April 2009

### FSSD07

# 1-Bit / 4-Bit SD/SDIO and MMC Dual-Host Multiplexer

### **Features**

■ On Resistance: 5Ω Typical, V<sub>DDC</sub>=2.7V

f<sub>togale</sub>: >75MHz

Low On Capacitance: 6pF Typical

■ Low Power Consumption: 2µA Maximum

 Supports Secure Digital (SD), Secure Digital I/O (SDIO), and Multimedia Card (MMC) Specifications

■ Supports 1-Bit / 4-Bit Host Controllers (V<sub>DDH1/H2</sub>=1.65V to 3.6V) Communicating with High-Voltage (2.7-3.6V) and Dual-Voltage Cards (1.65-1.95V, 2.7-3.6V)

- V<sub>DDC</sub>=1.65 to 3.6V, V<sub>DDH1/H2</sub>=1.65 to 3.6V

24-Lead MLP and UMLP Packages

### **Applications**

- Cell Phone, PDA, Digital Camera, Portable GPS, and Notebook Computer
- LCD Monitor, TV, and Set-Top Box

### **IMPORTANT NOTE:**

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

### Description

The FSSD07 is a 2:1 multiplexer that allows dual Secure Digital (SD), Secure Digital I/O (SDIO), and Multimedia Card (MMC) host controllers to share a common peripheral. The host controllers can be equal to, greater than, or less than peripheral card supply with minimal power consumption. This configuration enables dual host CMD, CLK, and D[3:0] signals to be multiplexed to a common peripheral.

The architecture includes the necessary bi-directional data and command transfer capability for single highvoltage cards or dual-voltage supply cards. The clock path is a uni-directional buffer.

Typical applications involve switching in portables and consumer applications: cell phones, digital cameras, home theater monitors, set-top boxes, and notebooks.

### **Analog Symbol**

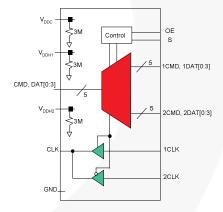


Figure 1. Analog Symbol Diagram

## **Ordering Information**

Part Number	Top Mark	Operating Temperature Range	© Eco Status	Package Description	Packing Method
FSSD07BQX	FSSD07	-40°C to +85°C	Green	24-Lead Molded Leadless Package (MLP), JEDEC MO-220, 3.5 x 4.5mm	Tape & Reel
FSSD07UMX	JK	-40°C to +85°C	Green	24-Lead Ultra-thin Molded Leadless Package (UMLP), 0.4mm pitch	Tape & Reel

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>.





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