C2000 MCU Core Board



Part Number: ICETEK-F28027-U



F2802x Piccolo microcontroller with C28X kernel. It uses the latest architectural technology and enhanced peripherals and builtin crystal oscillator with watchdog and its package size at least 38 pin and with a variety of temperature class and can often find it difficult to afford the corresponding cost advantage 32-bit real-time control functionality of applications. Real-time control in areas such as solar inverters, white appliances, hybrid car batteries and LED lighting applications such as truth, advanced algorithms, achieving higher levels of efficiency and accuracy, which can be widely applied in the field of automotive electronics and digital power. ICETEK-F28027-U minimum system board based on TI F2802x Piccolo microcontroller TMS320F28027 processor, and can be used with the C2000 system ICETEK-XDS100.

Hardware features

- Processor: TMS320F28027, speed 60M, working speed 60MIPS
 - On-chip RAM: 12KB
 - 13-Ch 12bit A/D, fastest converting speed 217ns
 - SPI: 1; SCI: 1; IIC: 1
 - Watchdog: 1
 - Timer: 1
 - Multiplex GPIO: 22
 - 8-Ch PWM output
- 64KB on-chip FLASH, comes with 128-bit encryption
- Board design with a test light
- 2 sets of extension connector 20PIN, provide conditions for users for secondary development
- Logic compatible IEEE1149.1 scanning circuit, this circuit is used only for testing and simulation
- Autostart function, can enable offline work
- +3.3V power input, internal +1.8V power management
- Board size: 46mm× 22mm

Applications

- Solar inverters
- LED lighting
- Electric car
- Equipment
- Digital power supply