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FAIRCHILD SEMICONDUCTOR®

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FSA1211 — Low-Power, Twelve-Port, High-Speed Isolation Switch

Features

- Low C_{OFF} Capacitance: 2.0pF Typical
- Low On Resistance: 7.5Ω Typical
- Low Power Consumption: 1µA Maximum
- 10µA Maximum I_{CCT} over an Expanded Voltage Range (V_{IN}=2.6V, V_{CC}=4.3V)
- Wide -3db Bandwidth: > 720MHz
- Packaged in Space-Saving 28-Lead UMLP
- 5.5kV ESD Rating; >9kV Power/GND ESD Rating
- Low On Capacitance: 6pF Typical

Applications

- Cell phone, PDA, Digital Camera, and Notebook
- LCD Monitor, TV, and Set-Top Box

IMPORTANT NOTE:

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

Description

The FSA1211 is a low-power, twelve-port, high-speed switch. This part is configured as a single-pole, single-throw switch (SPST) and is optimized for isolating a high-speed source, such as a cell phone camera interface. The FSA1211 features an extremely low on capacitance (C_{ON}) of 6pF. The wide bandwidth (>720MHz) exceeds the bandwidth needed to pass the third harmonic, resulting in signals with minimum edge and phase distortion. Superior channel-to-channel crosstalk minimizes interference.

The FSA1211 contains special circuitry on pins A and B that allows the device to withstand an over-voltage condition. This device is designed to minimize current consumption even when the control voltage applied to the /OE pin is lower than the supply voltage (V_{CC}). This feature is especially valuable for mobile applications, such as cell phones, allowing direct interface with the general-purpose I/Os of the baseband processor. Other applications include port isolation and switching in portable cell phones, PDAs, digital cameras, printers, and notebook computers.

Ordering Information

Part Number	Top Mark	Operating Temperature Range	Eco Status	Package
FSA1211UMX	F1211	-40 to +85°C	Green	28-Lead, Quad, Ultra-thin Molded Leadless Package (UMLP), 3.5x4mm
FSA1211UDMX	F1211	-40 to +85°C	Green	28-Lead, Quad, Dual-Row, Ultra-thin Molded Leadless Package (UMLP), 3.6x2.9mm

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

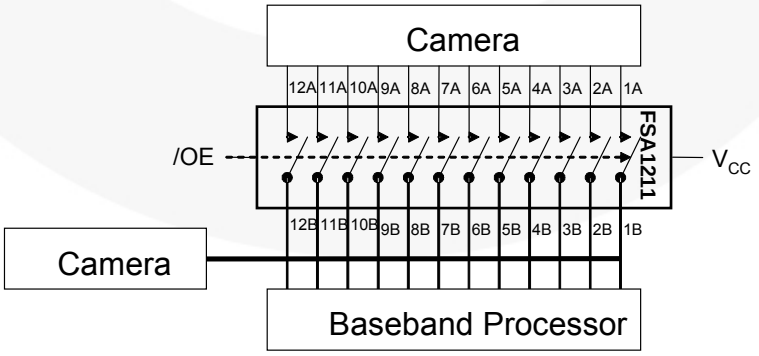

Figure 1. Analog Symbol

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Definition of Terms

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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.
Obsolete	Not In Production	Datasheet contains specifications on a product that is discontinued by Fairchild Semiconductor. The datasheet is for reference information only.

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