



New Product Announcement

LOGIC

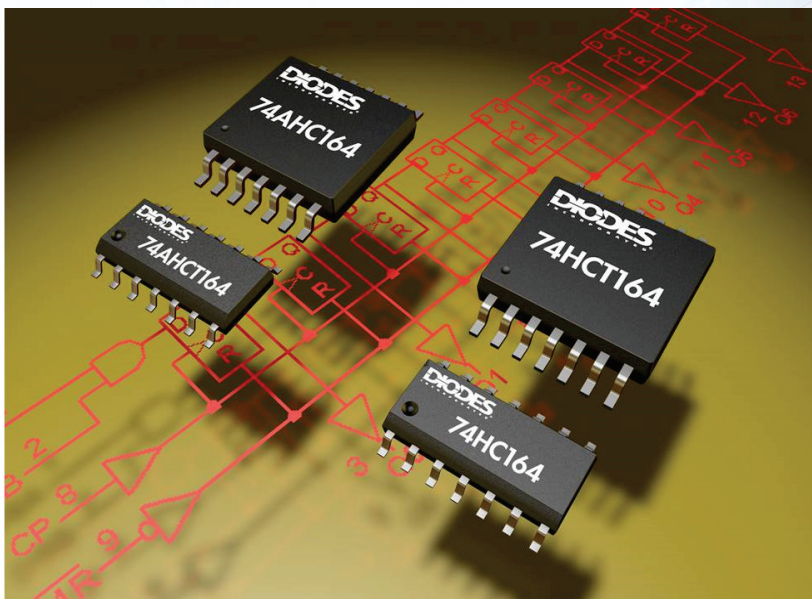
74HC164, 74HCT164, 74AHC164, and 74AHCT164 Serial Shift Registers

The 74HC164 remains one of the most popular parts from the 74HC logic family. The part is a serial input 8-bit edge triggered shift register that has 8 push pull outputs.

The 74HC164 features standard CMOS logic inputs while the 74HCT164 is suited for application requiring TTL logic thresholds. Both versions feature 4mA drive capability.

The 74AHC164 is a higher performance version that features 8mA drive capability and faster propagation times. The 74AHCT is the TTL compatible version.

SO-14 and TSSOP-14 packages are being made available at the initial release.



The Diodes Advantage

Wide Supply Voltage Range

The 74HC164 operates from 2.0V to 6.0V

The 74AHC164 operates from 2.0V to 5.5V

The 74HCT164 and 74AHCT164 operate from 4.5V to 5.5V

Updated 5V CMOS Process / Diodes Controlled Packaging

The die are fabricated on an upgraded 5V process that will guarantee a long term supply. The TSSOP-14 and SO-14 are packaged and tested at Diodes' majority owned facilities allowing for the best supply chain control and continued supply.

Direct Replacement

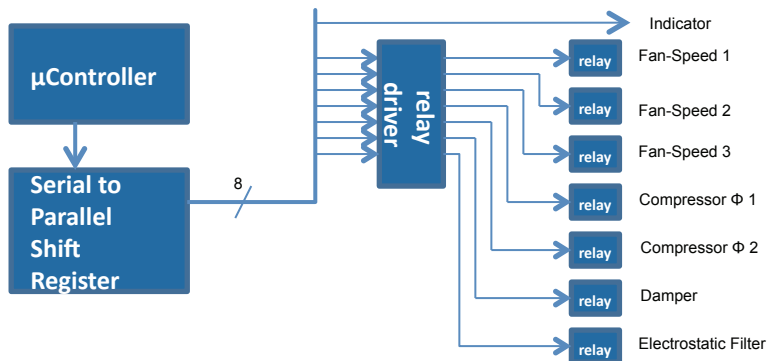
The 74HC164, 74HCT164, 74AHC164, and 74AHCT164 are direct replacements for industry standard parts



Cross Reference

| Diodes Device | Package | Description | TI | NXP | ON | Fairchild |
|-----------------|----------|---|---------------|-----------------|-----------------|---------------|
| 74HC164S14-13 | SO-14 | 8-Bit Parallel-Out Serial Shift Registers | SN74HC164DR | 74HC164D,653 | MC74HC164ADR2G | MM74HC164MX |
| 74HC164T14-13 | TSSOP-14 | 8-Bit Parallel-Out Serial Shift Registers | SN74HC164PWR | 74HC164PW,118 | MC74HC164ADTR2G | MM74HC164MTCX |
| 74HCT164S14-13 | SO-14 | 8-Bit Parallel-Out Serial Shift Registers, TTL Inputs | - | 74HCT164D,653 | - | MM74HCT164MX |
| 74HCT164T14-13 | TSSOP-14 | 8-Bit Parallel-Out Serial Shift Registers, TTL Inputs | CD74HCT164MT* | 74HCT164PW,118 | - | - |
| 74AHC164S14-13 | SO-14 | 8-Bit Parallel-Out Serial Shift Registers | - | 74AHC164D,653 | - | 74VC164MX |
| 74AHC164T14-13 | TSSOP-14 | 8-Bit Parallel-Out Serial Shift Registers | - | 74AHC164PW,118 | - | 74VC164MTCX |
| 74AHCT164S14-13 | SO-14 | 8-Bit Parallel-Out Serial Shift Registers, TTL Inputs | - | 74AHCT164D,118 | - | - |
| 74AHCT164T14-13 | TSSOP-14 | 8-Bit Parallel-Out Serial Shift Registers, TTL Inputs | - | 74AHCT164PW,118 | - | - |

Shift Register Applications 164/594/595



The shift register can be used to expand the output capabilities of a simple microcontroller. The required state can be clocked into a shift register and asserted onto the outputs. The shift register can maintain the state indefinitely.

Conceptually this depicts an air conditioner but the part is used similarly in many types of appliances and industrial controls.

To find out more information: Product page <http://www.diodes.com/logic>

Ordering Information

| Device | Packaging | Package marking info | Reel size | Tape width | Quantity |
|-----------------|-----------|----------------------|-----------|------------|----------|
| 74HC164S14-13 | SO-14 | 74HC164 YY WW X | 13" | 12mm | 2500 |
| 74HC164T14-13 | TSSOP-14 | 74HC164 YY WW X | 13" | 12mm | 2500 |
| 74HCT164S14-13 | SO-14 | 74HCT164 YY WW X | 13" | 12mm | 2500 |
| 74HCT164T14-13 | TSSOP-14 | 74HCT164 YY WW X | 13" | 12mm | 2500 |
| 74AHC164S14-13 | SO-14 | 74AHC164 YY WW X | 13" | 12mm | 2500 |
| 74AHC164T14-13 | TSSOP-14 | 74AHC164 YY WW X | 13" | 12mm | 2500 |
| 74AHCT164S14-13 | SO-14 | 74AHCT164 YY WW X | 13" | 12mm | 2500 |
| 74AHCT164T14-13 | TSSOP-14 | 74AHCT164 YY WW X | 13" | 12mm | 2500 |

All variants are in packages that are "Green" Molding Compound (No Br, Sb) with Lead Free Finish/RoHS Compliant (Note 1)

Notes: 1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. No purposely added lead. Halogen and Antimony free.

2. Codes for date coding on part marks

x x function number YY Year 0-9 WW week 1~52 52 represents 52 and 53 week X Internal Code