FAIRCHILD SEMICONDUCTOR®

January 2009

FSA2457 — Dual DPDT, 5Ω Analog Data Switch

Features

- Low On Capacitance for Data Path: 12pF Typical
- Low On Resistance for Data Path: 5Ω Typical
- Low Power Quiescent Consumption: 1µA Maximum
- Wide -3db Bandwidth: > 160MHz
- Packaged in Green 16-Lead UMLP (1.8 x 2.6mm)
- 4kV JEDEC: JESD22-A114 HBM
- 2kV JEDEC: JESD22-C101 CDM

Applications

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

IMPORTANT NOTE:

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

Description

The FSA2457 is a bi-directional, low-power, dual double-pole double-throw (4PDT) analog switch targeted at dual 1-bit SIM/SD/MMC card and/or GPS signal multiplexing. It is optimized for switching the WLAN-SIM data and control signals at 52Mbps.

The FSA2457 is compatible with the requirements of 1-bit SIM/SD/MMC cards and is ideal for interfacing to GPS baseband processors. The FSA2457 features a low on capacitance (C_{ON}) of 12pF to ensure high-speed data transfer.

The FSA2457 contains special circuitry that minimizes current consumption even when the control voltage applied to the SEL pin is lower than the supply voltage (V_{CC}). This feature is especially valuable in ultra-portable applications, such as cell phones; allowing direct interface with the general-purpose I/Os of the baseband processor. Other applications include switching and connector sharing in portable cell phones, PDAs, digital cameras, printers, and portable GPS systems.

Ordering Information

Part Number	Top Mark	Eco Status	Operating Temperature Range	Package
FSA2457UMX	GD	Green	-40 to +85°C	16-Lead, Quad, Ultrathin Molded Leadless Package (UMLP), 1.8 x 2.6mm

For Fairchild's definition of "green" Eco Status, please visit: http://www.fairchildsemi.com/company/green/rohs_green.html.

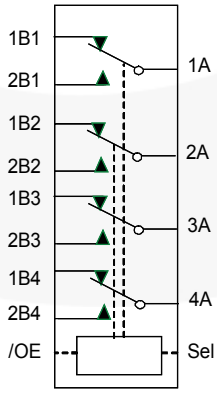

Figure 1. Analog Symbol

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Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative / In Design	Datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	Datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.
No Identification Needed	Full Production	Datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve the design.
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