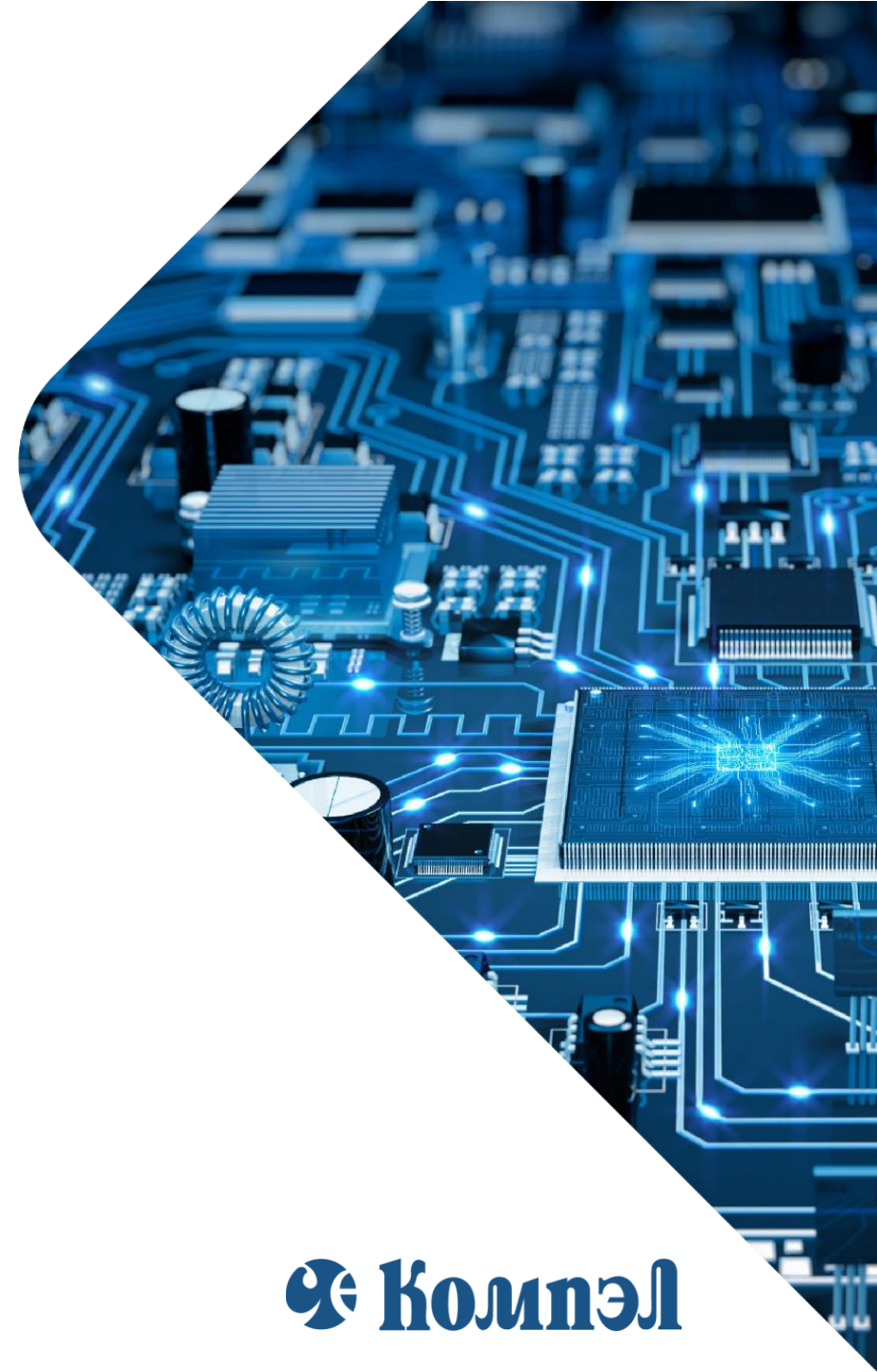


Микроконтроллеры RISC-V азиатских производителей



Архитектуры и топологии ядер

	RISC-V	Cortex M0+	Cortex M3	Cortex M4F	Cortex M7	Cortex M33	Cortex M23	Hi Freq	Big Memory
Fudan	-	★	-	-	-	-	-	★	★
GigaDevice	★	-	★	★	-	★	★	★★★★	★★★★
Geehy	★	★	★	★	-	-	-	★★	★★
WCH	★	-	★	-	-	-	-	★★	★
XHSC	-	★	-	★	-	-	-	★★★★	★★★★
Nations	-	★	-	★	-	-	-	★★	★★
Artery	-	-	-	★	-	-	-	★★★★	★★
Abov	-	★	★	★	-	-	-	★	★★
Sinowealth	-	★	★	-	-	-	-	★	★
Megawin	-	★	★	-	-	-	-	★	★
Nuvoton	-	★	-	★	★	-	★	★★★★	★★★★

Варианты RISC-V (отдельные производители)



- Около 50 наименований
- Тактовая частота: 48...144 МГц
- Память Flash: 16 ... 256 К
- Память RAM: 2 ... 64 К
- USB, CAN, Ethernet, BLE
- Питание 1.8-3.6 / 2.4-3.6 В / 2.7-5.5 В
- Корпуса: от 8 до 100 выводов

WCH 沁恒



- Около 20 наименований
- Тактовая частота: 108...160 МГц
- Память Flash: 16 К ... 4 М
- Память RAM: 6 ... 320 К
- USB, CAN, Ethernet, WiFi, BLE
- Питание 1.8-3.6 / 2.6-3.6 В
- Корпуса: от 32 до 100 выводов

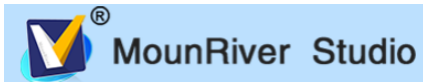


- Только версия чипа с Bluetooth
- 160 МГц, 1М Flash, 256К RAM
- BLE 5.2, 3 ... 4.5 В, QFN40



Средства разработки RISC-V

1. Отладка **CH32Vxxx-EVT**
2. Программатор **WCH-LinkE**
3. Среда разработки **MounRiver**



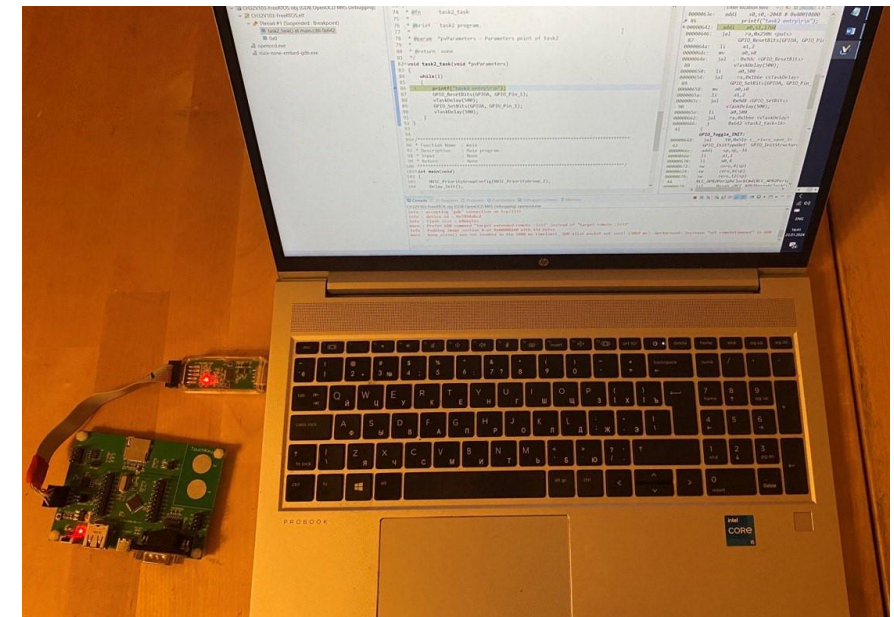
<http://www.mounriver.com/>

Посмотреть наличие и цены в СДС

<https://sds.compel.ru/infosheet/WCH/CH32V103C8T6-EVT-R1>

<https://sds.compel.ru/cat/30028/11tL3z4y6N1P1oB0jdKSm8EdJ>

<https://sds.compel.ru/infosheet/WCH/WCH-LinkE-R0-1v3>



На складе КОМПЭЛ

CH32V003F4U6

CH32V203C8T6

CH32V203F6P6

CH32V203F8P6

CH32V203G6U6

CH32V203RBT6

CH32V303VCT6

CH32V305FBP6

CH32V307RCT6

CH32V307VCT6

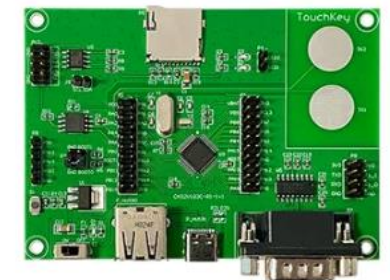
CH32V307V-EVT-R1

CH32V103C8T6-EVT-R1

CH32V203C8T6-EVT-R1

WCH-LinkE

WCH-LinkE-R0-1v3



Обучающие видео по RISC-V от WCH

	Ссылка	Описание	
1	https://www.youtube.com/watch?v=fNKGIVUfB7E	This video introduced what the WCH-LinkE is and how to use it to download the programs to WCH chips.	WCH-Link
2	https://www.youtube.com/watch?v=L9Wrv7nW-S8&t=144s	This video introduced what the RISC-V MCU CH32V003 is and how to get CH32V003 started quickly.	CH32V003
3	https://www.youtube.com/watch?v=SzyICj99w-Q	This video introduced how to get CH32V103 started quickly.	CH32V103
4	https://www.youtube.com/watch?v=VVFQsJ0gTeo&list=PLuK3v2rl-OzNvX9XqR5z04tdgD2HbBG2F	This video shows what the Bluetooth LE is and how to get BLE development started based on CH32V208.	CH32V208
5	https://www.youtube.com/watch?v=JHzsH9RhTR4&t=12s	This series of videos introduced the quick start of CH32V307, and demonstrated how to use Mounriver IDE quickly.	CH32V307 Mounriver IDE
6	https://www.youtube.com/watch?v=v5t_Y9UMKmY		
7	https://www.youtube.com/watch?v=qKwpGOYITwI&t=23s		
8	https://www.youtube.com/watch?v=MJOUCAU5III	This video introduced the high-speed brushless FOC motor control scheme based on CH32V203. The demo solution is Hair Dryer.	MOTOR FOC of CH32
9	https://www.youtube.com/watch?v=PSXAfMaWH_A&t=18s	This video introduced how to get CH32Vxxx MCUs developed with Arduino IDE.	Arduino For CH32V
10	https://pio-ch32v.readthedocs.io/en/latest/	This forum provided the PlatformIO for CH32V which intends to provide an easy way for developing firmwares for various WCH RISC-V chips. It easily integrates into VSCode and other IDEs which can be used cross-platform.	VSCode+PlatformIO For WCH
11	https://github.com/openwch	This repositories provided SDK&HDK of WCH chips and some open source solution based on WCH chips.	SDK&HDK WCH