FAIRCHILD
SEMICONDUCTOR®

June 2007

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

- Pb-Free 24-Lead MLP Package (3.5mm by 4.5mm)

- 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

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 analogswitch@fairchildsemi.com.

Ordering Information

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

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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Rev. I29