

Perf-V Based on Xilinx Artix-7 FPGA RISC-V open source

SKU 102110277

Perf-V is a FPGA demoboard designed for RISC-V open source community by PerfXLab. It integrates various peripheral chips and offers many interfaces. Perf-V has great flexibility and transplant multiple architectures. We prepare abundant materials for you to learn out product and offer a perfect experiment platform for the design of RISC-V and FPGA products. It is a preferred hardware for you to study, develop programs and make a DEMO.

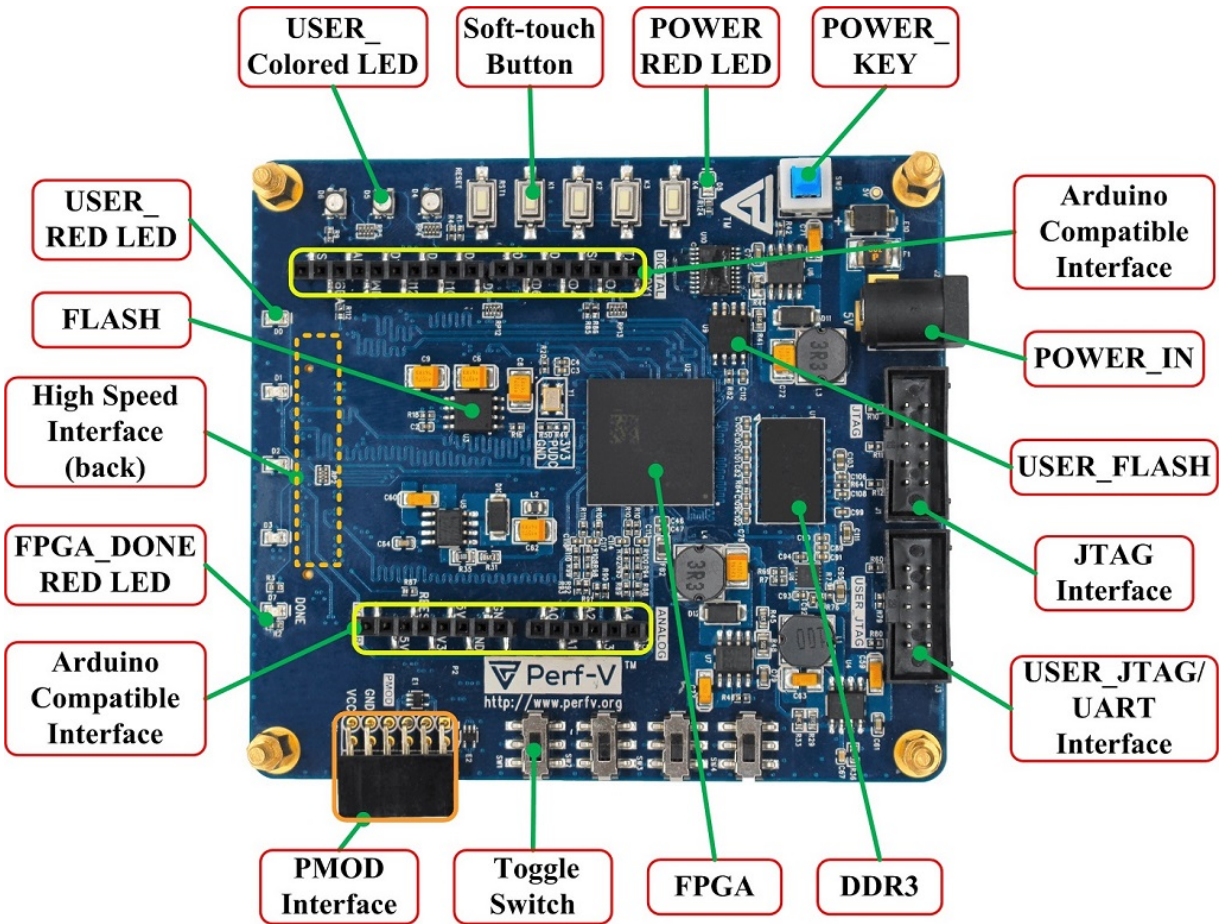
Features

- It uses Xilinx Artix-7 FPGA, Vivado software development, and is designed for the RISC-V open source community and FPGA learning enthusiasts design development board.
- It Integrates a variety of peripheral chips to provide a rich set of peripheral interfaces, including PMOD, Arduino, JTAG, UART interfaces, and high-speed interfaces for expansion of HDMI, VGA, USB2.0/3.0, camera, Bluetooth, expansion boards, etc. Strong flexibility.
- Based on Perf-V's self-developed smart car, it can use mobile phone Bluetooth to control the movement of the car, and can realize automatic tracing and obstacle avoidance functions.
- It successfully ports a variety of RISC-V architectures, providing a good experimental platform for RISC-V processor design and FPGA product development, and is the preferred hardware for learning, scientific research, project development, and DEMO solutions.
- There is a variety of modules available for selection, powerful, rich learning materials, complete experimental routines, cost-effective;
- It is for electronic design engineers, hardware DIY enthusiasts, all kinds of enthusiasts, college teachers and students and other groups.

Main Chips

| Name | Number | Chips | Features | |
|------|--------|--------------------------------|---------------|-------|
| FPGA | 1 | XC7A35T-1FTG256C | Logic Cells | 33280 |
| | | | DSP | 90 |
| | | | CLBs | 41600 |
| | | | Block RAM(Kb) | 1800 |
| | | | CMTs | 5 |
| | | XC7A50T-1FTG256C (Optional) | Logic Cells | 52160 |
| | | | DSP | 120 |
| | | | CLBs | 65200 |
| | | | Block RAM(Kb) | 2700 |

| | | | | |
|-----------------|---|-------------------------------------|------------------------|--------|
| | | | CMTs | 5 |
| | | XC7A75T-1FTG256C (Optional) | Logic Cells | 75520 |
| | | | DSP | 180 |
| | | | CLBs | 94400 |
| | | | Block RAM(Kb) | 3780 |
| | | | CMTs | 6 |
| | | XC7A100T- 1FTG256C (Optional) | Logic Cells | 101440 |
| | | | DSP | 240 |
| | | | CLBs | 126800 |
| | | | Block RAM(Kb) | 4680 |
| | | | CMTs | 6 |
| FPGA FLASH | 1 | N25Q064A | 8MB(64Mbit) | |
| RISC-V FLASH | 1 | N25Q064A | 8MB(64Mbit) | |
| DDR3 | 1 | MT41J128M16JT | 256MB(16Megx16x8Banks) | |

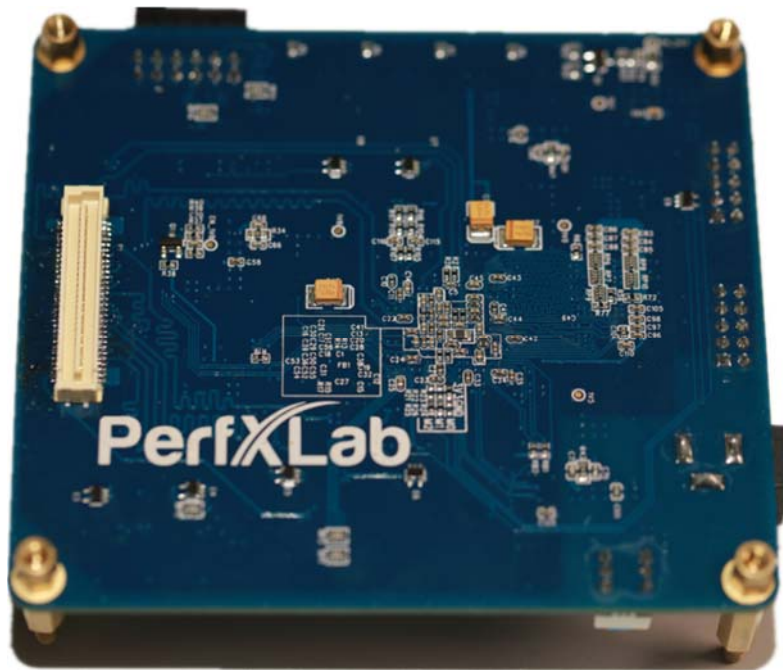


Part List

- 1 x Perf-V Board
- 1 x Download burner
- 1 x Power Adapter

ECCN/HTS

| | |
|--------|------------|
| ECCN | ERA99 |
| HSCODE | 8543709990 |
| UPC | |



<https://www.seeedstudio.com/Perf-V-Based-on-Xilinx-Artix-7-FPGA-RISC-V-opensource-p-4058.html/6-27-19>