# Broad Portfolio and Signal Path Expertise Enriches User Experience in Cell Phones

USB has become the universal interface for mobile applications. Fairchild's new USB transceiver and USB accessory detection switch bring functional enhancements without adding design complexity or increasing space and power in mobile designs. Through its signal path expertise, Fairchild's micro-USB switch (FSA9280A) and USB transceiver (FUSB2500) bring significant design advantages to the mobile space: •Auto Detection. The FSA9280A automatically detects accessories and configures the proper path for each accessory. This device can detect every accessory and charger in the market, and has a number of "reserved" resistors to accommodate new accessories such as glucometers, e-frames and audio docks. The FUSB2500 has an integrated charger detect that allows detection without additional component count. •Power Savings. The FSA9280A uses advanced sampling methods to minimize power consumption in the standby state, extending battery life. It also provides a negative switch capability in audio applications without consuming power; alternative solutions need a charge pump for this. Both the FSA9280A and FUSB2500 offer a low power down function that puts the device in standby when functions are not in use. •Audio Fidelity. Leveraging Fairchild's signal and audio expertise, the FSA9280A features exceptionally low Total Harmonic Distortion (THD) of 0.1 percent to optimize performance. •Robust Protection Functions. The FSA9280A features many built-in protection functions and the FUSB2500 offers exceptionally high ESD protection, 15kV HBM, exceeding the 2kV standard. •Space-Savings. By integrating a MOSFET and USB IP into one IC, the FSA9280A eliminates at least five additional components and reduces Bill of Material (BOM) costs. All of these design attributes are instrumental in delivering a rich user experience. The FSA9280A allows for every conceivable form of accessory and five future definable accessories, ushering in a full multi-media experience. The FSA9280A packs data, charging, audio, headset and other accessory connectivity into one solution. Through its careful optimization of power, both of these products feature a power saving mode to help extend battery life for digital still cameras, portable medical and mobile applications.

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