



# VinChip Systems Inc

---

## VinChip announces India's first homegrown 32-bit processor

**VinChip Systems** announces the immediate availability of its convergent 32-bit RISC processor, **VinRZ5110**. Its DSP enhanced instruction set architecture, low power design and optimized gate count makes it well suited for DSP and other embedded applications. Products based on applications such as mass storage devices, automotive control, wireless devices, audio/video encoders and decoders can be brought to market on schedule using **VinRZ5110** and its impressive array of development tools. It is also suitable for FPGA-based embedded systems, making it highly appropriate for bleeding/leading edge technology range of products.

**VinRZ5110** processor core includes on-chip debug logic based on OpenOCD which also supports in-system programming via JTAG. As an optional module, **VinSMDP** (**VinChip's** System Memory Debug Probe) is capable of static and dynamic capture of debug data and in-system programming over USB 2.0 achieving speeds of 480 Mbps. It gives 100% visibility and controllability to the entire system memory range and speeds up the remote debugging cycle appreciably compared to existing JTAG based debug solutions. **VinSMDP** can multi-task as a USB device for user tasks on the AHB as well.

**VinRZ5110** has been ported to binutils 2.19, gcc 4.3.2, gdb 6.8 and Eclipse IDE. Support for virtual prototyping has been made possible by Imperas' Open Virtual platform (OVP) featuring OVPsim simulator. The Instruction Set Simulator (ISS) built using OVPsim simulates at very high speeds and enables development of embedded software much ahead in the product cycle.

An OCP interface has been provided for easy stitching of IP blocks and makes it independent of specific bus protocols and design implementations.

"**VinChip's** latest offering, the **VinRZ5110** RISC processor, addresses customer requirements not only with the processor architecture but also with the comprehensive set of tools available. These tools include providing the instruction set simulator using Open Virtual Platforms modeling technology, so that virtual platforms based on the **VinRZ5110** can be built using both OVP and SystemC/TLM-2.0 simulators", says Simon Davidmann, OVP founder and Imperas CEO.

### About VinChip Systems

**VinChip Systems'** mission is to fill the gap in design productivity, brought about by advances in semiconductor manufacturing, while reducing product life cycles. OEMs now have the capability to design an entire System On a Chip, which leads to reduced cost and increased reliability. In addition, they now are able to develop products whose design and development cycles match, or even surpass, the product's life cycle.

**VinChip** has recognized the value of silicon-proven IP cores and Design Services in the current market conditions, and has assembled a team of design and domain experts with wide-ranging experience in developing solutions for Computing, Consumer Electronics, Automotive systems, Wireless systems and Industrial systems.

**VinChip's** current focus is on developing and providing IP and Verification solutions, associated software stacks, and Design Services, for USB 3.0, USB 2.0, Wireless USB, Mboa Mac, H.264 (MPEG/part10) and Bluetooth.

**VinChip** offers substantial cost savings to its customers, by providing silicon-proven IP and Design Services on site, or at its Design Centers in San Jose and Chennai, India.

Information on availability and pricing can be obtained by sending email to [info@vinchip.com](mailto:info@vinchip.com)