

# Arduino Adapter For Raspberry Pi Model:ARPI600



#### Overview

Arduino is a massive ecosystem, if there's a way for the Raspberry Pi GPIO interface to adapt to Arduino pinouts, it is possible to use the Pi together with vast Arduino shields and hardware/software resources. The ARPI600 is just intended for this.

What's more, the ARPI600 also support XBee modules, make it easy to add wireless feature to your great project.

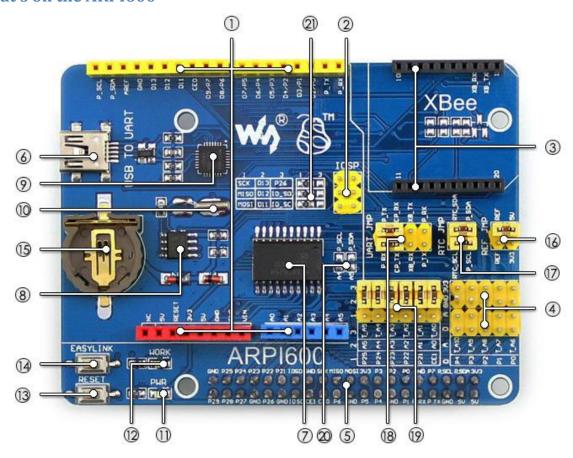
## **Supported Pi**

- Raspberry Pi 1 Model A+
- Raspberry Pi 1 Model B+
- Raspberry Pi 2 Model B

#### **ARPI600 Features**

- •Compatible with Arduino UNO, Leonardo, easy to connect with various Arduino shields
- •XBee connector for connecting various XBee modules
- Sensor interface for connecting various sensors
- Onboard USB TO UART for serial port debugging, also can be configured as XBee USB adapter
- •Onboard ADC, 10 bit, 38KSPS, 11 channels (6 channels for Arduino interface, 5 channels for sensors)
- •Onboard RTC

#### What's on the ARPI600



- 1. Arduino connector: for connecting Arduino shields
- 2. ICSP interface: Arduino ICSP
- 3. XBee connector: for connecting XBee communication modules
- 4. Sensor interface : for connecting sensors
- 5. Raspberry Pi connector: for connecting Raspberry Pi
- 6. USB TO UART
- 7. TLC1543 : AD converter
- 8. PCF8563: RTC
- 9. CP2102
- 10. 32.768KHz crystal: for RTC
- 11. Power indicator
- 12. XBee state LED
- 13. XBee and Arduino interface RESET button
- 14. XBee EASYLINK button
- 15. RTC battery holder: for CR1220 button battery
- 16. TLC1543 reference voltage configuration jumper
- 17. RTC jumper
- 18. UART jumper
  - when connecting P\_RX and CP\_TX, P\_TX and CP\_RX respectively, USB TO UART is connected to Raspberry Pi serial port
  - when connecting XB\_RX and CP\_TX, XB\_TX and CP\_RX respectively, USB TO UART is connected to XBee serial port
  - when connecting XB\_RX and P\_TX, XB\_TX and P\_RX respectively, Raspberry Pi serial port is connected to XBee serial port

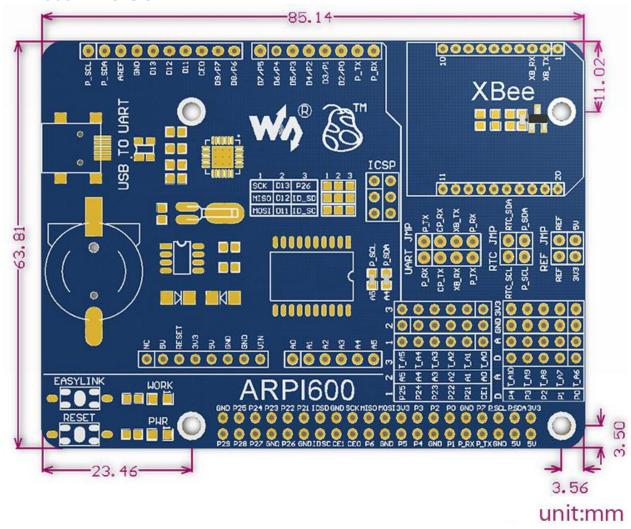
## 19. Arduino AD selection jumper

- o short 2 and 3 : Arduino A0-A5 as AD input
- short 1 and 2 : Arduino A0-A5 as digital control

## 20. Arduino I2C selection jumper

- short the jumper : Arduino A4-A5 as I2C control (the A4-A5 of Arduino AD selection jumper should be opened)
- 21. Arduino SPI selection jumper
  - o short 1 and 2 : Arduino D11-D13 as SPI control (default)
  - o short 2 and 3: Arduino D11-D13 as digital control

#### **ARPI600 Dimension**



Made in China