

Ultra Compact Inverting, Noninverting, and Toggling Drivers

DESCRIPTION

Moderate speed drivers designed for applications where space is at a premium, they are also suitable for use anywhere a simple, small driver is desired.

Three logic types are offered: Inverting, Noninverting, and Toggle. All drivers contain internal .01 μ F capacitors to provide bypassing on both supplies.

Low internal dissipation has been designed in to keep thermal requirements simple. These drivers are fully TTL compatible and unconditionally stable with a negative supply range of from 0V to -12V ("A" voltage code).

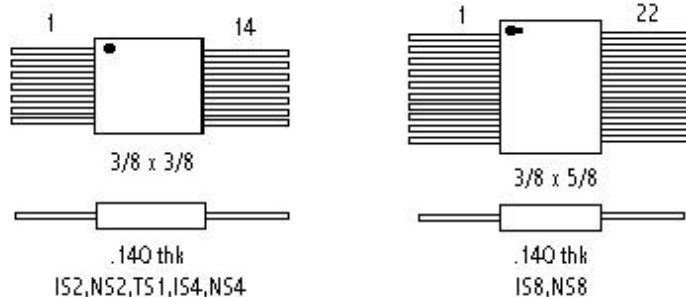
See Note #SD101 for other microminiature PIN driver styles and options.

FEATURES

- Small Size, High Density
- Very Low Quiescent Supply Current
- Moderate Speed - 25 nsec Typical Delay
- Simple-to-Integrate Pinouts
- Each Input is One LSTTL Load
- Output Testpoints on IS2, NS2, & TS1

| PARAMETER | SYMBOL | MIN | TYP | MAX | UNITS |
|---------------------------------|-------------------|-----|-----|-----|---------|
| Pos. Bias Voltage | V + | 4.5 | 5.0 | 5.5 | V |
| Neg. Bias Voltage | V - | 0 | -5 | -16 | V |
| Switching Speed | T _{sw} | -- | 25 | 60 | nsec |
| Pos. Supply (no lead) per Chan. | I _{q+} | -- | 2 | 5 | mA |
| Neg Supply (no lead) per Chan. | I _{q-} | -- | 2 | 5 | mA |
| TTL Input Current | I _{TTL0} | -- | 0.5 | 0.8 | mA |
| TTL input Current | I _{TTL1} | -- | 0.0 | 40 | μ A |

OUTLINES



Consult factory for alternative styles

PIN CONNECTIONS

| PIN | IS2,NS2 | TS1 | IS4,NS4 | IS8,NS8 |
|-----|---------|---------|---------|---------|
| 1 | VEE | VEE | +5v | +5v |
| 2 | Out 1 | InvOut | IN1 | IN1 |
| 3 | IN1 | Gnd | Out 1 | Out 1 |
| 4 | Gnd | IN | IN2 | IN2 |
| 5 | IN2 | NC | Out 2 | Out 2 |
| 6 | Out 2 | NinvOut | NC | IN3 |
| 7 | +5v | +5v | Gnd | Out 3 |
| 8 | Out 2 | NinvOut | Gnd | IN4 |
| 9 | NC | NC | NC | Out 4 |
| 10 | TP 2 | N.I.TP | IN3 | NC |
| 11 | NC | NC | Out 3 | Gnd |
| 12 | TP 1 | Inv.TP | IN3 | Gnd |
| 13 | NC | NC | Out 4 | NC |
| 14 | NC | Inv Out | VEE | IN5 |
| 15 | NC | NC | NC | Out 5 |
| 16 | NC | NC | NC | IN6 |
| 17 | NC | NC | NC | Out 6 |
| 18 | NC | NC | NC | IN7 |
| 19 | NC | NC | NC | Out 7 |
| 20 | NC | NC | NC | IN8 |
| 21 | NC | NC | NC | Out 8 |
| 22 | NC | NC | NC | VEE |

Versions with fewer channels are available.

Delete unused pins.

Redundantly labeled pins are internally connected.

OUTPUT CURRENTS

The following nominal positive output currents are available:
5, 10, 20, 25, 30, 40 and 50 mA

Negative output current varies with negative supply voltage.