Then Now & Next | RISC-V

VO: Let's take it back to 1980. While some were eating dots in the newest arcade game, a team at Berkeley was inventing the first Reduced Instruction Set Computer. RISC for short.

SUPER: The first Reduced Instruction Set Computer (RISC I) was invented in 1980.

VO: Fast forward 30 years and through 4 iterations to get RISC-V. Then another 8 years for it to gain traction.

SUPER: RISC-V was created in 2010 and it gained traction in 2018.

VO: RISC-V is an Instruction Set Architecture, or ISA. Kind of like a blueprint to build a processor.

SUPER: RISC-V is an Instruction Set Architecture (ISA). It defines the abstract model of a processor.

VO: You might think this technology is particularly fancy or complicated, but it's not. In fact, it's pretty simple.

SUPER: RISC-V only has 47 integer instructions that are either 32 or 64 bit implementations.

VO: It's this simplicity and the fact that it's free and open-souce that makes RISC-V so important.

SUPER: It's simple, free and open-source.

VO: You, me or anyone can take this basic blueprint and add on our own ideas. It's designed to be modified, growing through extensions, rather than altering the base code.

SUPER: A modular design allows it to be built upon.

VO: That means the customization is endless.

SUPER: The customization is endless.

VO: Now RISC-V is administered by the nonprofit, RISC-V International. They look after the standard, including its future development.

SUPER: RISC-V international is a nonprofit that oversees everything RISC-V.

VO: And the future for RISC-V is as bright as it is varied. What's next is building up a

robust ecosystem of tools specific for RISC-V.

SUPER: Next: a robust ecosystem of tools.

VO: A huge array of diverse products such as simulators, debuggers, compliers and libraries, bootloaders, and the list goes on.

SUPER: Creating diverse products to expand RISC-V capabilities.

VO: With more tools, RISC-V will become easier to use and more standardized. Everyone will be clamoring to build a processor with this simple but powerful blueprint.

SUPER: It will be easier to use and more standardized.

VO: This tech is relatively new, and we're still in the process of making its history. The cool part is–anyone can add to the story.

SUPER: We're still in the process of making RISC-V history.

VO: Brought to you by Mouser Electronics, where it's our mission to empower innovation together.