

Testing results of the PortaDAC1866OCUB

Instruments for measurements:

Measurements were made by using the audio analyzer TEKTRONIX AM700, the oscilloscope LECROY WS424, cable kit.

Measurement conditions

During measurements at the audioanalyzer AM700, the DAC1866 output loaded of 150 ohms which embedded in inputs of the AM700

During measurements at the LECROY WS424, the DAC1866 output loaded embedded load of 50 ohms.

The test signals were fed to the coaxial input.

The source of test signals is the integrated digital generator TEKTRONIX AM700

frequency response irregularity:

0.5 dB in the bandwidth of 10 Hz to 7 kHz

4 dB in the bandwidth of 10 Hz-20 kHz

THD + N

0,004% at 1 kHz

THD

0.003% at 1 kHz

IMD test CCIF

0,006% (13 kHz, 14 kHz)

IMD test SMPTE

0,02% (60 Hz, 7 kHz, 1: 4)

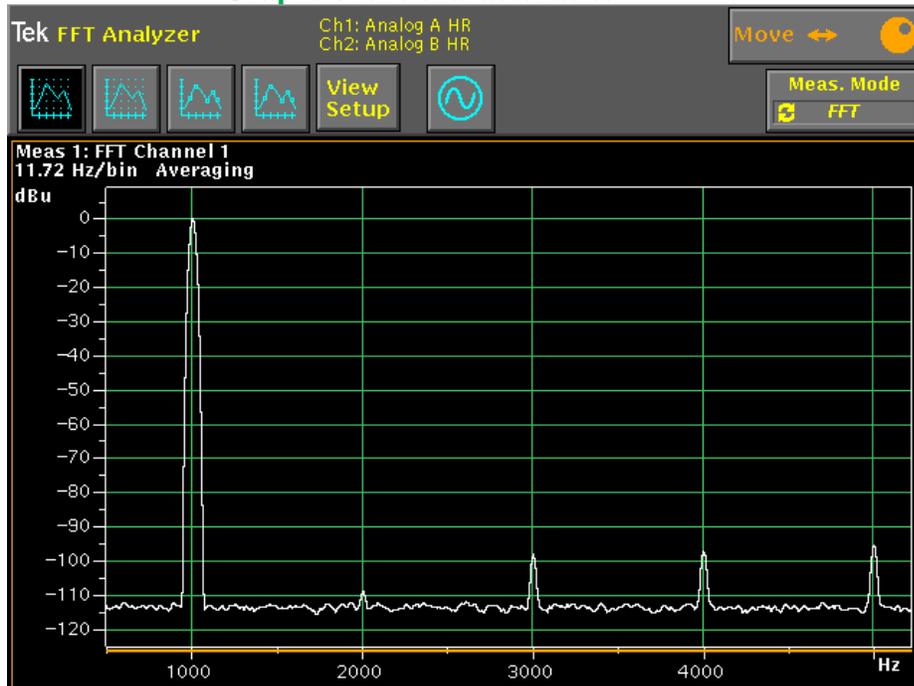
Channel separation

-75 dB at 1 kHz

Maximum voltage swing on the output of 8.5 V unloaded

Maximum power output of 0.12 W at 8 ohms

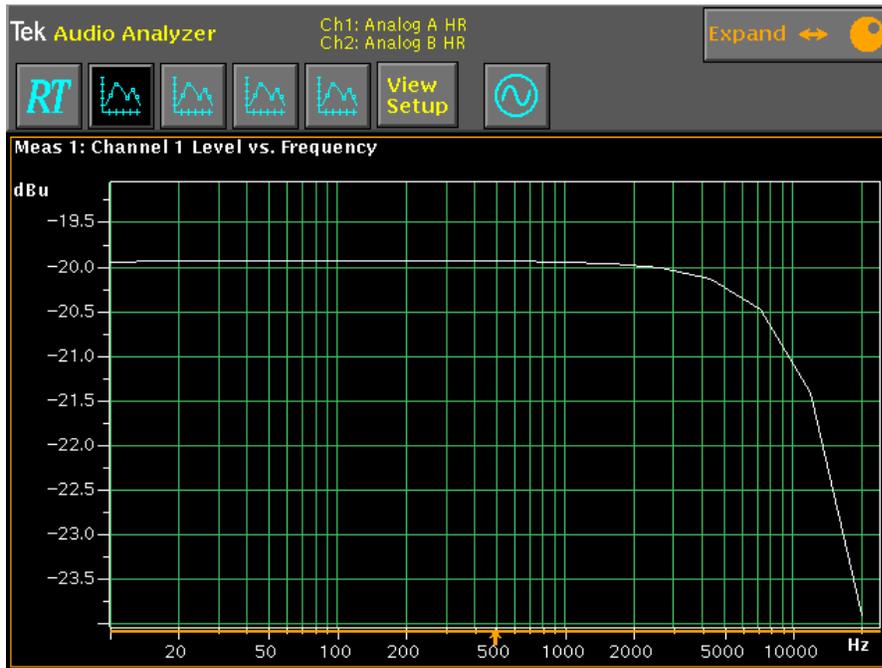
Graphs of the characteristics



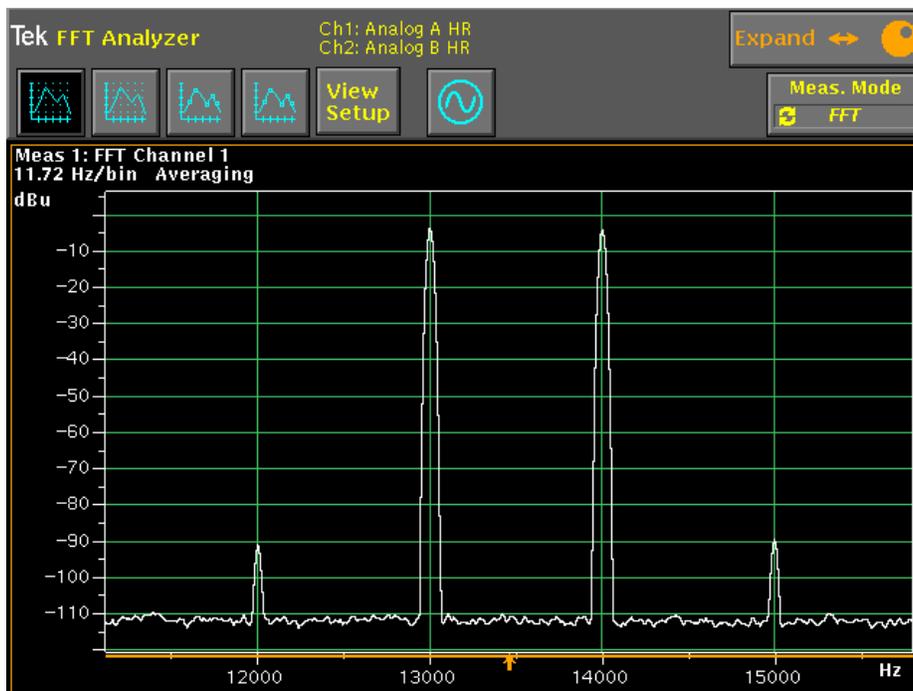
The spectrum of the output signal of the DAC at 1 kHz.

	Frequency	Level	THD	THD+N
Ch1	999.99 Hz	0.05 dBu	0.00262 %	0.00397 %

The difference between the signal level and harmonics is 95 dB. Noises and other spectral components do not exceed the level of -110 dB.



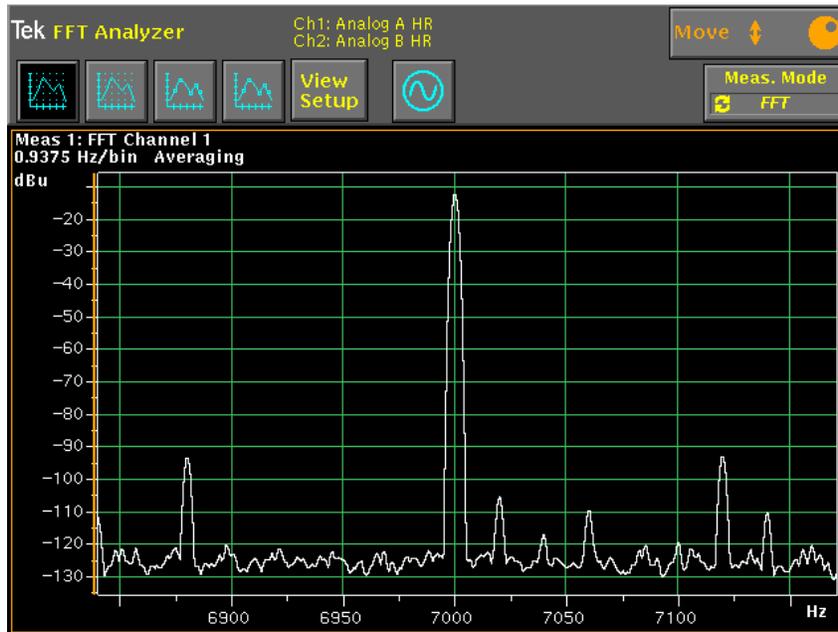
Frequency response in the audio range.
irregularity is 4 dB in the bandwidth of 20 Hz-20 kHz.



The graph of the intermodulation distortion CCIF test.

	Frequency	Level	THD	THD+N	Wow&Flutter	IMD	
Ch1	12999.76 Hz	-1.20 dBu	0.00000 %	31.32379 %	%	0.0055 %	CCIF

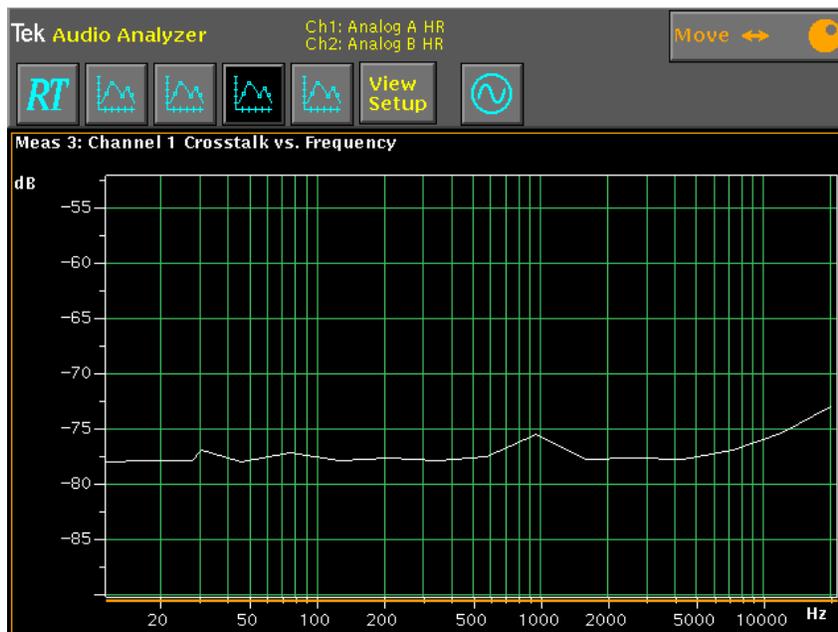
CCIF standard test with frequencies of the signal of 13 kHz and 14 kHz having the same amplitude. Visible parasitic constituents in the output signal at the difference frequencies are 12 kHz and 15 kHz. The difference between the signal levels and harmonics is approximately 85 dB.



The graph of the intermodulation distortion of the DAC SMPTE test

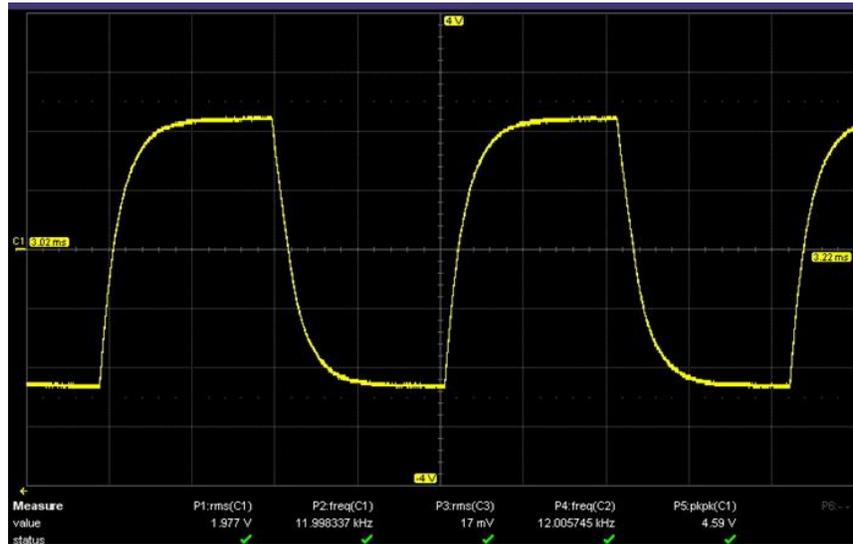
	Frequency	Level	THD	THD+N	Wow&Flutter	IMD
Ch1	60.00 Hz	0.44 dBu	0.00169 %	22.98884 %	%	0.0194 % SMPTE

The standard SMPTE test with frequencies of the signal of 60 Hz and 7 kHz having amplitude ratio accordingly 4/1. Visible parasitic constituents in the output signal at difference frequencies. The difference between the signal levels 60 Hz and harmonics is 95 dB.

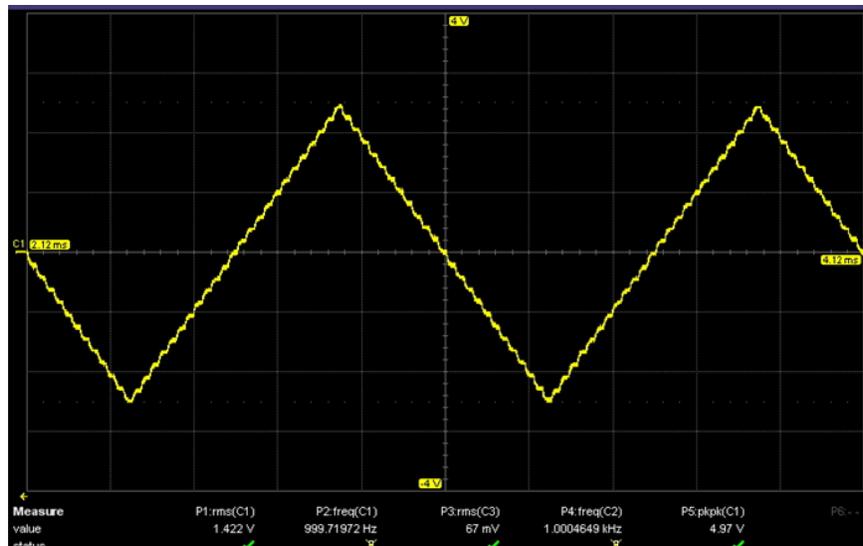


The graph of the characteristic of the separation of stereo channels

Stereo channels separation is -75 dB at 1000 Hz.

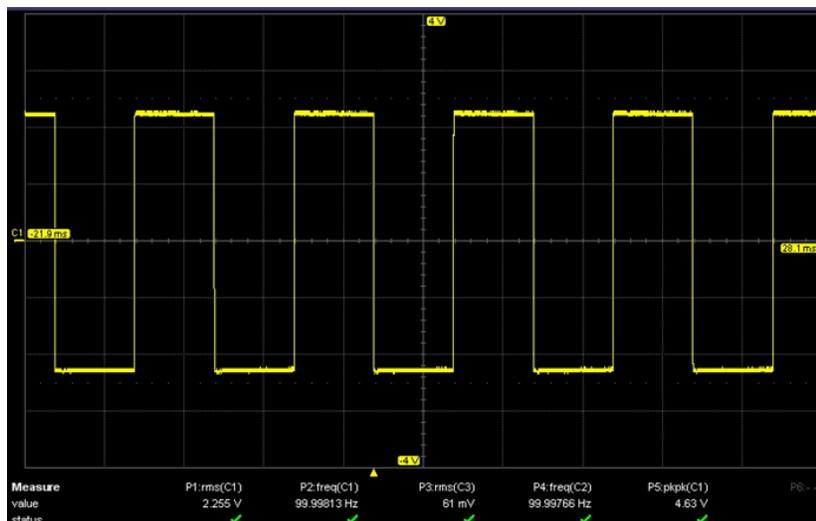


The graph of the rectangular output signal with the frequency of 10 kHz.



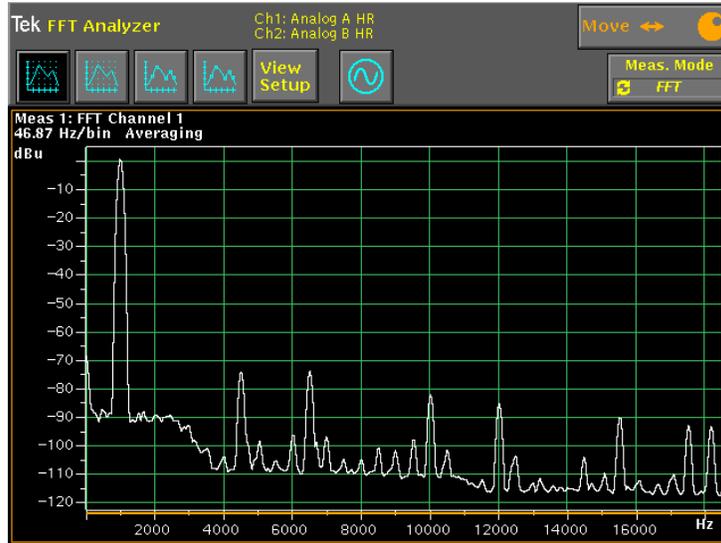
The graph of the output signal of the triangular waveform with the frequency of 1 kHz.

The signal is symmetric, including when passing through 0.



The graph of the rectangular output signal with the frequency of 100 kHz. There is no decline and distortions.

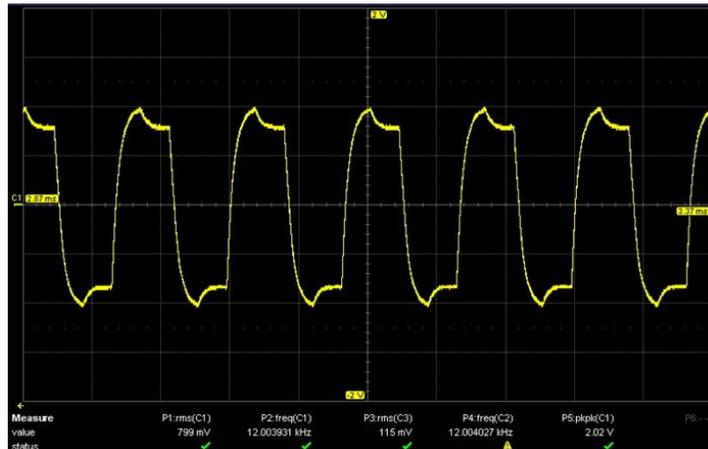
Graphs of characteristics when receiving the test signal from the bluetooth.



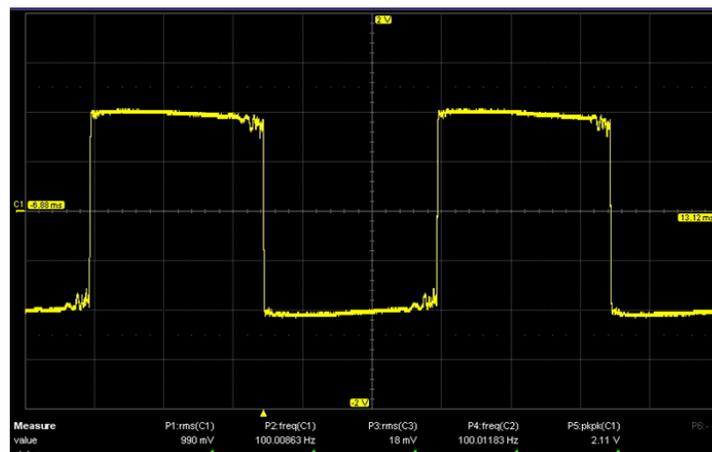
The spectrum of the output signal of the DAC at 1 kHz.

	Frequency	Level	THD	THD+N
Ch1	1000.09 Hz	0.45 dBu	0.00354 %	0.03396 %

The difference between the signal level and extraneous components associated with the features of the transmission via bluetooth is 75 dB.



The rectangular signal with a frequency of 12 kHz



The rectangular signal with a frequency of 100 kHz. The distortion on the edge of the signal is visible.