General Description

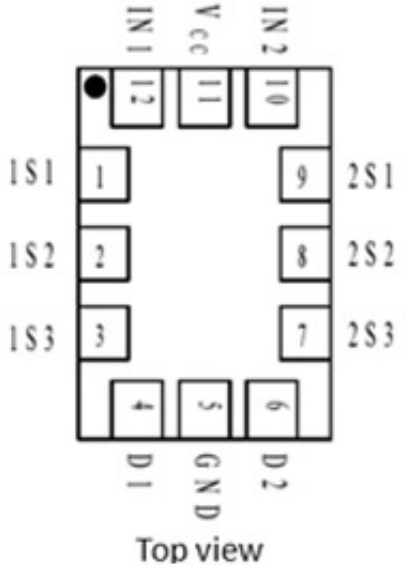
The ET3856 is a high-speed CMOS LOW VOLTAGE DUAL ANALOG S.P.3.T. (Single Pole Triple Throw) SWITCH or Dual 3:1 Multiplexer / Demultiplexer Switch fabricated in silicon gate C2MOS technology. It is designed to operate from 1.65V to 4.3V, making this device ideal for portable applications.

The device offers very low ON-Resistance (<1.0Ω) at VCC = 4.3V. The disabling and enabling of switches are done by setting the 1IN and 2IN control pins. Additional key features are fast switching speed, and Ultra Low Power Consumption. All inputs and outputs are equipped with protection circuits against static discharge, giving them ESD immunity and transient excess voltage.

Features

- HIGH SPEED:
  tPD = 0.3ns (TYP.) at VCC = 3.0V
  tPD = 0.4ns (TYP.) at VCC = 2.3V
- ULTRA LOW POWER DISSIPATION:
- ICC = 0.2μA (MAX.) at TA = 85°C
- LOW “ON” RESISTANCE VIN = 0V:
  RON = 1.0Ω(MAX. TA = 25ºC) AT VCC=4.3V
  RON = 1.5Ω(MAX. TA = 25ºC) AT VCC=3.0V
  RON = 1.8Ω(MAX. TA = 25ºC) AT VCC=2.3V
- WIDE OPERATING VOLTAGE RANGE:
  VCC (OPR) = 1.65V to 4.3V SINGLE SUPPLY
- 4.3V TOLERANT AND 1.8V COMPATIBLE THRESHOLD ON DIGITAL CONTROL INPUT at VCC = 2.3 TO 4.3V
- LATCH-UP PERFORMANCE EXCEEDS 300mA
- ESD PERFORMANCE (ANALOG CHAN. Vs. GND): HBM >2kV
- Package:QFN12L

Pin Configuration



Top view