Solid Sands announces next-generation release of its world-beating SuperTest compiler test and validation suite

- *New 'Vermeer' release features comprehensive correctness-testing of optimizing compilers, and compiler validation on freestanding environment 'bare-metal' systems*

- *Also includes C++17 language support, extended traceability, and test driver support for multi-processor Windows™ environments*

Amsterdam, the Netherlands – 9 May 2019 – Solid Sands, the world leader in compiler testing and validation, today announced a brand-new release of its industry-leading SuperTest™ compiler test and validation suite. Continuing the theme of naming new SuperTest releases after world-famous Dutch painters, the team of Solid Sands has now chosen the Dutch Painter Johannes Vermeer. Johannes Vermeer is known for his photorealistic attention to detail using pigments such as lapis lazuli to create a world more perfect than the real one. It is still a mystery how he was able to achieve the masterly treatment of light and color in his work, since the appreciation of his paintings came only two centuries after his death. SuperTest aims to attain the same perfection as Vermeer, but without the mystery – with each test hand-crafted to demonstrate exactly what aspect of C or C++ is verified.

The new 'Vermeer' release brings important benefits to the C-language community, including comprehensive correctness-testing of optimizing compilers and the ability to run SuperTest on highly resource-constrained 'bare-metal' systems. Other enhancements include C++17 language support, extended traceability, and the ability to run SuperTest in multi-processor Windows environments.

"Optimizing compilers remain one of the most powerful tools in a software developer's armory, but as the safety and security of embedded systems become ever-more mission critical they are potentially one of the weakest links in the tool chain," said Marcel Beemster, CTO at Solid Sands. "Today's new SuperTest release is a major step forward in providing compiler developers and users with the confidence they can leverage the up-side of optimization by minimizing the down-side risk."

One of the strengths of SuperTest has always been its ability to run directly on target hardware, but without the benefits of an operating system this has not always been easy. The new SuperTest Vermeer release solves the problem by including a library of dedicated freestanding environment tests that run in as little as 4 Kbytes of on-chip memory without the need for an OS or I/O subsystem. All that users need to do is connect their computer to a target hardware development board and download and run the compiled test code.

The new Vermeer release also adds C++17 language testing to SuperTest's existing C++ support, keeping SuperTest ahead of the curve in terms of language evolution, while its extended requirements traceability feature now includes support for C90, C99, C11, C++11 and C++14. In

addition, users running SuperTest in a Windows environment will now be able to exploit multiple processors to speed up compiler testing and enhance their productivity.

The SuperTest Vermeer release is commercially available now.

To read Solid Sands' white-paper on optimizing compiler testing click here.

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About Solid Sands
Solid Sands is based in Amsterdam, the Netherlands. Our mission is to put quality into C. We do that by improving the quality of C and C++ compilers, libraries and analysis tools, and their safe and secure use, with the best possible test and validation suite. With SuperTest, Solid Sands serves its customers to achieve the software quality level required by the ISO language and functional safety standard such as ISO 26262 and EN:50128. With our history in compiler development, our knowledge of past, current and upcoming versions of the C and C++ standards, new analysis and optimizations techniques and new use cases, Solid Sands stays at the fore-front of tools testing and validation.