October 12, 2012

Dear clients and colleagues,

Advancements in consumer electronics make our life simple, whether it is faster computers, smart phones or tablet computers. It is an industry that continues to push the boundaries of physics; however, consumers may not realize the complexities behind it. At the heart of most consumer electronics is the Integrated Circuit (IC).

IC complexity has increased with demand for faster; smaller and more powerful devices as well as penetration of new computing platforms (for example, tablet PCs and netbooks). ICs are manufactured by repeating a complex series of up to 500 individual process steps, utilizing a number of different electronic materials. The manufacture of highly advanced ICs can last from four to six months.

Technological innovations and productivity improvement continue to provide a lot of investment opportunities and are an important theme in our portfolio. This week we profile AZ Electronic Materials, a company that has been in the portfolio for over a year and has been benefitting from the trend.

AZ Electronic Materials (AZEM LN 320 pence)
www.azem.com

Business Overview
AZ Electronic Materials (AZ) is a producer and supplier of specialty chemical materials. Its products are integral to the manufacture of ICs and flat-panel displays, which are in turn critical for the development of almost every conceivable electronic device. Without high-quality, high-purity specialty chemicals, iPads, televisions, mobile phones, laptop computers simply wouldn't perform to the level that they do today.

AZ is UK listed, yet almost all of its revenue comes from Asia. The faith of the Euro does not impact its profitability or sales as clients are billed in USD. Barriers to entry are very high and AZ holds either #1 or #2 position in most of the chosen niches. Over 80% of revenues come from products where it is the market leader.

Unlike commoditized chemical plays, it concentrates only on specialty chemicals, ensuring gross margins of 49%+ and EBITDA margins of 32%+. We estimate AZ indirectly earns around $1.50-$2.00 on every iPad sold, as its chemicals act as the fundamental building blocks in some or the other component of the iPad.

It has a unique footprint in Asia, with production and R&D facilities right where it matters, close to customers who are the world's leading electronics manufacturers. AZ's semiconductor customers have significant capital requirements (the capex on one semiconductor fabrication plant unit can cost up to $10B), meaning they have to run as close to 100% capacity utilization as possible. Consequently these customers certify processes using specific suppliers and processes in order to minimize the risk of downtime (which can be very costly).

History

The AZ business was originally a part of Hoechst AG, a German chemicals company (now Sanofi-Aventis). In 1997 Clariant acquired it as part of its acquisition of Hoechst AG's specialty chemicals. In 2004 it was acquired by the Carlyle group. The company went public in 2010.

Market Data

Market Cap U$1.9B, debt $480M, cash $151M, p/e (12/2013) 12.4x, ev/ebitda (12/2013) 7.8x and dividend yield 2.5%.

Competitive advantages

- Leading technology positions (2000 patents with an average remaining life of around 11 years)
- R&D facilities close to customers
- Deep and stable customer relationships (>20 years in some cases)
- Global presence (competitors are more regionally focused within the continent)
- High quality development, manufacturing and logistical infrastructure (Batch-making production system ensures customer can be supplied from a number of locations with similar product quality)

Growth strategy

- Mega-trends driving semiconductor and flat panel growth
- Product penetration at leading IC and FPD players
- Growth of non-electronic applications
- Commercialization of high value-add products and technology for next generation ICs

Risks

- Demand for electronics products may not increase as expected
- Customer relationship may deteriorate
- Input price rises might not be passed through in a timely manner

Valuation

Target price = 427 pence, using DCF model at growth rate of 15% for the next 7 years, 6% at maturity, risk premium of 9%, and payout at maturity of 45%.

Have a nice weekend.

The Global Alpha Team