

The topology of the IC we use in the less expensive products is very similar to the topology of our discrete circuits. We've figured out how to implement these monolithic ICs with zero feedback. By using two of them together, and modifying their characteristics, we can get within spitting distance of the performance of our discrete circuits at a much lower cost. The critical advantage here is that the monolithic design of the IC means that all of the transistors are matched extremely closely. In contrast, with our discrete circuits we have to spend a lot of time measuring, sorting, and matching transistors, which translates to a more expensive final product. By using an IC in a way that hasn't been done before, we're able to achieve a real breakthrough in performance at a real-world price point. It's great to make an all-out assault on the state of the art, when the only limit is your imagination. But the real challenge is to bring those lessons back to the real world where more people can enjoy the fruits of our labors.