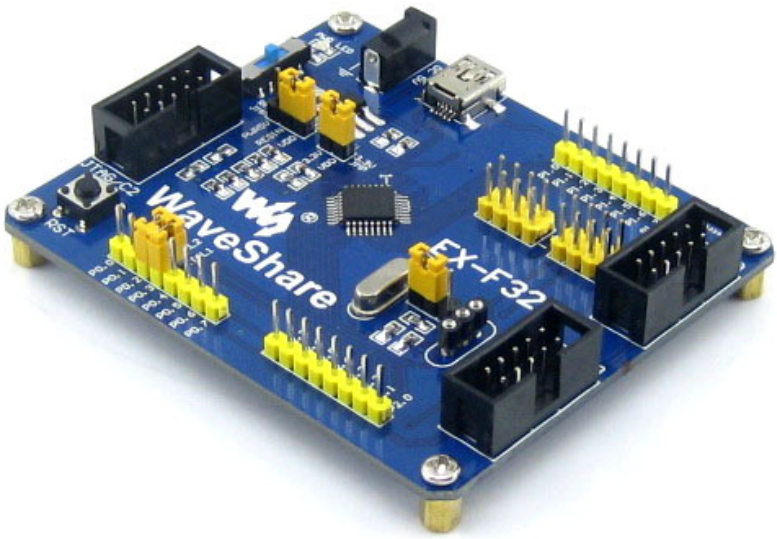
Development Board designed for the C8051F320 microcontroller



Overview

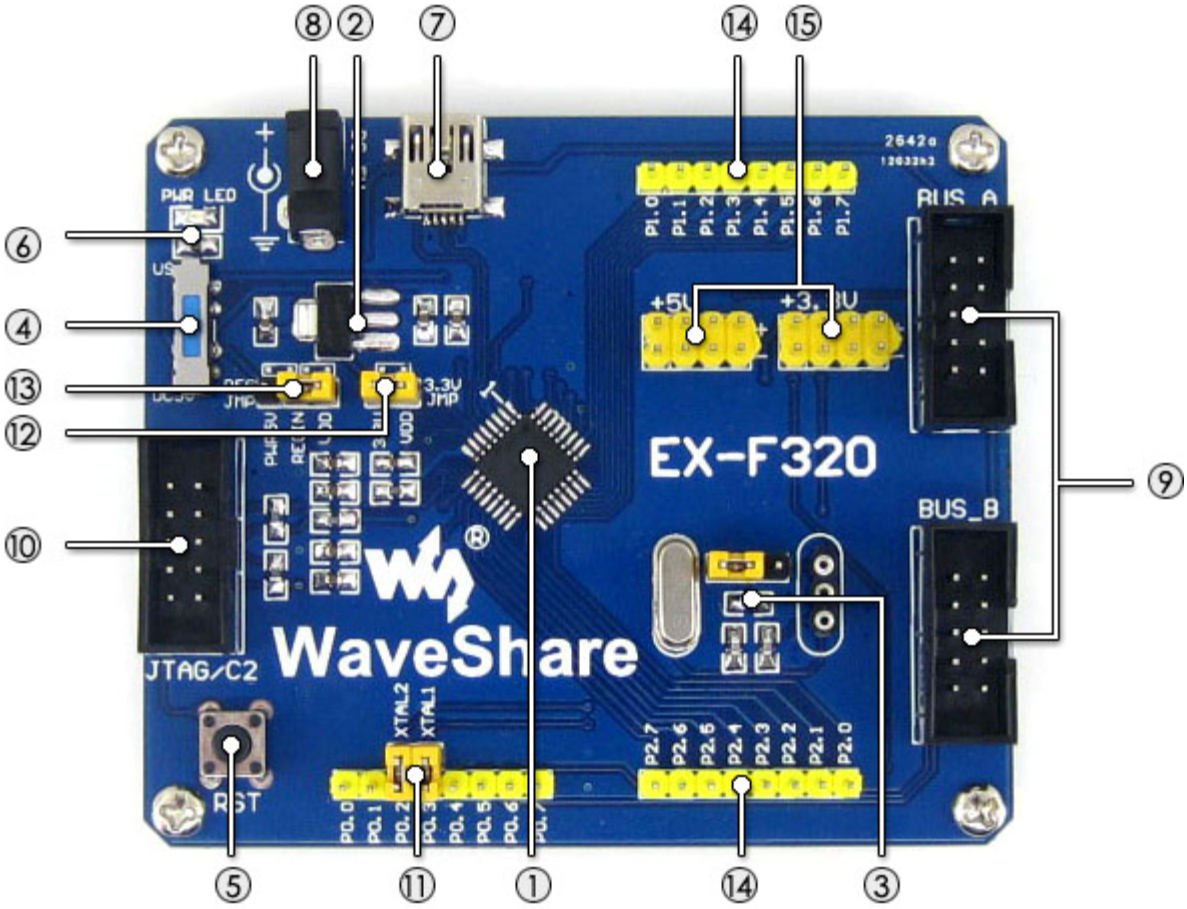
A development board for the **C8051F320** microcontroller. It is designed to give designers a quick start to develop code on the device.

This development board comes with the **C8051F320** chip in LQFP32 package.

What's On Board

- **Power**
  - Powered from mini USB port or 5V DC jack, configured via on board switch
  - Power input/output pin headers
    - spare power input
    - convenient for providing power supply to other board/device if necessary
- **Onboard Chips**
  - C8051F320 (LQFP32), the C8051F Microcontroller
  - AMS1117-3.3, on board regulator
- **Interfaces**
  - JTAG/C2 interface for programming/debugging
  - mini USB interface
  - BUS-A & BUS-B, for connecting to the expansion board DVK501, ease to study/develop various peripheral devices
- **Human to Machine Interface**
  - Reset button, used to reset the system
  - Power indicator LED

- **Other Features**
  - External crystal configurable
    - there is a jumper for selecting on board 12M crystal or custom crystal mounted via the socket
    - a jumper for configuring MCU pins as oscillator inputs or regular I/O pins
  - All the MCU I/O pins are accessible on expansion connectors for further expansion
  - All the pins are clearly marked on the PCB. These marks provide the basic information on the pins



1. Microcontroller
   - C8051F320
   - LQFP32 package
2. On board regulator
   - AMS1117-3.3
3. External crystal configuration
   - on-board 12 M crystal on left side
   - custom crystal socket on right side
   - selected via jumper
4. Power input switch
   - USB or 5V DC
5. Reset
6. Power indicator
7. mini USB interface

8. 5V DC jack
9. Peripherals expansion ports
    - for connecting to DVK501
    - header pinout definition is provided
    - easy to develop various peripherals

10. 10-pin JTAG/C2 interface
    - standard C2 interface
11. External crystal enable jumper
    - short the jumper to use external crystal
    - open the jumper to config the pins as regular I/O pins
12. Jumper 3.3VJMP
    - open the jumper when REG0 enabled
    - short the jumper when REG0 disabled
13. Jumper REGJMP
    - short PWR5V & REGIN when REG0 enabled
    - short REGIN & VDD when REG0 disabled
14. Pin headers connected to MCU I/O pins
    - marked clearly on the PCB
    - easy for testing and further expansion
15. Power Input/Output
    - 5V/3.3V
    - power input (spare)
    - power output