T-G-C electronics design

Case Study 4: Obsolete Parts & Reverse Engineering

Obsolete Parts

A test equipment manufacturer was using a high volume of a high-speed comparator which became obsolete. The part had unique specifications suited to the application. Fortunately, the part was mounted on a small hybrid, which facilitated the design of a replacement assembly. We designed and simulated a novel discreet FET, bipolar transistor, and IC comparator architecture. This exceeded the performance of the original. It was lower cost to manufacture, and has been produced in many thousands.

Reverse Engineering

A customer acquired a "mature" product line, but with the minimum of documentation. Armed with just PCB Gerber files and 99th generation photocopies of the original schematics, we completely regenerated the schematics and a perfect copy of the PCB design on our CAD system.