

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

## Features

- On Resistance Typically 4Ω,  $V_{DDH}=2.7V$
- $F_{toggle} > 120MHz$
- 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 ( $V_{DDH}=1.65V$  to 3.6V) Communicating with High-Voltage (2.7-3.6V) and Dual-Voltage Cards (1.65-1.95V, 2.7-3.6V)
  - $V_{DDH}=1.65$  to 3.6V,  $V_{DDC1/C2}=V_{DDH}$  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

## Analog Symbol Diagram

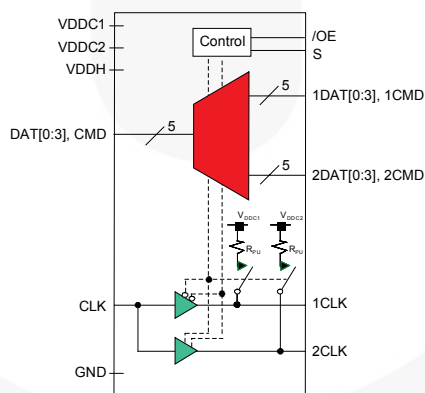


Figure 1. Analog Symbol Diagram

## 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 [analogswitch@fairchildsemi.com](mailto:analogswitch@fairchildsemi.com).

## Ordering Information

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

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