



November 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<sub>BUS</sub>

# **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 <a href="mailto:analogswitch@fairchildsemi.com">analogswitch@fairchildsemi.com</a>.

# **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

Ø For Fairchild's definition of Eco Status, please visit: <a href="http://www.fairchildsemi.com/company/green/rohs\_green.html">http://www.fairchildsemi.com/company/green/rohs\_green.html</a>.

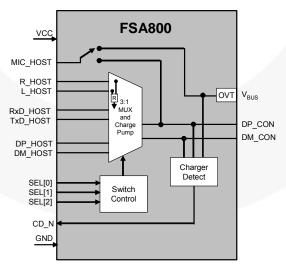
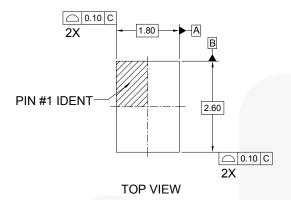
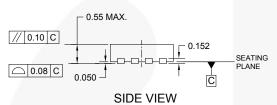
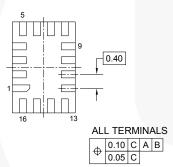


Figure 1. Functional Block Diagram

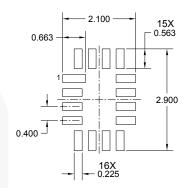
# **Physical Dimensions**





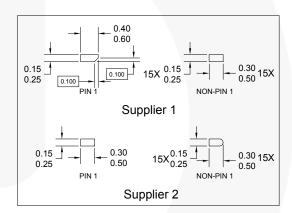






#### RECOMMENDED LAND PATTERN

#### TERMINAL SHAPE VARIANTS



NOTES:

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- **B. DIMENSIONS ARE IN MILLIMETERS**
- C. DIMENSIONS AND TOLERANCES PER ASME Y14.5M, 1994 D. TERMINAL SHAPE MAY VARY ACCORDING TO PACKAGE
- SUPPLIER, SEE TERMINAL SHAPE VARIANTS
- E. LAND PATTERN IS A MINIMAL TOE DESIGN
- F. DRAWING FILE NAME: UMLP16AREV3

Figure 15. 16-Lead, UMLP

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