NEWS RELEASE

Ambiq's Low Power SoC Enables Added Functionality in Misfit's Next-Generation Wearable Without Sacrificing Battery Life

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Ambiq®, the leader in ultra-low power solutions, today announced Misfit, Inc. has selected the Apollo system on chip (SoC) as the 'brain' in the Misfit Shine 2 Fitness and Sleep Monitor.

Announced just last week, the next-generation Misfit Shine 2 provides new features, functions and capabilities without sacrificing its market leading 6-months of battery life. Shine 2 tracks activity and sleep more accurately with a 3-axis accelerometer and newly added 3-axis magnetometer, displays progress and tells time in a halo of rainbow-colored lights, and gets users motivated with Misfit Move, a feature that encourages users to be active with a vibrational nudge. Text and call notifications and a silent vibration alarm are also new with Shine 2.

The Misfit Shine 2 also incorporates dramatically improved touch responsiveness with capacitive sensing technology, faster syncing, and extended Bluetooth range. Its 12 lights display over 16 million colors and are bright enough to be seen in direct sunlight.

"Shine 2 would not be what it is without this processor," said Steve Diamond, VP of Hardware Engineering at Misfit. "It allowed us to focus less on power optimization and more building a next-generation product with the same great battery life."

The Apollo SoC will operate as the central processor and controller in the new Misfit Shine 2, handling overall device operations including processing inputs from the device's motion and environmental sensors and also controlling wireless communication with the outside world.

Ambiq's interim CEO, Mike Noonen, said: "The selection by a major wearable electronics leader such as Misfit to use the Apollo SoC is a significant endorsement of our unique production ready technology and our ability to work closely with world-class consumer companies. The Ambiq team is thrilled that our order of magnitude low power advantage is used so effectively in the Shine 2."

Based on the 32-bit Arm® Cortex®-M4 with FPU, in real-world applications the Apollo SoC delivers typically 5 to 10 times lower energy consumption than other competitive SoCs. This high level of performance per watt can mean significantly extended battery life, the use of smaller or fewer batteries, and/or the ability to add new features not previously possible. These benefits are critically important for wearable electronics and other battery-powered applications.

The dramatic reduction in energy consumption is achieved using Ambiq's patented **Sub-threshold Power Optimized Technology** (SPOT®) platform. In addition, the Apollo SoC offers best-in-class power consumption numbers in both active-mode and sleep-mode—a capability that is unique in the industry. The **Apollo SoC** consumes an industry-leading 34µA/MHz when executing instructions from flash memory and features sleep-mode currents as low as 140nA.

The Misfit Shine 2 will be widely available for purchase in November, in time for the high-volume seasonal end-of-year retail market.