











## 6. Performance Parameter

Sr no	wav	Parameters	
		Peak signal to noise ratio	Mean square error
1	Sample1.wav	85.8775	1.6801e-004
2	Sample2.wav	57.0195	0.1292

Sr no	wav	Parameters	
		Mean Frequency_diff	papr_diff
1	Sample1.wav	1.6754e-005	1.0000
2	Sample2.wav	3.9171e-004	1.0000

In above table Sample 1 & sample 2 are 2 sample audio wav file

## 7. Parameters

### I. Peak signal to noise ratio:

The ratio between the maximum possible power of signal and the power of corrupting noise. It is used to estimate the quality of reconstructed audio signal with respect to original audio signal.

It is calculated as  $PSNR = \text{Peak Signal to Noise Ratio}(y, y_1)$ .

### II. Peak average power ratio difference:

It is defined as,  $papr\_diff = ((\text{peak1} - \text{peak2}) / \text{mean\_frequency\_diff})$

### III. Mean square error:

This finds the mean of the squared errors:

$MSE = \text{mean}(\text{errors.}^2)$

Each element is squared separately, and then the mean of the resulting vector is found.

## 8. Conclusion

Thus the real time MP4 and AAC decoding system supporting LC profile for audio decoder have designed. The output of this project processed by many blocks before hear the audio services. To verify the designed system by using simulation. The result of simulation showed in both Xilinx ISE 13.1 ISIM and MATLAB R2010a software provide the same decoded output

## References

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