

Audio Preamplifier Selector

		1510	1512	1580	1583
Industry Std Pinout		Yes	Yes	No	No
Feedback Configuration		Fixed	Fixed	Flexible	Flexible
Output Configuration		Single-ended	Single-ended	Differential	Differential
EIN	0dB, Rs=0Ω 60dB, Rs=0Ω 60dB, Rs=150Ω	-99.7 dBu -134.8 dBu -128.9 dBu	-104.1 dBu -134.8 dBu -128.9 dBu	-109.4 dBu -134.8 dBu -128.9 dBu	-102.8 dBu -128.9 dBu -126.5 dBu
THD+N	60dB	0.005 %	0.008 %	0.005 %	0.006 %
Bandwidth -3dB (small signal)	60dB	3 MHz	1.6 MHz	0.4 MHz	0.19 MHz
Slew Rate		19 V/μs	19 V/μs	53 V/μs	50 V/μs
Supply Voltage	Min Max	±5 V ±20 V	±5 V ±20 V	±5 V ±18 V	±5 V ±18 V
Packages		SO-8, DIP-8 SO-14 SO16-Wide	SO-8 DIP-8 SO-14	QFN-16	QFN-16

Digitally Controlled Preamplifiers

	Digitally-Controlled Preamplifier Chip Sets						All-In-One Digitally-Controlled Preamplifiers				
	1580/ 5171	1580/ 5173	1583/ 5173		1580/ 5263	1583/ 5263		6261 (per channel)	6263 (per channel)	6266 (per channel)	
Gain Range	5.6 dB, 13.6 - 68.6 dB (0, 8-63 dB with 5.6 dB attenuation)	0 - 60 dB			0 - 51 dB			42 dB	42 dB	42 dB	
Step Size	1 dB	3 dB			3 dB			1 dB	3 dB	6 dB	
Max Gain Error	Typ Max	0.15 dB 0.5 dB	0.2 dB 0.5 dB	0.2 dB 0.5 dB	0-39dB 42-51dB	±0.5 dB ±1.0 dB	±0.5 dB ±1.0 dB	-38dB 30-34dB	±0.2 dB ±0.3 dB	±0.2 dB ±0.3 dB	±0.2 dB ±0.3 dB
EIN	0dB, Rs=150Ω 30dB, Rs=150Ω 60dB, Rs=150Ω	-108 dBu -124 dBu -128 dBu	-106 dBu -122 dBu -127 dBu	-100 dBu -118 dBu -125 dBu	0dB 21dB 51dB	-102.3 dBu -119.5 dBu -128.5 dBu	-95.5 dBu -116 dBu -126.2 dBu		-127 dBu (max gain)	-126 dBu (max gain)	-126 dBu (max gain)
THD+N	21dB	0.0003 %	0.0005 %	0.0006 %	24dB	0.003 %	0.003 %	10 dB -8 dB	0.0015 % 0.05 %	0.0015 % 0.05 %	0.0015 % 0.05 %
Max Input	0dB 30dB 60dB	21 dBu -3 dBu -33 dBu	26 dBu -3 dBu -33 dBu	26.4 dBu -3 dBu -33 dBu	0dB 21dB 51dB	+27.5 dBu -2.3 dBu -23.3 dBu	+26.4 dBu -2.3 dBu -23.3 dBu	-8 dB	16.5 dBu	16.5 dBu	16.5 dBu
Supply Voltage	±5 to ±17 V	±5 to ±17 V			±5 to ±17 V			±5, +5 or +10 V	±5, +5 or +10 V	±5, +5 or +10 V	
Supply Current	7.9 mA (1580) 8.3 mA (5171) 16.2 mA (Total)	7.9 mA (1580) 7.6 mA (5173) 15.5 mA (Total)	7.0 mA (1583) 7.6 mA (5173) 14.6 mA (Total)		7.9 mA (1580) 0.8 mA (5263) 8.7 mA (Total)	7.0 mA (1583) 0.8 mA (5263) 7.8 mA (Total)		3 mA	3 mA	3 mA	
Packages	QFN16 (1580) QFN32 (5171)	QFN16 (1580/1583) QFN24 (5173)			QFN16 (1580/1583) QFN24 (5263)			QFN48	QFN48	QFN48	