CH32V003 Datasheet http://wch.cn

Series Product Naming Rules

Example: CH32 V 3 03 R 8 T 6

Device family

- F = ARM-based, general-purpose MCU
- V = QingKe RISC-V-based, general-purpose MCU
- L = QingKe RISC-V-based, low power MCU
- X = QingKe RISC-V-based, Dedicated architecture or special IO

Product type

- 0 = QingKe V2/V4 core, main frequency @48M
- 1 = M3/ QingKe V3/V4 core, main frequency @72M
- 2 = M3/ QingKe V4 non-floating-point core, main frequency @144M
- 3 = QingKe V4F floating-point core, main frequency @144M

Device subfamily

- 03 = General-purpose
- 05 = Connectivity (USB high-speed, SDIO, dual CAN)
- 07 = Interconnectivity (USB high-speed, dual CAN, Ethernet, DVP, SDIO, FSMC)
- 08 = Wireless (BLE5.X, CAN, USB, Ethernet)
- 35 = Connectivity (USB, USB PD)

Pin count

| J = 8 pins | A = 16 pins | F = 20 pins |
|---------------|---------------|--------------|
| G = 28 pins | K = 32 pins | T = 36 pins |
| C = 48 pins | R = 64 pins | W = 68 pins |
| V = 100 pins | Z = 144 pins | |

Flash memory size

- 4 = 16 Kbytes of Flash memory
- 6 = 32 Kbytes of Flash memory
- 7 = 48 Kbytes of Flash memory
- 8 = 64 Kbytes of Flash memory
- B = 128 Kbytes of Flash memory
- C = 256 Kbytes of Flash memory

Package

T = LQFP U = QFN R = QSOP P = TSSOP M = SOP

Temperature range

- 6 = -40°C~85°C (industrial-grade)
- $7 = -40^{\circ}\text{C} \sim 105^{\circ}\text{C}$ (automotive-grade 2)
- 3 = -40°C ~ 125 °C (automotive-grade 1)
- D = -40°C ~ 150 °C (automotive-grade 0)