CC2530 Eval Kit4

Primary Attribute

 Part Number CC2530 Eval Kit4
Manufacturer Waveshare
  Remarks

Pricing

Price List (All prices are in US dollars)				
Price Break	**@ 1Unit**	**@ 2Units**	**@ 3Units**	**@ 4Units**
Unit Price	41.99	39.89	38.29	37.09
Extended Price	41.99	79.78	114.87	148.36

Product Photos

ZigBee development/evaluation kit designed for CC2530F256
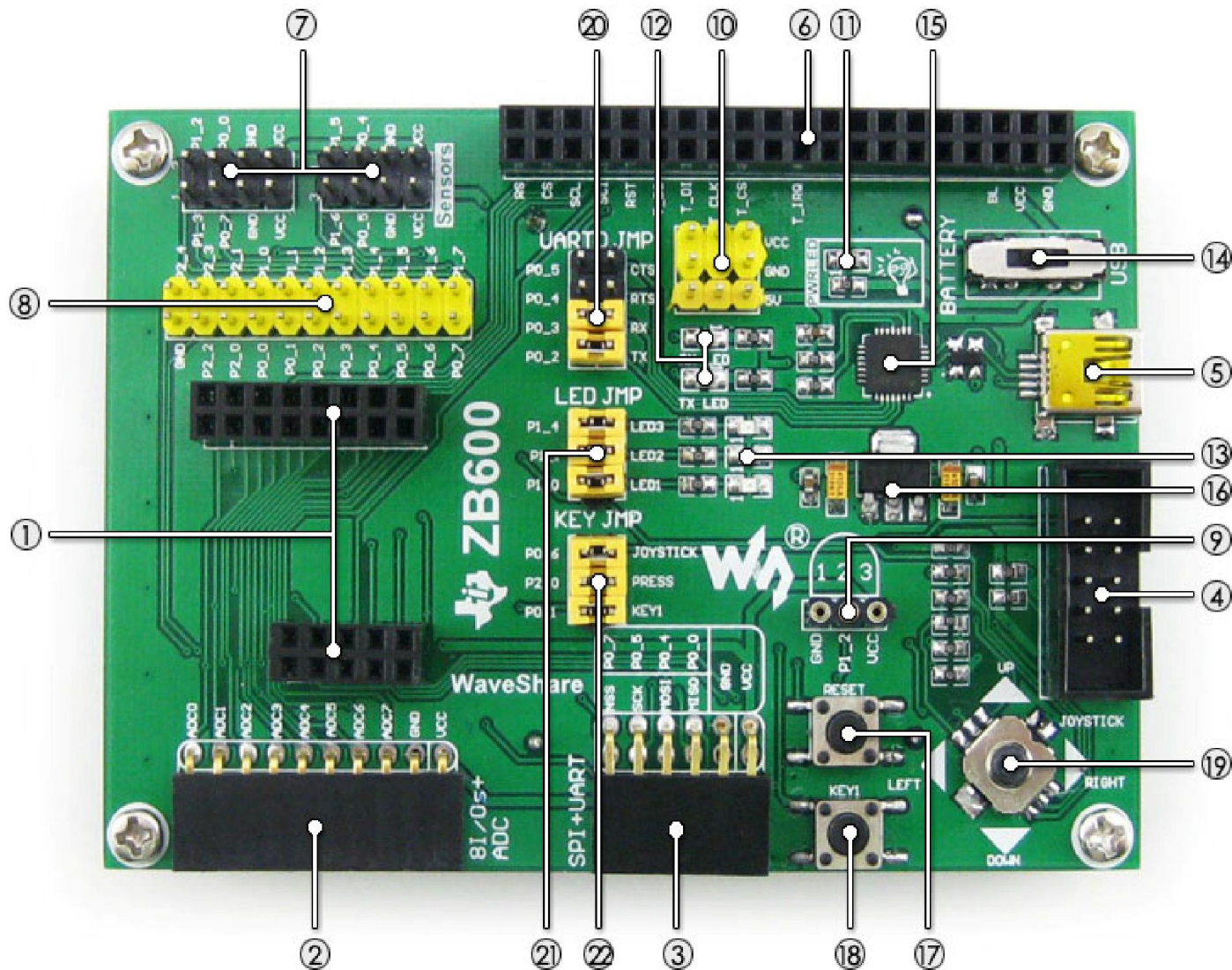
Overview

CC2530 Eval Kit4 is a ZigBee development/evaluation kit designed for CC2530F256, consists of the mother board **ZB600** and the ZigBee module **XCore2530**. LCD and modules are also included.

ZB600 Features

- Onboard battery holder, multi power supplies are available

- All the IOs are accessible for easy expansion
- Integrates CP2102 for debugging
- LEDs and user keys
- Onboard sensor interface, supports connecting various sensors

What's on the ZB600

1. ZigBee module connector: for easily connecting ZigBee modules
2. 8I/Os+ADC interface
3. SPI+UART interface
4. Debugging interface
5. USB interface: USB to UART via the onboard convertor CP2102

6. LCD interface
7. Sensor interface: for connecting sensors like Temperature sensor, Humidity sensor, Gas sensor, or Flame sensor, etc.
8. MCU pins connector: all the MCU pins are accessible on expansion connectors for further expansion
9. ONE-WIRE interface
10. 5V/3.3V power input/output: usually used as power output, also common-grounding with other user board
11. Power indicator
12. Serial port RX/TX indicator
13. User LEDs
14. Power switch
15. CP2102
16. AMS1117-3.3
17. Reset button
18. User key
19. Joystick: five positions
20. UART0 jumper
21. User LED jumper
22. User key and Joystick jumper

XCore2530 Features

1. As easy to use as any UART modules
2. Preloaded Bootloader, supports programming via UART directly without any debugger
3. Provided firmware: Coordinator and/or Router(preloaded by default)
4. Supports configuring via upper computer software
5. Auto networking (at least 1 Coordinator and 1 Router are required)
6. Onboard power amplifier RXF2401, achieves farther communication distance

XCore2530 Specifications

1. Onboard chip: CC2530F256RHAR
2. Communication distance (open and wide operating environment):
   o Absolute maximum: over 1500 meters
   o Stable communication: over 1300 meters
   o Auto connecting: over 1000 meters
3. Frequency range: 2.4GHz
4. Wide supply-voltage range (2 V–3.6 V)
5. Operating temperature: -40℃ ～ 85℃
6. Serial port baud rate: 38400bps (default), different baud rates are available by software configuration
7. Dimension: 26mm x 37mm (PCB)

8. Expansion pinheader: all the I/Os except P1_1, P1_4
9. Pinheader pitch: 2.54mm
10. Spacing between pinheaders on the left side and the right side: 22.86mm (9x2.54mm)
11. Antenna: 2.4G 2DB 360° omni-directional

CC2530F256RHAR Features

1. Frequency range: 2.4GHz
2. 16 transfer chains, software configurable according to environmental conditions
3. Radio baud rate up to 250kbps
4. High-Performance and Low-Power 8051 microcontroller core with code prefetch
5. 2.4-GHz IEEE 802.15.4 compliant RF transceiver
6. Wide supply-voltage range (2 V–3.6 V)
7. Watchdog timer, battery monitor, and temperature sensor
8. 12-Bit ADC with 8 channels and configurable resolution
9. 2 powerful USARTs with support for several serial protocols
10. IR generation circuitry
11. General-Purpose timers (One 16-Bit, Two 8-Bit)
12. AES security coprocessor
13. 21 General-Purpose I/O pins (19 × 4 mA, 2 × 20 mA)