



Next Generation SmartCard Test Solution

Abelon Systems have partnered with Aspects Software to develop the next generation ultra-portable SmartStation3 test platform.

Aspects is the market leader in the field of smartcard testing and has a history of delivering Test Tools for the mobile market facilitating the inspection, analysis and examination of communications between 3G and GSM terminal handsets and their (U)SIM cards.

Aspects' requirement was to upgrade their highly successful SmartStation2 with a new generation of test platform with even better performance and greater flexibility.

Abelon Systems Limited, a leading UK provider of embedded solutions, was selected to design the new platform. This new product had very exacting requirements for performance, functionality, footprint and cost. The successful outcome of the R&D partnership is the SmartStation3.

Leigh Mullin, Head of Engineering at Aspects commented: "We found Abelon took time to listen and understand our requirements. Their response was flexible and innovative. They really share Aspects' commitment to bring a world beating test solution to the market".

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Of the product, Leigh added, 'We took a step back to truly understand what the market was looking for and have re-engineered the SmartStation platform to address industry testing and standards compatibility needs. As a result of our joint efforts, the SmartStation3 is now highly portable and can easily be moved to remote test sites. Increased processing power has facilitated faster and more efficient working, enabling engineers to identify and resolve terminal/card communications issues more quickly. Aspects always had a reputation for its robust test solutions, and considerable investment in the supporting firmware and software has made the new SmartStation3 platform even more stable.'

The SmartStation3 was launched at the Cartes exhibition in Cannes last November, and has been attracting a lot of attention at the recent 3GSM World Congress in Barcelona.

Technology

Abelon designed the system architecture for the SmartStation3 around a 400MHz CPU, PC/104+ single board computer (SBC). Interfaced to the PC/104 and handling the terminal, card simulations and device monitoring is a custom designed BGA-based Altera FPGA card. The card also has a complex analogue subsystem for handling the card and terminal interfaces.

Packing the solution to meet the design, approval and manufacturing challenges within a small system footprint was central to the products' success. Abelon qualified and selected the TG533 PC/104 SBC from Chesterfield-based DSP Design Ltd. "Working with a small footprint always creates thermal management challenges", recalled Ian Smith, Abelon MD, "but using the DSP Design TG533 board allowed us to provide an ideal solution".

"The SBC solution was perfect for Aspects' product", said Smith, "'time to market' was critical to our customer and the SBC allowed us to focus on the custom hardware and firmware capabilities of the SmartStation3"



For more information on Abelon's custom embedded design services, please phone 0131 661 9088 to arrange a consultation or email sales@abelon.com for more information.

For more information on the SmartStation3 please contact Aspects Software on info@aspectssoftware.com

About Abelon Systems

Abelon Systems Ltd is a firm of consulting software designers building solutions for embedded systems, mobile, and desktop PCs and servers. Abelon design applications using communications, telephony, database and Web server technology and provide a full systems integration service. The company was founded in 2002 and has a staff of highly experienced engineers with an impressive reputation for providing innovative high quality design solutions across a variety of market sectors.

Press Contact: Ian Smith, Managing Director, Abelon Systems

About Aspects Software

Aspects Software (www.aspectssoftware.com) is a specialist, independent smartcard solution provider with over 20 years' experience. Focusing on Open Standards, Aspects has developed a Java Card / Global Platform compliant Operating System with tailored solutions for the Wireless (GSM Phase 2+), Finance (VISA Config 1 & 2), ID (FIPS 140-2 Level 3 certified) and multi-media markets. Aspects also provides Smartcard Security Consultancy Services and a range of industry leading, proven Test Tools for the Wireless market to inspect, analyse and ensure Standards compliance terminals and handsets with smartcards.