RED-V RedBoard - SiFive RISC-V FE310

Paper Circuits Classroom Pack

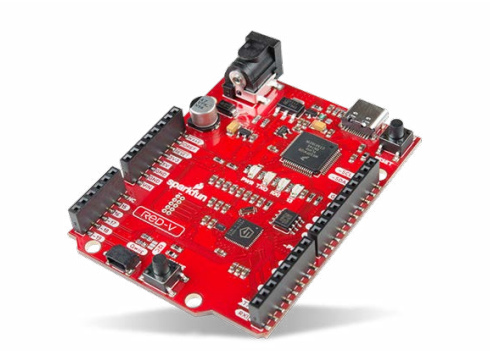
Product Overview

11-29-2021

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

SparkFun RED-V RedBoard - SiFive RISC-V FE310 SoC is a low-cost, Arduino-compatible, and completely open-source development board. This board features the SiFive FE310 SoC that comes with the RISC-V Instruction Set Architecture (ISA). The RED-V RedBoard employs the Arduino R3 form factor, 32MB QSPI flash, NXP K22 Arm® Cortex®-M4 for USB connectivity, and JTAG interface.



This board is equipped with a Qwiic connector that makes I2C easy. The RED-V RedBoard operates at the 3.3V to 1.8V voltage range. This board features 19 digital I/O pins and 9 PWM pins. The RED-V RedBoard incorporates a simple bootloader to start prototyping and developing RISC-V applications.

Features

- Open-source RISC-V development board
- Carry out all the functions of an Arduino in an open architecture
- Economical RISC-V option
- Available in Arduino Uno R3 footprint
- Employs SiFive freedom E310 (FE310) SoC
- Equipped with a Qwiic connector
- Host interface (USB-C):
  - Program
  - Debug
  - Serial communication
- Qwiic Connector

Specifications

- 3.3V to 1.8V operating voltage range
- 19 digital I/O pins
- 9 PWM pins
- Input Voltage:
  - 5V USB or 7VDC to 15VDC Jack
- IO Voltages:
  - Both 3.3V or 5V supported
- 1/3 SPI controllers/HW CS pins
- 19 external interrupt pins
- 1 (& button) external wakeup pins
- 3.3V to 1.8V operating voltage range
- 19 digital I/O pins
- 9 PWM pins

Mouser Part Number

View Part

To learn more, visit https://www.mouser.com/new/sparkfun/sparkfun-red-v-redboard/