

Fairchild Switch Family Introduction

Fairchild's Switch product line is a family of low-impedance bus, bus exchange and multiplexer/demultiplexer switches. These devices provide high-speed bus switching. The low "ON" resistance of these NMOS pass gates allows inputs to be connected to outputs without adding propagation delay or generating additional ground bounce noise. Fairchild Switches are ideal high speed, bidirectional interfaces between mixed-supply buses, and in design situations requiring isolation and protection.

Features	Benefits
Near zero propagation delay (0.25ns max).	High performance products offer seamless interface to logic functions
Low "ON" resistance (5Ω) and input capacitance.	Minimizes bus loading.
Low power consumption (3μA I _{CC})	Saves power, extends battery life.
1-bit to 48-bit configurations.	Provides flexibility for applications requiring mixed supply buses, bus isolation, or hot insertion.
BGA, QSOP, SC70, SOIC, SOT23, SSOP, TSSOP and US8 packaging	Provides package flexibility including the smallest packages available
Options with Undershoot Hardened Circuitry (UHC®) protection	Provides highly reliable hot-swap isolation
Options with integrated 25Ω series resistors	Noise Suppression
Options with integrated diode	Voltage Translation
Options with Precharge	Allows live insertion

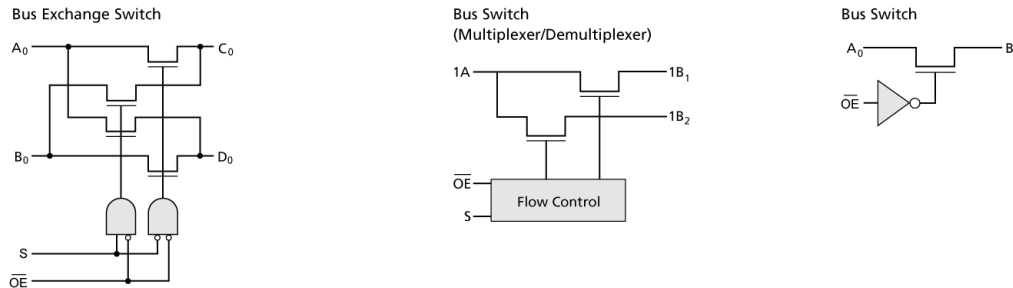


FIGURE 1. Fairchild Switch Configurations

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