



## AMPLICON STANDARDISE ON PXI FOR IN-HOUSE TESTING ▾

The introduction of Amplicon's new PCI 230+ and PCI 260+ range of data acquisition boards, presented us with the opportunity to update the existing equipment used for production testing and diagnostics.

The existing equipment comprised of a host computer, several individual bench-top instruments with a custom switch and cable solution. This was a perfect application for converting to a PXI based ATE (Automated Test Equipment) solution.



## SYSTEM REQUIREMENTS ▾

With a comprehensive range of Amplicon boards, the ATE system needed to be suitable for testing the existing and new data acquisition boards.

## SOLUTION

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A PXI chassis populated with PXI instrumentation and a PXI to PCI bridge was used as the measurement and control sub-system. This was connected to the host PC containing the board-under-test and the test software. This combination of hardware allows the existing PC to be utilised and other bus technologies such as PCI-Express based boards to be tested simply by changing the PC.

Utilising PXI instruments from ADLINK, Signametrics and Ztec, a compact, portable and modular test system was created that can be used to test, diagnose, soak and characterise the full functionality and features of all the boards. This system can be easily reconfigured for testing new products and customer specific requirements.

In addition, using the manufacturer's virtual instruments, a comprehensive suite of test equipment exists which can be used for many applications.

## HARDWARE USED

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- 1 x 8-slot PXI chassis (PXIS-2630)
- 1 x 4x8 2-wire matrix module (PXI 7931)
- 1 x PCI to PXI Extension kit (PCI-8570 + PXI-8570 + ACL-PXIES-2)
- 1 x Dual channel digital PXI oscilloscope, 200MS/s, 12-bit (ZT431PXI)
- 1 x 6.5 digit 3U PXI DMM with frequency counter and capacitance (SMX2042)
- 1 x Arbitrary waveform generator, 400MS/s, 16-bit, 4MSample memory (ZT530PXI-01)