

# Ambiq: Ultra-low Power MCU & RTC

The World's Most Energy-Efficient Solutions

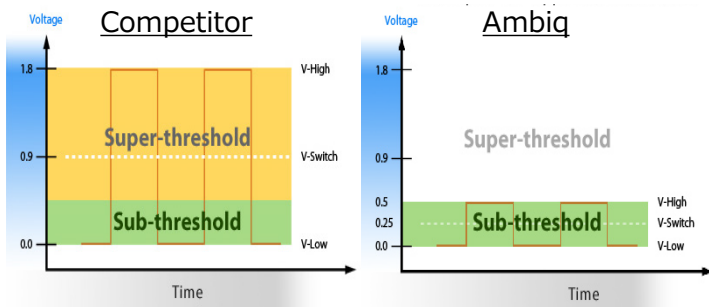
“Apollo Family” MCU & RTC with Power Management

FUJITSU



- Location: Texas Austin, USA, Found: 2010
- Product: Ultra-low Power MCU, RTC

## ■ SPOT™



**SPOT™** Patented SPOT Platform dramatically reduces an internal operating voltage to 0.5V, and reduce energy usage to 1/5 upto 1/10 than the other competitors.

## <Apollo Family MCU>

### ■ Feature

- **<10μA/MHz in Active Mode**
- **Supports Bluetooth 5.0**
- **Cortex M4F, ROM 1MB**
- **High Performance Peripherals. PDM, 14bit ADC and so on**

### ■ Lineup

Product Family	Apollo1	Apollo2	<b>NEW</b> Apollo2 Blue
CPU	Cortex M4F	Cortex M4F	Cortex M4F
Operating frequency	24MHz	48MHz	48MHz
MCU Power Consumption	35μA/MHz	14.5μA/MHz	<b>14.5μA/MHz</b>
Voltage	2.1~3.8V	1.8~3.6V	1.8~3.6V
ROM(KB)	512 or 256	1024	1024
RAM(KB)	64 or 32	256	256
Bluetooth	-	-	<b>BLE 5.0*</b>

\*Plan to support BLE 5.0 from 2018/3Q

### ■ Application

- Wearable Electronics
- Beacon
- Internet of Things (IoT) Devices
- Wireless Sensors
- Consumer Electronics
- Wireless Earbuds/headsets
- Smart Appliances
- Battery-Powered Applications



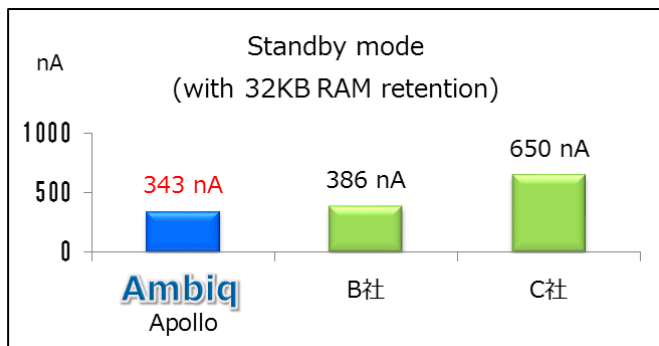
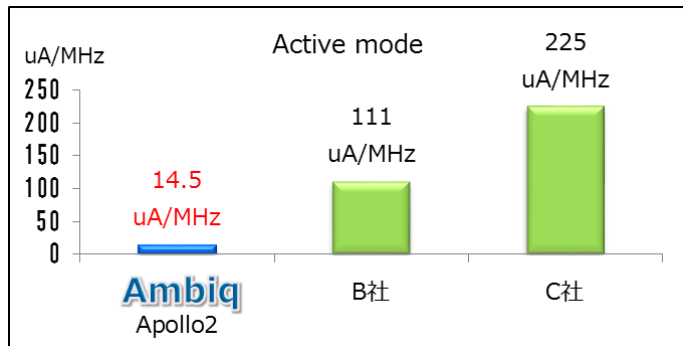
# Ambiq: Ultra-low Power MCU & RTC

## The World's Most Energy-Efficient Solutions

### "Apollo Family" MCU, RTC with Power Management

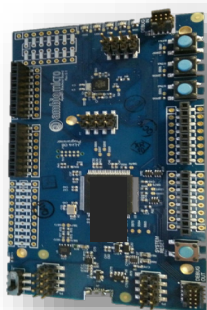


#### Competitive Comparison: ARM Cortex-M4F



#### Apollo1 EVB, Apollo2 EVB Apollo2 Blue EVB

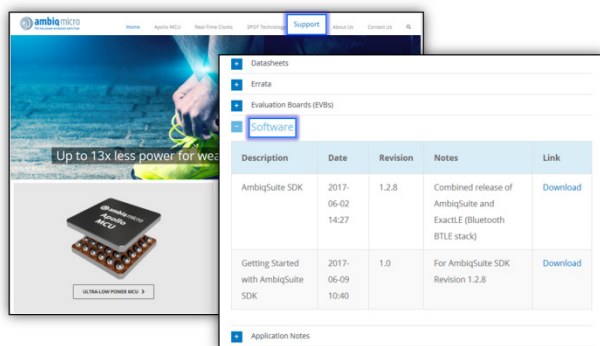
Evaluation board of Apollo family MCU are available



#### Development Environment:

Sample project/program, Application note, software and more information are available. Please visit and download from the web-site.

<http://www.ambiqmicro.com/support>



#### 3rd Party Debug Tools

IAR, KEIL

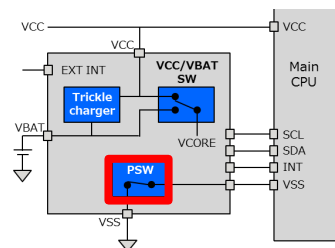
## <RTC>

#### Feature

- Ultra-low supply current: **55nA** (Crystal Oscillator)
- Integrated **PSW** shuts off power supply to host MCU, its power consumption turns to zero.

#### Lineup

Part Number	Interface	Package	PKG size (mm)	SRAM (byte)	Power Switch
AM1805AQ	I <sup>2</sup> C	16-Pin QFN	3x3	256	○
AM1815AQ	SPI	16-Pin QFN	3x3	256	○
AM0805AQ	I <sup>2</sup> C	16-Pin QFN	3x3	256	-
AM0815AQ	SPI	16-Pin QFN	3x3	256	-



#### <Contact Information>

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