

An introduction to Verum

verum®

Tools for building
mathematically
verified software

Setting the new paradigm for embedded software development

Verum's software tools enable complex concurrency and control errors to be discovered and eliminated early in the software development lifecycle. As a result, creators of embedded software are able to bring reliable products to market quickly, predictably and cost-effectively.

Guy Broadfoot and Robert Howe founded Verum in 2004 with the belief that there needs to be a better way to develop complex embedded software. Through the application of proven mathematical techniques, Verum has developed a unique technology, Analytical Software Design (ASD). By dynamically modelling and formally verifying designs for completeness and correctness, ASD increases the predictability of the outcome of the software development process.

ASD allows the design of a software system to be mathematically verified as complete and correct, even before a single line of code has been written. Defect-free source code is generated automatically, directly from the verified design. In principle, ASD can be used for any kind of software. However, it really excels in mission-critical applications, such as embedded software in medical, machine control and automotive systems.

Verum has established reference customers for its technology which include leading companies such as Philips Applied Technologies, and Philips Medical Systems. Through these projects we have demonstrated that ASD delivers productivity increases from the conventional norm of 4-8 lines of delivered code per man-hour, to 13-80 **defect-free** lines of delivered code per man-hour. Results such as these have helped Verum to gain significant external funding partners for its current product development.

Verum's initial focus was in the geographic area bounded by Eindhoven, Leuven and Aachen in The Netherlands where there is a high concentration of builders of complex systems and machines, for various markets including medical systems, semiconductor and automotive equipment. Verum is now developing new markets beyond these in preparation for the launch of its ASD toolset in 2009.

Verum is building a comprehensive partner programme to help exploit the benefits of ASD and the power of ASD tools. The programme enables our partners to maximise their revenues through applying ASD to embedded software development and by delivering key services.

Verum - Tools for building mathematically verified software

For more information, please contact Verum Consultants BV.

Laan van Diepenvoorde 32

5582 LA Waalre

T +31 (0) 40 2359090

F +31 (0) 40 2359090

E info@verum.com

W www.verum.com