Discrete and programmable DAC

Playback Designs' philosophy is very simple, but again, very difficult to achieve. In order to achieve the best possible sonic performance it is vital to understand all the details of the theories behind digital and analog signal processing. Relying on component manufacturers to solve signal processing challenges generally ends up in compromised performance. Playback Designs embarked right from the beginning on a path where it applied its vast technical expertise in analog and digital signal processing to design solutions that give "discrete" a new meaning: where standard chips for digital signal processing were not good enough, Playback Designs uses general gate arrays that can be programmed with their own discrete and proprietary algorithms, where standard analog integrated amplifiers were not good enough Playback Designs uses discrete analog components to better the overall performance. Playback Designs did not leave any step untouched in the theory of Digital to Analog Conversion nor did it leave it to 3rd party vendors for any solutions.

Both the audiophile and recording industries have adopted DSD (Direct Stream Digital, as used on SACD) as the premier format for both recording and playback. At Playback Designs we wanted to go much further. We decided to convert all digital audio to a format that has twice or even quadruple the data rate of SACD before converting it to analog. Most companies are upconverting 2, 4 or 8 times while we are doing it 128 or 256 times. You will hear greater resolution and detail, an improved sense of space with more precise imaging with much faster transient response. With a Playback Designs component your system will sound more alive!

The architecture in Playback Designs' products is programmable and user updateable. As new algorithms and technologies become available the user can immediately upload them into the product in form of a firmware upgrade. The Playback Designs products don't easily become obsolete, because other technologies might want to surpass them.

Most standard off-the-shelf DAC chips introduce unnatural frequency effects ("brick wall filter effect" and others). With its discrete approach Playback Designs has control over every little step and algorithm inside the digital-to-analog conversion process and was able to address the fundamental flaws of the off-the-shelf chip solutions that other manufacturers generally use.

Through a combination of unique analog and digital signal processing technologies Playback Designs was able to achieve a sonic performance that maintains the character of analog playback and combines it with the advantages of digital.