



February 2007

# FSA2380 — Low $R_{ON}$ (0.75Ω) 3:1 Negative Swing Audio Source Switch

## Features

- 10μA Maximum  $I_{CCT}$  Current Over An Expanded Control Voltage Range ( $V_{IN}=2.6V$ ,  $V_{CC}=4.3V$ )
- $C_{ON}$  Capacitance 70pF Typical
- 0.75Ω Typical On Resistance ( $R_{ON}$ )
- 1Bn, 2Bn Ports Support Negative Swing Audio to -2V
- -3db Bandwidth: > 120 MHz
- Low Power Consumption (1μA maximum)
- Power-Off Feature for 1A/2A Pin ( $I_{IN} < 2μA$ )
- Packaged in Pb-Free 14-Pin TSSOP and DQFN

## Applications

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

## Description

The FSA2380 is a Double-Pole, Triple Throw (DP3T) multiplexer that routes three dual-channel sources of data or audio under the control of a single pair of select pins. The FSA2380 has special circuitry on the 1A/2A pins to allow a power-off feature. With the  $V_{CC}$  supply removed and voltage on the 1A/2A pins, there is minimal leakage current into the 1A/2A data pins. The FSA2380 also features very low quiescent current and a power-off feature to extend battery life. The low quiescent current feature allows mobile handset applications direct interface with the baseband processor general-purpose I/Os. Typical applications involve switching in portables and consumer applications, such as cell phones, digital cameras, and notebooks with hubs or controllers.

## IMPORTANT NOTE:

For additional performance information, please contact [analogswitch@fairchildsemi.com](mailto:analogswitch@fairchildsemi.com).

## Ordering Information

| Part Number | Top Mark | Pb-Free | Packing Description  |
|-------------|----------|---------|--|
| FSA2380BQX  | 2380     | Yes     | 14-Terminal Depopulated very thin Quad Flat-pack No leads (DQFN) 2.5 x 3.0mm, JEDEC MO-241 |
| FSA2380MTCX | FSA2380  | Yes     | 14-Lead Thin Shrink Small Outline Package (TSSOP) 4.4mm wide, JEDEC MO-153                 |

## Analog Symbol

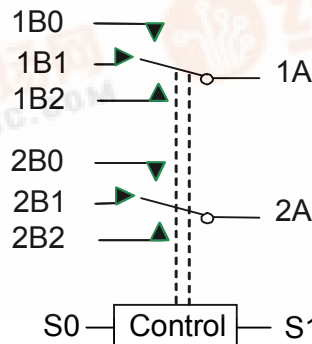



Figure 1. FSA2380 Analog Symbol

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| FACT Quiet Series <sup>™</sup>       | OPTOLOGIC <sup>®</sup>         | SuperSOT <sup>™</sup> -3   |                             |
| FACT <sup>®</sup>                    | OPTOPLANAR <sup>®</sup>        | SuperSOT <sup>™</sup> -6   |                             |
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