

MDFourier: A Micro SD Compromise and Silly Anecdote

bfbiii

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1 MDFourier Notes

These series of quick notes are meant as stand alone bits of interesting data we find along while developing and polishing MDFourier. For the full documentation and the rest of the notes, please visit <http://junkerrhq.net/MDFourier>.

2 A Micro SD Compromise and Silly Anecdote

Continuing our search for a micro SD card with low access noise that does not exhibit “audio stretch” every 20-40 minutes on certain ODEs¹ we have come across a card that represents a bit of a compromise: the Samsung EVO Select (128GB and 256GB); consistently less noise than the SanDisk cards measured (Ultra, Extreme, High Endurance) and, as of yet, no audio stretch anomaly exhibited on the SSDS3 we used for testing. The compromise here is the SD access noise is not as low as the lowest measuring cards we’ve come across that are plagued by the audio stretch (i.e. the Lexar Pro 667x and Transcend 300S). In short, without stretch, the Samsung card presents an appealing alternative.

¹as outlined in a previous note <http://junkerrhq.net/MDFourier/notes/note5-sdcardnoise.html>

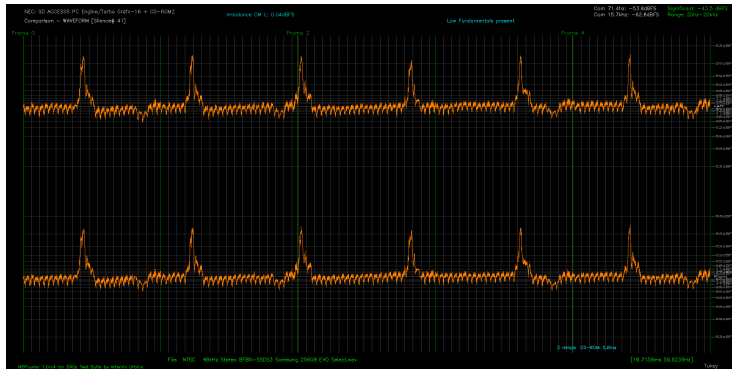


Figure 1 The Samsung EVO Select 256GB (noisiest section in the SD access noise pattern)

For some context, here is the SanDisk Ultra 400GB vs the Samsung EVO Select 256GB—differences plotted in the frequency domain with average line drawn to highlight the Samsung’s fairly consistent lower SD access noise across the spectrum.



Figure 2 SanDisk Ultra 400GB vs the Samsung EVO Select 256GB

The plot is more or less consistent with a bevy of SanDisk cards as compared to this particular Samsung model. Less noise, not revolutionary, but less. File this under “tentative recommendation as a suitable compromise,” and the search for an even better fit with even lower SD access noise, should it exist, continues.

As an addendum, from time to time, some unorthodox things get tested on these journeys. As a result, we can safely say that using a micro SD card extender like this <https://www.amazon.com/gp/product/B01D9J8KQE/> does not alter the SD access noise in this scenario in any meaningful way. Anecdotaly we can also say that the extender worked perfectly with the SanDisk Ultra 400GB micro SD card should you have any real purpose for such an extender.

3 Contact

fbiii can be contacted at twitter <https://twitter.com/bernardbygott>.