

DESCRIPTION

The SG1644, SG2644, SG3644 is a dual non-inverting monolithic high speed driver. This device utilizes high voltage Schottky logic to convert TTL signals to high speed outputs up to 18V. The totem pole outputs have 3A peak current capability, which enables them to drive 1000pF loads in typically less than 25ns. These speeds make it ideal for driving power MOSFETs and other large capacitive

loads requiring high speed switching.

In addition to the standard packages, Linfinity offers the 16-pin SOIC (DW package) for commercial and industrial applications, and the Hermetic TO-66 (R package) for military use. These packages offer improved thermal performance for applications requiring high frequencies and/or high peak currents.

KEY FEATURES

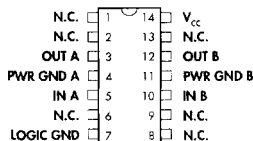
- TOTEM POLE OUTPUTS WITH 3.0A PEAK CURRENT CAPABILITY
- SUPPLY VOLTAGE TO 22V
- RISE AND FALL TIME LESS THAN 25ns
- PROPAGATION DELAYS LESS THAN 20ns
- NON-INVERTING HIGH-SPEED HIGH-VOLTAGE SCHOTTKY LOGIC
- EFFICIENT OPERATION AT HIGH FREQUENCY

HIGH RELIABILITY FEATURES

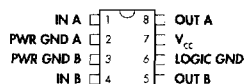
- AVAILABLE TO MIL-STD-883B
- RADIATION DATA AVAILABLE
- LINFINITY LEVEL "S" PROCESSING AVAIL.

COMPLETE SPECIFICATIONS AVAILABLE FROM "LIN" FAX SYSTEM
(SEE PAGE 4-1) AND 1990/91 SILICON GENERAL DATABOOK

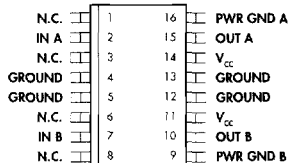
PACKAGE PIN OUTS



J PACKAGE
(Top View)



Y & M PACKAGE
(Top View)



DW PACKAGE
(Top View)

PACKAGE ORDER INFORMATION

T _A (°C)	J Ceramic DIP 14-pin	Y Ceramic DIP 8-pin	M Plastic DIP 8-pin	DW Plastic SOIC 16-pin
0 to 70	SG3644J	SG3644Y	SG3644M	SG3644DW
-25 to 85	SG2644J	SG2644Y	SG2644M	SG2644DW
-55 to 150	SG1644J	SGSG1644Y	SG1644M	—
MIL-STD-883	SG1644J/883B	SG1644Y/883B	SG1644M/883B	—

Note: All surface-mount packages are available in Tape & Reel. Append the letter "T" to part number. (i.e. SG3644DWT)

FOR FURTHER INFORMATION CALL (714) 898-8121

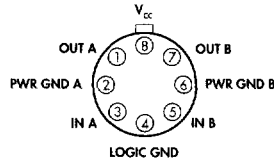
11861 WESTERN AVENUE, GARDEN GROVE, CA. 92841

SG1644/SG2644/SG3644

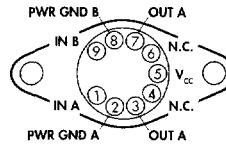
DUAL HIGH-SPEED DRIVER

PRODUCTION DATA SHEET

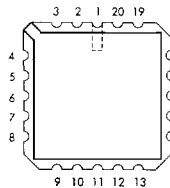
PACKAGE PIN OUTS



T PACKAGE
(Top View)



R PACKAGE
(Top View)



L PACKAGE
(Top View)

- | | |
|---------------|---------------------|
| 1. N.C. | 11. N.C. |
| 2. PWR GND A | 12. N.C. |
| 3. N.C. | 13. OUT B |
| 4. IN A | 14. N.C. |
| 5. N.C. | 15. V _{cc} |
| 6. LOGIC GND | 16. N.C. |
| 7. N.C. | 17. V _{cc} |
| 8. IN B | 18. N.C. |
| 9. N.C. | 19. OUT A |
| 10. PWR GND B | 20. N.C. |

PACKAGE ORDER INFORMATION

T _A (°C)	T Metal Can TO-99 8-pin	R Metal Can TO-66 5-pin	L Ceramic (LCC) 20-pin
0 to 70	SG3644T	SG3644R	—
-25 to 85	SG2644T	SG2644R	—
-55 to 150	SG1644T	SG1644R	—
MIL-STD-883	SG1644T/883B	SG1644R/883B	SG1644L/883B