

# ATOLL - AT102X - EVB V2

# Bluetooth Low Energy

#### **Overview**

Atoll AT1020 Evaluation Board (EVB) is a simple board for customers to evaluate Atoll's AT1020-256 BLE module. AT1020-256 is Atoll's module with Qualcomm CSR1020 Bluetooth Low Energy SoC. This EVB brings out all important pins in compact "Adafruit Feather" form factor.

#### **Peripherals**

- Up to 11 Programmable general-purpose PIO controllers
- 10-bit ADC & 1 analogue AIO
- 5 PWM modules with 3D shutter control
- SPI interface
- I2C controller
- UART interface
- Digital microphone, I2S port for PCM I/O & G.722 Codec

#### **Other Features**

- Power Reset Button
  - SW2: Used for hardware power reset.
- User Push Button
  - SW1 → PIO13 → J29.1 & J29.2 Should ON
- RGB LED
  - RED  $\rightarrow$  PIO3  $\rightarrow$  J2.3&J2.4 Should ON
  - GREEN  $\rightarrow$  PIO14  $\rightarrow$  J2.5&J2.6 Should ON
  - BLUE  $\rightarrow$  PIO10  $\rightarrow$  J2.1&J2.2 Should ON



- Serial UART Debug.
  - On board CP2102 chip for the UART to

### **Further Information**

Atoll Solutions Private Limited #229, 2nd Floor, 2A Main, 5th Cross, HAL 3rd Stage, New Tippasandra, Bangalore – 560 075, India.

www.atollsolutions.com

Email: <a href="mailto:sales@atollsolutions.com">sales@atollsolutions.com</a>

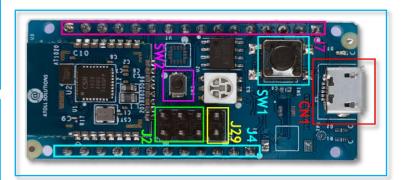
Phone: +91 8040944502

## **Target Applications**

Bluetooth Low Energy Technology:

- HID: keyboards, mice, touchpad, advanced remote controls with voice activation
- Sports and fitness sensors: heart rate, runner/cycle speed and cadence
- Health sensors: blood pressure, thermometer and glucose meters
- Mobile accessories: watches, proximity tags, alert tags, environmental sensors and camera controls
- Smart home: heating, switching and lighting control
- Wire replacement applications

Qualcomm® Mesh Connectivity: Internet of Things control



Pin #	Pin Description
J7.1	ENA
J7.2	VCC_3V3D
J7.3	NC
J7.4	GND
J7.5	PIO_14
J7.6	PIO_10
J7.7	NC
J7.8	NC
J7.9	SPI_PIO/SE
J7.10	DEBUG_SPI_CSB/PIO_1
J7.11	DEBUG_SPI_CLK/PIO_0
J7.12	DEBUG_SPI_MOSI/PIO_2
J7.13	DEBUG_SPI_MISO/PIO_3
J7.14	UART_TX/PIO_8
J7.15	UART_RX/PIO_9
J7.16	GND

Pin #	Description
J4.1	VBAT
J4.2	ENA
J4.3	VCC_USB
J4.4	NC
J4.5	NC
J4.6	NC
J4.7	NC
J4.8	AIO
J4.9	NC
J4.10	I2S_WS/PIO_13
J4.11	SCL/PIO_12
J4.12	SDA/PIO_11