NEWS RELEASE

Ambiq and TSMC Deliver World's Lowest Energy Consumption for Huawei's Fitness Wearables

2017-09-07

Ambiq®, the pioneer and leader in ultra-low power solutions, today announced that Huawei has selected the Apollo2 platform, built on TSMC's 40nm Near-Vt technology platform, to power its new line of lightweight fitness wearables including the newly launched Huawei Band 2 Pro. The Apollo2 platform features high performance sensor and application processing at a breakthrough power consumption of under 10µA/MHz, enabling more than twice the battery life in wearable and IoT devices, as well as enhanced intelligence and improved functionality.

At the heart of the Apollo2 platform is Ambiq's patented Sub-threshold Power Optimized Technology (SPOT®), which includes wide-ranging IP to drive record-breaking energy efficiency. In addition, Apollo2 leverages TSMC's 40nm Near-Vt technology platform to significantly cut power use by always-on devices and meet the stringent power and connectivity demands of the wearables and IoT markets.

Consumers in the rapidly-growing wearables and IoT markets are demanding increased intelligence, extended battery life and more powerful features that let them do more with their devices. Ambiq's Apollo2 is redefining what is possible by dramatically reducing energy consumption while leaving plenty of room for sensor and application processing power.

"We're excited to partner with Huawei to power its new line of fitness wearables," said Scott Hanson, founder and Chief Technology Officer of Ambiq. "We congratulate Huawei on its product launch and we're thrilled that our superior low-power technology built on TSMC's 40nm Near-Vt technology platform is helping Huawei offer new and better wearable and IoT products. Manufacturers can now build smarter, more innovative wearables and IoT devices without worrying about the trade-off between features and battery life."

Huawei chose the Apollo2 because it is the lowest-power system on a chip on the market and for Ambiq's unique SPOT technology, which enables Huawei to achieve greater efficiencies for its next wave of wearables and connected devices. This is clearly demonstrated in the Huawei Band Pro 2 product, available on Amazon.com, which includes professional runner training, advanced sleep tracking, and relaxation exercises without sacrificing crucial battery life.

"Ambiq's groundbreaking low-power technology is critical because consumers are demanding always-on, always-connected, always-aware devices with longer battery life and slimmer, more fashionable form factors," said Rico Zhang, Smart Wearable Product Line President of Huawei. "We are very pleased to offer the most innovative fitness wearables in the market, enabled by Ambiq's Apollo2 platform."

"We are pleased to partner with Ambiq to provide a unique and innovative low power solution," said Been-Jon Woo, Vice President of TSMC. "TSMC's ultra-low power (ULP) platforms, including 55ULP, 40ULP, and 22ULP/ULL are widely adopted for a variety of wearable and IoT applications. As we extend ULP technology to Near-Vt (NVT) technology for designs like Ambiq's Apollo2 platform, we are committed to providing a comprehensive ULP/NVT technology platform and IP ecosystem to enable the best IoT product solutions."

A wide variety of major brands and OEMs are using Ambiq technology to build functional, innovative and enjoyable low power devices for consumers. The Apollo2 platform's low power consumption and large memory size delivers the ability to continue creating robust, industry-leading consumer applications and devices.