Our products and key customers

Dialog focuses on three major sectors: mobile, connectivity and automotive and industrial.

Mobile solutions

Our power management, audio and display semiconductor solutions are designed for portable devices, including smartphones, tablets, Ultrabooks™, ebooks, MP3, MP4 and other media players.

Dialog replaces discrete power management components with highly integrated, single chip solutions that provide design simplicity, reduce energy usage, save board space for other components and lower the overall bill of materials. Dialog's Power Management Integrated Circuits (PMICs) are fully configurable, which means they can be programmed to meet the exact voltage and current needs of every component.

Effective power management in many portable devices presents an increasingly complex array of design challenges. Smartphones, tablets and Ultrabooks™ increasingly need to be able to run high definition video, games, GPS maps and audio content and connect via high speed 4G LTE and legacy 3G networks, Wi-Fi and short-range wireless stands like Bluetooth. 4G LTE, for example, requires a lot more processing power to decode far greater amounts of data in the wireless spectrum. At the same time consumers demand displays that are brighter, bigger and incorporate touch functionality and, in the future, haptic feedback. Each of these features is a major battery drain, creating a need for effective power management technologies.

Multicore devices delegate simple tasks to one core, while directing more complex, power-hungry tasks to the other core. Each of the quad- or octal-core application processors needs to be powered up and down into and out of sleep state in particular sequences. Dialog's solutions excel at handling this power management complexity. Dialog's charging solutions for lithium ion battery systems support faster charging, more safely and from a wider variety of sources.

With a long legacy of delivering different power management designs for world-leading mobile phone manufacturers and portable consumer OEMs, we seek to optimise all aspects of the design, including electrical, thermal and mechanical packaging considerations. These designs offer sophisticated integration with multiple power management and analog functions on the chip, including programmable high-performance LDOs (low dropout voltage regulators), high-efficiency DC-DC voltage converters, intelligent battery charging circuits, software programmable LED drivers, sensor ADCs, USB interfaces, and multichannel audio capabilities.

In 2012, Dialog launched a new class of power management product – DA9063 – our fourth generation of advanced system PMIC and flagship product, targeting high-end multicore-based applications. A second member of the family – DA9021 – addresses lower power cost-sensitive applications.

Our configurable PMICs enable late changes in board-level designs as additional functionality that is added into smartphone platforms during the R&D process. As a platform-based PMIC can support multiple phone designs, Dialog helps its customers reduce inventories and respond to the consumer market's need for volume flexibility.

Dialog's Audio CODECs filter out extreme background noise and increase the fidelity of the sound through advanced echo cancellation and DSP (Digital Signal Processing) technology that delivers a rich, deep base and clear high frequencies even in noisy environments. This is complemented by amplifier technology to improve audio quality through the headphones and speakers.

From left:
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