WHO OWNS THE IP?

Patent disputes and management costs may stall growth in the Internet of Things

Complex semiconductor electronic systems – like the Internet of Things (IoT) – are only possible by combining widely available hardware and software in innovative new ways. But proving who owns the intellectual property behind these technologies is becoming an increasingly difficult hurdle to clear.

The semiconductor electronics industry is well acquainted with the basic concepts of IP management. But the degree of management needed – especially to handle larger and more complex systems like the IoT – is not yet fully appreciated. Traditionally, IP was curated internally. From discrete blocks of technology derived from a company’s precious hardware and software projects, or it was purchased from external, third-party suppliers. But today’s globally distributed and collaborative development teams and diverse IP offerings require a more robust management system.

“The concept of a ‘lifecycle’ is a good way to think about the range of activities, risks and costs associated with IP for a semiconductor company,” explained Warren Savage, president and CEO of IPextreme, a US-based company licensing IP and methodologies for system-on-chip designers. “Today, we see amazing levels of IP reuse to create complex devices at lower and lower costs. But as time goes on, the attention will turn to some of the hidden costs associated with creating, buying, using and supporting IP. We see a lot of big companies struggling with these things today.” Those hidden costs will only increase as designers use more and more third-party IP to improve product performance, add new features and meet the ever-shrinking time-to-market windows.

“IP-related lawsuits are increasingly being used for competitive advantage,” noted Mark Davis, principal at Deloitte Consulting, based in New York City. “The growth of patent troll IP activities requires firms to manage IP tightly and be able to defend against claims.” A patent troll uses patent rights to threaten other companies in an attempt to collect licensing fees, but does not use those patents to actually improve or create new products.

The optimal product design choice will depend upon the right mix of a company’s internal IP and third-party offerings, said Richard Waclawiak, a senior market analyst for RISC & System-on-Chip (SoC) at Semico Research, a semiconductor marketing and consulting research company located in Phoenix. “Firms may be required to license specific IP to accomplish a product feature desired by customers,” Waclawiak said.

“On the flip side, they may choose to invest more time in R&D/Engineering to invent something that goes beyond existing IP to ensure they are few and clear from patent claims.”

Enterprise IP management will help hardware and software teams make the right IP choices so that hidden costs impact the evolution of the IoT or any other innovative technology.

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CHALLENGING THE ENTERPRISE

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