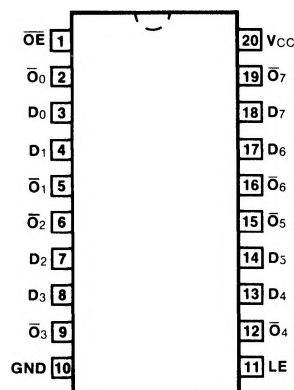


54LS/74LS533

OCTAL TRANSPARENT LATCH

(With 3-State Outputs)

CONNECTION DIAGRAM PINOUT A

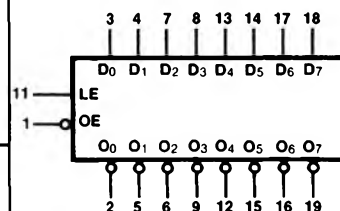


DESCRIPTION — The '533 consists of eight latches with 3-state outputs for bus organized system applications. The flip-flops appear transparent to the data when Latch Enable (LE) is HIGH. When LE is LOW, the data that meets the setup times is latched. Data appears on the bus when the Output Enable (\overline{OE}) is LOW. When \overline{OE} is HIGH the bus output is in the high impedance state. The '533 is the same as the '373, except that the outputs are inverted. For detailed specifications please see the '373 data sheet, but note that the propagation delays from data to output are 5.0 ns longer for the 'LS533 than for the 'LS373.

- EIGHT LATCHES IN A SINGLE PACKAGE
- 3-STATE OUTPUTS FOR BUS INTERFACING

ORDERING CODE: See Section 9

LOGIC SYMBOL



V_{CC} = Pin 20
GND = Pin 10

| PKGS | PIN OUT | COMMERCIAL GRADE | MILITARY GRADE | PKG TYPE |
|-----------------|---------|---|--|----------|
| | | $V_{CC} = +5.0 \text{ V}, \pm 5\%$, $T_A = 0^\circ \text{C to } +70^\circ \text{C}$ | $V_{CC} = +5.0 \text{ V} \pm 10\%$, $T_A = -55^\circ \text{C to } +125^\circ \text{C}$ | |
| Plastic DIP (P) | A | 74LS533PC | | 9Z |
| Ceramic DIP (D) | A | 74LS533DC | 54LS533DM | 4E |
| Flatpak (F) | A | 74LS533FC | 54LS533FM | 4F |

INPUT LOADING/FAN-OUT: See Section 3 for U.L. definitions

| PIN NAMES | DESCRIPTION | 54/74LS (U.L.) HIGH/LOW |
|-----------------------------------|----------------------------------|----------------------------|
| $D_0 - D_7$ | Data Inputs | 0.5/0.25 |
| LE | Latch Enable Input (Active HIGH) | 0.5/0.25 |
| \overline{OE} | Output Enable Input (Active LOW) | 0.5/0.25 |
| $\overline{O}_0 - \overline{O}_7$ | Complementary 3-State Outputs | 65/15 (25)/(7.5) |