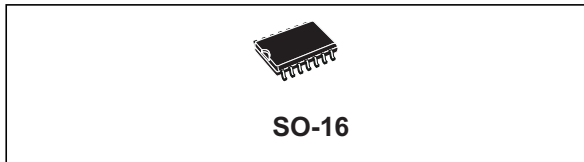


## 8-stage shift and store bus register with 3-stage outputs

Datasheet - production data



### Applications

- Automotive
- Industrial
- Computer
- Consumer

### Features

- 3- state parallel outputs for connection to common bus
- Separate serial outputs synchronous to both positive and negative clock edges for cascading
- Medium speed operation 5 MHz at 10 V
- Quiescent current specified up to 20 V
- Standardized symmetrical output characteristics
- 5 V, 10 V, and 15 V parametric ratings
- Input leakage current  $I_I = 100$  nA (max.) at  $V_{DD} = 18$  V,  $T_A = 25$  °C
- 100% tested for quiescent current
- ESD performance
  - HBM: 1 kV
  - MM: 200 V
  - CDM: 1 kV

### Description

The HCF4094 is a monolithic integrated circuit fabricated in metal oxide semiconductor technology available in an SO-16 package. The HCF4094 is an 8-stage, serial shift register having a storage latch associated with each stage for strobing data from the serial input to parallel buffered 3-state outputs. The parallel outputs may be connected directly to common bus lines. Data are shifted on positive clock transition. The data in each shift register stage are transferred to the storage register when the STROBE input is high. Data in the storage register appear at the outputs whenever the OUTPUT-ENABLE signal is high. Two serial outputs are available for cascading a number of HCF4094 devices. Data are available at the  $Q_S$  serial output terminal on positive clock edges to allow for high speed operation in a cascaded system in which the clock rise time is fast. The same serial information, available at the  $Q'_S$  terminal on the next negative clock edge, provides a means for cascading HCF4094 devices when the clock rise time is slow.

Table 1. Device summary table

Order code	Temperature range	Package	Packing	Marking
HCF4094M013TR	-55 ° C to +125 ° C	SO-16	Tape & reel	HCF4094
HCF4094YM013TR <sup>(1)</sup>	-40 ° C to +125 ° C	SO-16 (automotive grade) <sup>(1)</sup>		HCF4094Y

1. Qualification and characterization according to AEC Q100 and Q003 or equivalent, advanced screening according to AEC Q001 and Q002 or equivalent.