

RAD750[®] space computers Wind River Simics[®] virtual platform



Wind River Simics[®] provides a virtualized platform of the BAE Systems RAD750[®] hardware, designed specifically to support software development efforts. This full-system simulator includes the RAD750[®] microprocessor as well as the devices found on the RAD750[®] 3U, 6U, and 6U extended boards.

Description

Wind River Simics provides a binary-compatible virtual instance of RAD750[®] hardware. This means that software compiled for a physical RAD750[®] processor can run on the Wind River Simics virtual RAD750[®] simulator without modification. The virtual platform can be extended to include other components and modules of the spacecraft to support system testing and integration efforts as well.

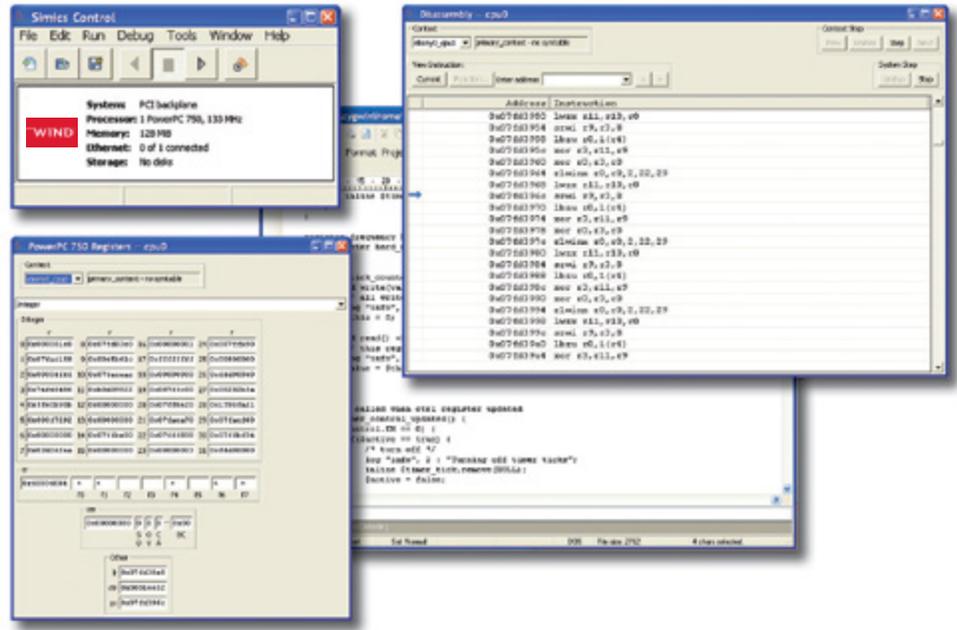
By reducing project risks, the software helps ensure projects are finished on time and within budget. Fostering truly concurrent hardware and software development activities allows software development to occur long before physical hardware is available. Virtual prototypes can be built in Wind River Simics to allow assessment of future hardware changes on the software.

Wind River Simics software runs on typical laptops or PCs, allowing every developer access to the virtual target; significantly reducing challenges associated with sharing lab resources.

Key features

- Highly scalable and affordable platform for embedded software testing and debugging
- Every line of code can run within the simulator, including:
 - Application code
 - Real-time operating systems
 - Device drivers
 - Protocol stacks
- Rich application program interface
- Application areas include:
 - Software development
 - Software testing
 - System architecture
 - Field operations
 - System security
- Users include:
 - Low-level software developers
 - Application developers
 - System integration and test engineers
 - Project managers
- Compatible with third-party IDEs and debuggers

RAD750® space computers Wind River Simics virtual platform



RAD5545® family of products

RAD5510® Single-core system-on-chip power architecture processor
RAD5515® Single-core system-on-chip power architecture processor

RAD5545® Multi-core system-on-chip power architecture processor
RAD5545® Space VPX single board computer

RAD750® family of products

RAD750® radiation-hardened PowerPC microprocessor
RAD750® 6U CompactPCI single-board computer
RAD750® 6U CompactPCI extended single-board computer

RAD750® 3U CompactPCI single-board computer
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RAD750® custom single-board computers

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