

September 2007

# FSSD06 — SD/SDIO and MMC Two-Port Multiplexer

#### **Features**

- On Resistance Typically 4Ω, V<sub>DDH</sub>=2.7V
- F<sub>togale</sub>: > 120MHz
- Low On Capacitance: 9pF Typical
- Low Power Consumption: 1µA Maximum
- Conforms to Secure Digital (SD), Secure Digital I/O (SDIO), and Multimedia Card (MMC) Specifications
- Supports 1-Bit / 4-Bit Host Controllers (V<sub>DDH</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>DDH</sub>=1.65 to 3.6V, V<sub>DDC1/C2</sub>=V<sub>DDH</sub> to 3.6V
- 24-Lead MLP (3.5 x 4.5mm) and UMLP Packages

### **Applications**

- Cell Phone, PDA, Digital Camera, Portable GPS
- LCD Monitor, Home Theater PC/TV, All-in-One Printer

### **Description**

The FSSD06 is a two-port multiplexer that allows Secure Digital (SD), Secure Digital I/O (SDIO), and Multimedia Card (MMC) host controllers to be expanded out to multiple cards or peripherals. This configuration enables the CMD, CLK, and D[3:0] signals to be multiplexed to dual-card peripherals. It is optimized for 1-bit / 4-bit SD / MMC applications.

The architecture includes the necessary bi-directional data and command transfer capability for single high-voltage cards or dual-voltage supply cards. The clock path for the FSSD06 is a uni-directional buffer with an integrated pull-up for high-impedance mode.

Typical applications involve switching in portables and consumer applications: cell phones, digital cameras, home theater monitors, portable GPS units, and printers.

#### **IMPORTANT NOTE:**

For additional performance information, please contact <a href="mailto:analogswitch@fairchildsemi.com">analogswitch@fairchildsemi.com</a>.

# **Analog Symbol Diagram**

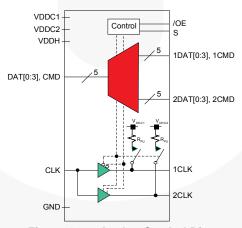


Figure 1. Analog Symbol Diagram

## **Ordering Information**

Part Number	Pb-Free	Operating Temperature Range	Package Description	Packing Method
FSSD06BQX		-40°C to +85°C	24-Lead Molded Leadless Package (MLP), JEDEC MO-220, 3.5 x 4.5mm	Tape & Reel
FSSD06UMX (Preliminary)		-40°C to +85°C	24-Lead Ultrathin Molded Leadless Package (UMLP) (Preliminary)	Tape & Reel





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