

FSA2357 — Low R_{ON} 3:1 Analog Switch

Features

- 10µA Maximum I_{CCT} Current Over an Expanded Control Voltage Range: V_{IN}=2.6V, V_{CC}=4.5V
- On Capacitance (C_{ON}): 70pF Typical
- 0.55Ω Typical On Resistance (R_{ON})
- -3db Bandwidth: > 120MHz
- Low Power Consumption (1µA maximum)
- Packaged in Pb-Free 14-Pin TSSOP and DQFN
- Priority Enable Control Circuitry

Applications

- HDMI 5V Power Routing, LCD Monitor, TV, and Set-Top Box
- Cell Phone, PDA, Digital Camera, and Notebook

Description

The FSA2357 is a Double-Pole, Triple Throw (DP3T) multiplexer that routes three dual-channel sources of data or audio under the control of three select pins. The FSA2357 features very low quiescent current, which 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.

Ordering Information

Part Number	Top Mark	Packing Description
FSA2357BQX	2357	14-Terminal Depopulated very thin Quad Flat-pack No leads (DQFN) 2.5 x 3.0mm, JEDEC MO-241
FSA2357MTCX	FSA2357	14-Lead Thin Shrink Small Outline Package (TSSOP) 4.4mm wide, JEDEC MO-153

☑ All packages are lead free per JEDEC: J-STD-020B standard.

Analog Symbol

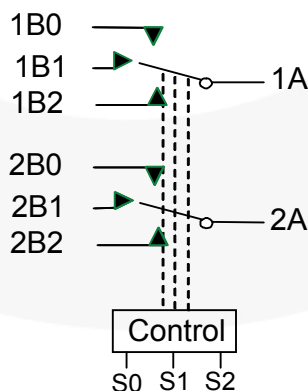
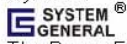



Figure 1. Analog Symbol



TRADEMARKS

The following includes registered and unregistered trademarks and service marks, owned by Fairchild Semiconductor and/or its global subsidiaries, and is not intended to be an exhaustive list of all such trademarks.

- | | | | |
|---|---|--|--|
| ACEx [®] | FPST [™] | PDP-SPM [™] | SyncFET [™] |
| Build it Now [™] | FRFET [®] | Power220 [®] |  SYSTEM GENERAL [®] |
| CorePLUS [™] | Global Power Resource SM | Power247 [®] | The Power Franchise [®] |
| CROSSVOLT [™] | Green FPST [™] | POWEREDGE [®] |  the power franchise [®] |
| CTL [™] | Green FPST [™] e-Series [™] | Power-SPM [™] | TinyBoost [™] |
| Current Transfer Logic [™] | GTO [™] | PowerTrench [®] | TinyBuck [™] |
| EcoSPARK [®] | i-Lo [™] | Programmable Active Droop [™] | TinyLogic [®] |
| EZSWITCH [™] * | IntelliMAX [™] | QFET [®] | TINYOPTO [™] |
|  EZ [™] | ISOPLANAR [™] | QS [™] | TinyPower [™] |
|  F [®] | MegaBuck [™] | QT Optoelectronics [™] | TinyPWM [™] |
| Fairchild [®] | MICROCOUPLER [™] | Quiet Series [™] | TinyWire [™] |
| Fairchild Semiconductor [®] | MicroFET [™] | RapidConfigure [™] | μSerDes [™] |
| FACT Quiet Series [™] | MicroPak [™] | SMART START [™] | UHC [™] |
| FACT [®] | MillerDrive [™] | SPM [®] | Ultra FRFET [™] |
| FAST [®] | Motion-SPM [™] | STEALTH [™] | UniFET [™] |
| FastvCore [™] | OPTOLOGIC [®] | SuperFET [™] | VCX [™] |
| FlashWriter [®] * | OPTOPLANAR [®] | SuperSOT [™] -3 | |
| | | SuperSOT [™] -6 | |
| | | SuperSOT [™] -8 | |

* EZSWITCH[™] and FlashWriter[®] are trademarks of System General Corporation, used under license by Fairchild Semiconductor.

DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION, OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS. THESE SPECIFICATIONS DO NOT EXPAND THE TERMS OF FAIRCHILD'S WORLDWIDE TERMS AND CONDITIONS, SPECIFICALLY THE WARRANTY THEREIN, WHICH COVERS THESE PRODUCTS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF FAIRCHILD SEMICONDUCTOR CORPORATION.

As used herein:

- Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
- A critical component in any component of a life support, device, or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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.
Preliminary	First Production	This 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	This 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	This datasheet contains specifications on a product that has been discontinued by Fairchild Semiconductor. The datasheet is printed for reference information only.

Rev. 132