



Note: Ron Leckie is an independent analyst and consultant on technology and business to companies in the semiconductor, equipment and related industries. Ron spent 11 years at Megatest and 14 years at Signetics/Philips. At SEMICON/West he gave a presentation titled "A Testing Tsunami" in which he discussed the present state of the semiconductor ATE business and how to survive it. Included in his presentation was the slide below and the following are his comments on how the industry has reached it's present condition.

By Ron Lecke.

As the saying goes, "if only I had a nickel for..." the number of times I've heard people say that the semiconductor ATE industry is ripe for consolidation. Those of us who work in and watch the sector know that there has already been a lot of merger and acquisition (M&A) activity.

Searching through some old notes, and racking my mental archives, I developed the chart below, which shows the history of about three dozen significant players that have consolidated down to the current five major players globally.

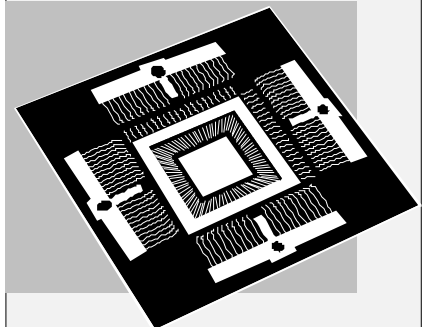
Starting at the top, you can see the major Teradyne acquisitions. As we all know, Verigy started off life as HP's test division, which was split off with other semiconductor related units to form Agilent and subsequently spun-off in turn to form Verigy with a few acquisitions along the way. The most acquisitive player had clearly been Credence, which was subsequently acquired itself last year by LTX. Only the older ATE veterans will remember that Advantest used to be named Takeda Riken and, until it picked up the former SZ products from Credence, had not really been very acquisitive. Finally, Minato was acquired by Ando, which in turn was picked up by Yokogawa.

There are a few other ATE companies that have simply disappeared along the way, including Accutest, Macrodata and Genrad's chip test unit.. (If any readers can suggest omissions or corrections to this history, please call or email me at www.infras-advisors.com).

M&A is really a misnomer in that it should be A&M since the acquisition comes first, followed by the merger and integration activities. It is the latter where many companies have failed to achieve the elusive benefits of consolidation. The theory is that one plus one should equal more than two, but that seldom happens. The solution is improved up-front diligence across all aspects of the target business followed by speedy, effective integration. It's easily said, but a lot of work and not easy to do right!

One final note is that there is a very interesting theory published in the book, *The Rule of Three: Surviving and Thriving in Competitive Markets* by: Jagdish N. Sheth and Rajendra S. Sisodia. These authors describe how as free markets mature they reduce to the three strongest players who control 70 percent to 90 percent of that market. We can see it taking shape in the ATE market. The U.S. is already down to three and the next step will be to end up with three major players globally. Any bets on the final three?

ATE/DFT MEETINGS



KGD Pkg. & Test Workshop
 1-2 October, 2009
 Biltmore Hotel & Suites
 Santa, Clara, CA.
<http://www.semi.org/>

SEMICON Europa 2009
 6-8 October, 2009
 Messe Dresden
 Dresden, Germany
www.semicon.europa.org

ITC 2009
 3-5 November, 2009
 Austin Convention Center.
 Austin, TX
<http://www.itctestweek.org/>

