

## Perf-V Based on Xilinx Artix-7 FPGA RISC-V opensource

SKU 102110277

Perf-V is a FPGA demoboard designed for RISC-V opensource 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.

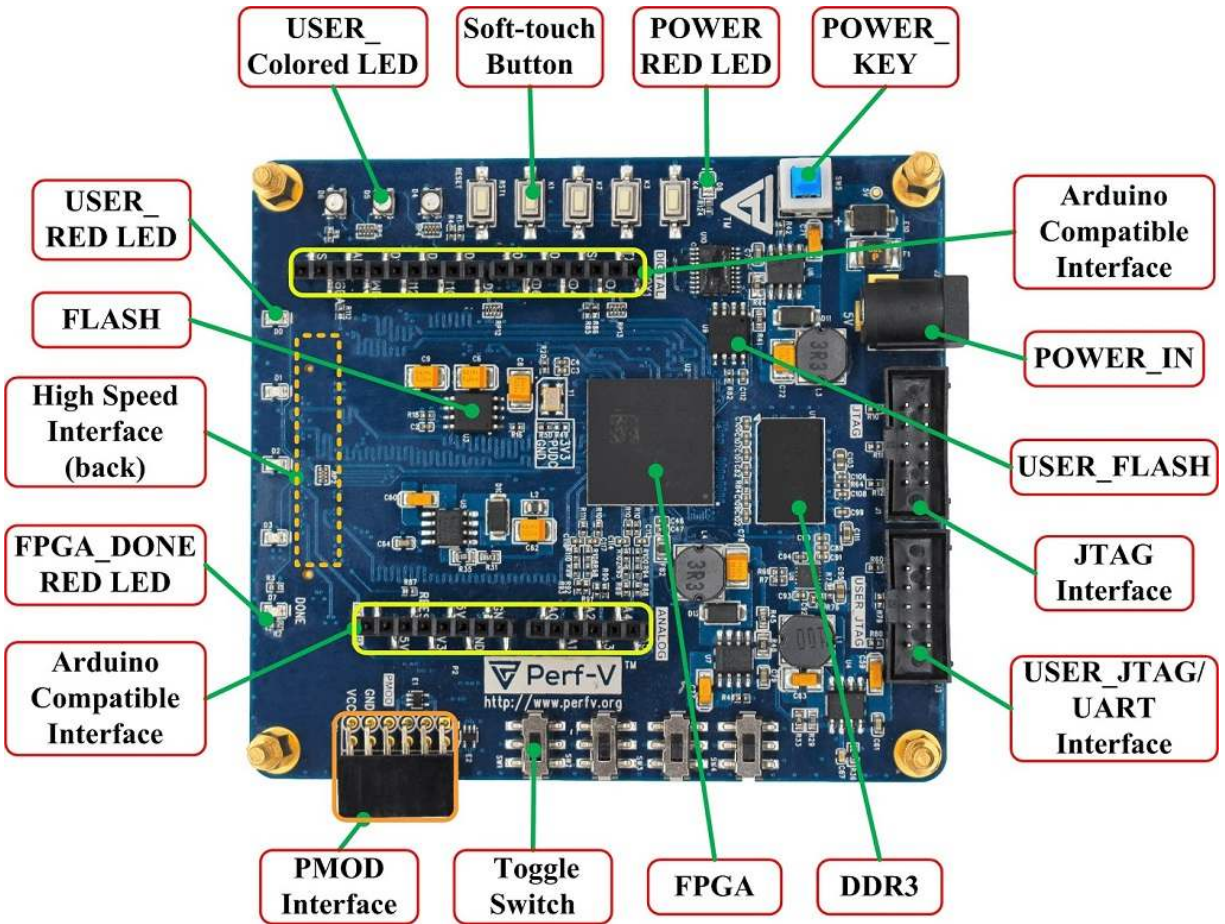
## Features

- 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)	



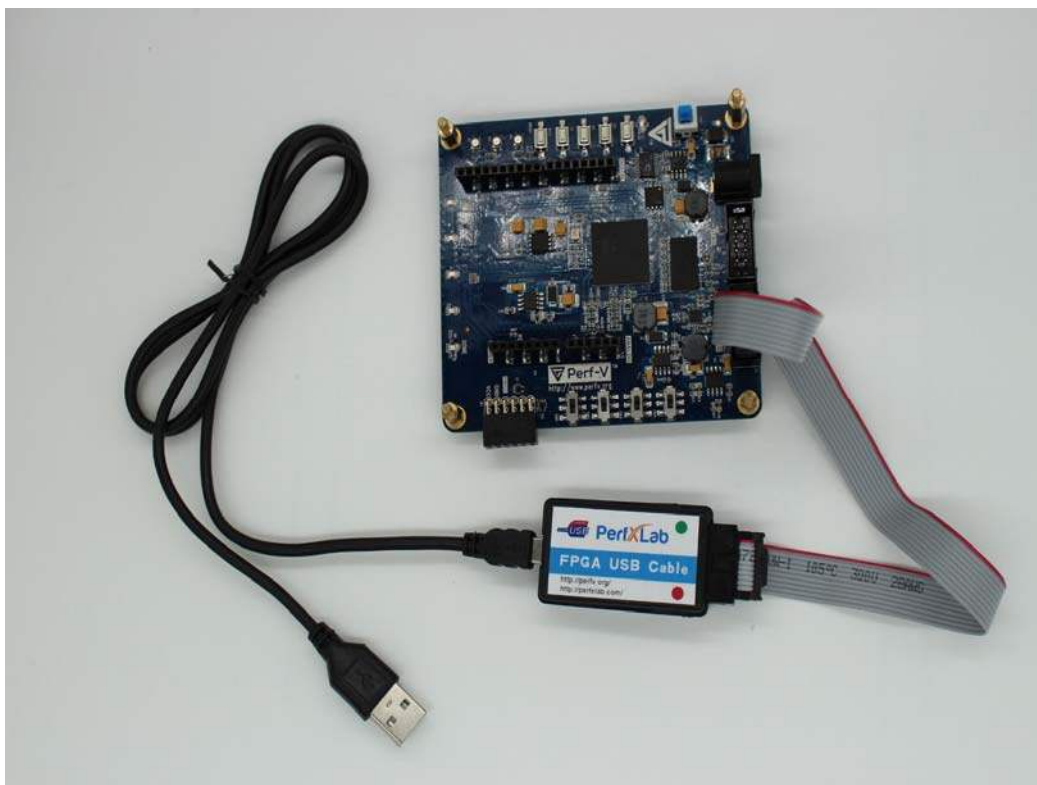
## Part List

- 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>