

# Synopsys and Chongqing Chongyou Information Technology Company

## Advanced Methods Ensure First-Pass Silicon Success

*"As we planned this project, we wanted to work with the best technology and the best design services partner. We selected Synopsys' Discovery Verification tools and Synopsys Professional Services and were rewarded with a successful chip tapeout and new methodologies that enhanced our design flow for our future designs."*

**Professor Zhen Jianhong, General Manager, CYIT**



Chongqing Chongyou Information Technology Co. (CYIT), a leading Chinese fabless semiconductor company, develops chips for China's new 3G wireless communication standard, TD-SCDMA. Having established a robust system-to-RTL design process, CYIT sought a partner who would complement their own skills with physical design expertise to support their first customer-owned tooling (COT) manufacturing hand-off. Additionally, because of the complexity of their design, which integrates an ARM processor and a 3rd-party DSP core, CYIT recognized the need for new coverage-driven functional verification methodologies to improve chances of first-pass silicon success.

### Synopsys Solution

- Discovery™ Verification Platform
- Functional Verification Methodology Consulting
- Netlist-to-GDSII Design Services

### Cooperation Benefits

Close cooperation and project management between Synopsys Professional Services and CYIT throughout the design process – from specification review through functional verification and chip implementation – ensured efficient project execution and tapeout success. The verification methods employed by Synopsys ensured high functional coverage for the multi-core chip and provided CYIT with an advanced, reusable methodology that improved the productivity of their verification environment. Producing a fully functional chip with the first prototypes represented an important milestone for CYIT and helped it achieve its next round of funding.

