 3.3 V		103		dB
No Filter (RMS)	AVDD = 1.8 V		96		dB
	AVDD = 3.3 V		10		dB
Power Supply Rejection Ratio	CM capacitor = 10 µF				
	100 mV p-p at 217 Hz		7		dB
	100 mV p-p at 1 kHz		−6		dB
Differential Offset Error			2		mV
Mono Mixer Mute Attenuation, Beep to Mixer Path Muted	Mute set by Register 0x401F, Bit 0		−90		dB
REFERENCE (CM PIN)					
Common-Mode Reference Output			AVDD/2		V

POWER SUPPLY SPECIFICATIONS

AVDD1 and AVDD2 must always be equal. Power supply measurements are taken with the SigmaDSP processing core enabled.

Table 3.

Parameter	Test Conditions/Comments	Min	Typ	Max	Unit
AVDD1, AVDD2		1.8[1]	3.3	3.65	V
IOVDD		1.63	3.3	3.65	V
Digital I/O Current (IOVDD = 3.3 V)	20 pF capacitive load on all digital pins				
Slave Mode, Analog I/O, 12.288 MHz External MCLK Input	f_S = 48 kHz		0.20		mA
	f_S = 96 kHz		0.35		mA
	f_S = 8 kHz		0.04		mA
Master Mode, MCKO Enabled	f_S = 48 kHz		1.25		mA
	f_S = 96 kHz		2.50		mA
	f_S = 8 kHz		0.22		mA
Digital I/O Current (IOVDD = 1.8 V)	20 pF capacitive load on all digital pins				
Slave Mode, Analog I/O, 12.288 MHz External MCLK Input	f_S = 48 kHz		0.10		mA
	f_S = 96 kHz		0.18		mA
	f_S = 8 kHz		0.02		mA
Master Mode, MCKO Disabled	f_S = 48 kHz		0.68		mA
	f_S = 96 kHz		1.33		mA
	f_S = 8 kHz		0.12		mA
Analog Current (AVDD)	See Table 4				

[1] The zero-cross detection of the beep path is not supported at AVDD1, AVDD2 < 2.2 V.