## TESTING TIMES DEMAND PARTNERSHIP



Mark McBride explains the importance of test today

When working with a manufacturing partner, nobody wants devices being returned. Test regimes, such as those in place at Elite, help ensure quality devices with minimal return rates and help customers improve their products. From its headquarters in Enniskillen, Northern Ireland, Elite has become the electronics manufacturing partner of choice for a number of manufacturers, thanks to the range of services it provides to its customers. In its role as a provider of electronic manufacturing solutions, Elite's service offering includes cable assembly, PCB assembly and complete system build. In many instances it provides a 'one stop shop' for its customers.

Mark explained: "For device assembly and build we have identified test as key, and with 25 years of in house test experience we can rightly claim to be ahead of the game."

In his time at Elite, Mark and his team have developed a range of test technologies for PCBs. Customers can avail themselves of test at sub assembly or board level, with dedicated full functional testing, also at board level. Other technologies include combined ATE bed of nails with functional

Test is a vital part of any relationship between an electronics manufacturing partner and its customer, explains technical manager at Elite Electronic Systems, Mark McBride

test and IC programming and verification. Analogue and digital network terminal equipment approval is available, as is voltage signature diagnostic capability to component level. There is also a boundary scanning facility, with debug or full functional test capability.

For customers that require a complete systems build, Elite also offers: complete system full functional test, reliability testing with an on-site environmental chamber and earth bond and electrical strength safety testing.

Bespoke testing Mark works on an individual basis with each customer to develop the test procedure and solution required for their specific device.

He commented: "PCB customers work closely with us to specify their individual test requirements and can either utilise our existing technology, supply their own test regime, or develop test solutions in partnership."

This partnership approach is vital in ensuring that the customer gets the optimum test for their device. In essence, Elite provides customers with a bespoke testing regime designed to ensure every customer achieves a high level of testing.

Mark has identified this ability to deliver test as an important part of the selection process for a manufacturer and one of the reasons Elite manages to develop and maintain long term relationships. He said: "We become part of the process. Discussions between our test people and customer's engineers are common place as we strive to produce quality electronics."

Mark is also at home dealing with designers, helping them with the design for test phase in any product. Mark explained: "Our test regime has in many instances helped engineers and designers radically improve products, as we help them through test to identify areas which might require improvement.

This is a unique relationship, but vital, as it instils the utmost confidence in our customers." Taking the time to discuss and incorporate product testing helps to ensure product quality and can pay dividends, particularly in proving out new product designs.