

NE Asia JUN 2006 Issue

Sun Turns to Open Source for Widespread SPARC Adoption

<http://neasia.nikkeibp.com/neasia/004277>

Sun Microsystems Inc of the US has disclosed the intellectual property related to its UltraSPARC T1 (codename: Niagara), which began shipment in November 2005, to the public under the name OpenSPARC. The general public license (GPL) approach is being used. In addition to register transfer level (RTL) design data, the firm also disclosed most of the information needed for microprocessor development, including test vectors and simulation models.

The goal of Sun in disclosing microprocessor design data, which took its engineers so long to develop, is to increase the amount of equipment using SPARC and the already-disclosed OpenSolaris operating system (OS) by tapping the open course community (see Fig). Sun senior vice president and Fellow, Scalable Servers Group chief technologist Mike Splain, commented, "We wanted to lower the barriers to introducing the SPARC architecture to boost the number of system-on-chip (SoC) and other integrated circuits (IC) developed. If these chips are used in various products, it will increase our business opportunities."

Other people in the industry have voiced doubt, such as Tony Massimini, chief of technology for micrologic at Semico Research Corp of the US, a survey firm. He believes that it will take considerable time to achieve widespread adoption of the architecture in diverse markets. Start-up Simply RISC of Italy, on the other hand, is one firm that has announced it will ship a line of SoCs integrating central processing unit (CPU) cores called the S1, based on OpenSPARC, by the end of 2006. A source at the firm explained, "We only have five employees, and we couldn't have developed anything without OpenSPARC." Sun commented that it is currently in discussions with a Chinese firm, which has a semiconductor fab, about ICs based on the OpenSPARC architecture.

GPL Worries

For Sun, one key issue is the poor general understanding of how intellectual property related to hardware is handled under the GPL. Eben Moglen, general counsel of the Free Software Foundation of the US, a group working for free software, said that manufacturers of products using ICs incorporating GPL-protected intellectual property are required to at least disclose the intellectual property used, if requested by a user. He did not comment on just how far the disclosure must go, however.

Sun has recommended that developers considering using OpenSPARC intellectual resources consult an attorney. Basically, the firm said, if design data is changed, it should be sufficient to just disclose the revised design data as RTL. Simply RISC plans to disclose the RTL design data and other information for its IC under the GPL.

by Phil Keys, Silicon Valley

(June 2006 Issue, Nikkei Electronics Asia)