FAIRCHILD

SEMICONDUCTOR®

September 2009

FSA800 — USB2.0 High-Speed (480Mbps), UART, and Audio Switch with Negative Signal Capability

Features

- 3:1 Switch Handles:
    - Audio Headsets
    - UART
    - High- and Low-Speed USB Data
- USB Charger Detection and Indication
- Negative-Swing-Capable Audio Channel
- Built-in Termination Resistors for Audio Pop Reduction
- Simple Switch Control Using Three Select Pins
- 28V Over-Voltage Tolerance on V_{BUS}

Applications

- Cell Phones, MP3 Players, PDAs

Description

The FSA800 is a 3:1 USB accessory switch that enables USB data, stereo and mono audio, microphone, and UART data to share a common connector port. It is designed for high-speed USB 2.0 signaling. The architecture is designed to allow audio signals to swing below ground so a common USB and headphone jack can be used for personal media players and portable peripheral devices.

FSA800 detects wall chargers through a dedicated pin that provides the baseband with charger detection.

The FSA800 meets both USB Rev. 2.0 and micro-USB specifications.

IMPORTANT NOTE:

For additional performance information, please contact analogswitch@fairchildsemi.com.

Ordering Information

Part Number	Operating Temperature Range	Top Mark	🌿 Eco Status	Package
FSA800UMX	-40 to +85°C	JN	Green	16-Lead Quad, UMLP, 1.8 x 2.6mm

🌿 *For Fairchild's definition of Eco Status, please visit: http://www.fairchildsemi.com/company/green/rohs_green.html.*
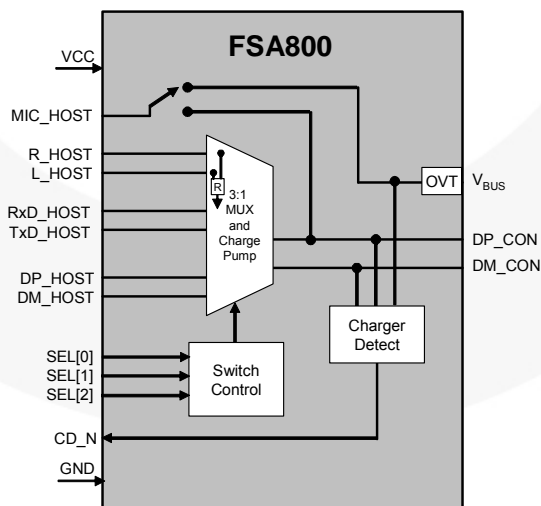

Figure 1.   Functional Block Diagram

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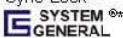
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Definition of Terms

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