DOLPHIN INTEGRATION ANNOUNCES THE FILING OF A PATENT ON THE ARCHITECTURE OF ULTRA LOW POWER-CONSUMPTION SOC IN VOICE INTERACTION DEVICES

Grenoble, France. January 12, 2018.
An innovation was becoming necessary for drastically extending the duration of battery charge of wearable devices, smart speakers, Bluetooth Head phones, Smartphones, and enabling a true-wireless solution for smart home devices.

The "voice-first" digital life is here and the growing popularity of voice-based interactions between humans and devices is testimony to this trend. Thanks to advanced language processing, machines are not only able to convert the human speech to text but also to understand meaningful information, such as keywords and commands.

In the year 2017, 25 million devices have been shipped, bringing the total number of voice-first devices to 33 millions in circulation according to VoiceLabs (Mediapost). Therefore 75% of US Households will have a Smart Speaker by 2020, about 138 million smart speakers (Gartner). This throws in a unique challenge of power consumption to battery-powered smart devices:
Touchless activation sensing is becoming a must for applications relying highly on the interactivity with the final user, but having to avoid wasting a lot of power for processing non-relevant data, such as ambient noise 95% of the time.

Dolphin Integration introduces a low power alternative: the WhisperTrigger™, a Voice Activity Detector (VAD) enabling a breakthrough in Low-Power consumption and larger battery autonomy.

In ultra-low power systems, triggers play the key role of tracking activity-related events and awakening the relevant functions, which are otherwise turned-off, the rest of the time. Our family of triggers has been adopted by several leading fabless suppliers designing SoCs, to detect various events while ensuring up to 90% increase in battery autonomy. The powerful self-adaptive algorithm of WhisperTrigger™ adapts automatically to ambient noise variations, be it in near-field or far-field contexts and the rest of the SoC is in stand-by or sleep mode and wake-up only when advanced computation is required.

The WhisperTrigger™ is a complete solution for Voice Activity Detection, which can be integrated within a SoC or in a MEMS microphone. Their suppliers who do not prepare themselves for this market demand must expect a bad surprise.

Depending on the system requirements, the Voice Activity Detection can be applied to both analog and digital signal. Furthermore, it can be combined with Dolphin Integration's best-in-class offering in Always-on and Low power SoC management (e.g. power and clock domain controller, low power voltage regulator, oscillator and standard cell library).

Dolphin Integration shall widely communicate and promote WhisperTrigger™, and more broadly the whole of Fabric IP solution in the coming months. They will be

presented at prestigious events, which will take place in the United States, China and Europe.

The chairman