# DUAL 3-NIPUT 3-OUTPUT HIGH PERFORMANCE GATES 

ADVANCE INFORMATION
TO BE ANNOUNCED
10210 B, F, 10211 B, F 10212 B, F: -30 to $+85^{\circ} \mathrm{C}$

## DIGITAL 10,000 SERIES ECL

## DESCRIPTION

The 10210/10211/10212 are designed to drive up to six transmission lines simultaneously. The multiple outputs of these devices also allow the wire-"OR"ing of several levels of gating for minimization of gate and package count.

Three logic functions are available:

$$
\begin{aligned}
& 10210 \text { - Triple OR outputs } \\
& 10211 \text { - Triple NOR outputs } \\
& 10212 \text { - Two NOR/One OR Outputs }
\end{aligned}
$$

The 10210/10211/10212 are high performance versions of the 10110/10111/10112.

The ability to control three parallel lines with minimum propagation delay from a single point makes the 10210/10211/10212 particularly useful in clock distribution applications where minimum clock skew is desired. The 10212 is particularly useful as a clock amplifier on a board using clock signals with both polarities.

## TEMPERATURE RANGE

- -30 to $+85^{\circ} \mathrm{C}$ Operating Ambient


## PACKAGE TYPES

- B: 16-Pin Silicone Dip
- F: 16-Pin CERDIP


## FEATURES

- FAST PROPAGATION DELAY = 1.7 ns TYP. (ALL OUTPUTS LOADED)
- POWER DISSIPATION = 150 mW/PACKAGE TYP. (NO LOAD)
- VERY HIGH FANOUT CAPABILITY - CAN DRIVE SIX $50 \Omega$ LINES
- INTERNAL $50 \mathrm{k} \Omega$ PULLDOWN RESISTORS
- OPEN EMITTERS FOR BUSSING AND LOGIC CAPABILITY


## ELECTRICAL CHARACTERISTICS

Conditions; $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}, \mathrm{V}_{\mathrm{EE}}=-5.2 \mathrm{~V} \pm 1 \%$

1. $I E=38 \mathrm{~mA} d c$ max.
2. linh $_{\text {in }}=425 \mu \mathrm{~A}$ dc max.

Conditions: $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}, \mathrm{V}_{\mathrm{C}}=+2.0 \mathrm{~V} \pm 1 \%$,
$V_{E E}=-3.2 \mathrm{~V} \pm 1 \%, 50 \Omega$ loads
3. $t_{p d}=1.7 \mathrm{~ns}$ typ.
4. $t_{r}, t_{f}=1.5$ ns typ. (20\% to $80 \%$ )

## LOGIC DIAGRAMS

| 10210 | 10211 | 10212 |
| :---: | :---: | :---: |
|  | ${ }_{5}^{5}=\mathrm{S}_{0}^{-2}$ |  |
|  |  | $10$ |
| $V_{C C 1}=1,15 \quad V_{C C 2}=16 \quad V_{E E}=8$ <br> POSITIVE LOGIC: HIGH LEVEL $=" 1 "$ |  |  |
|  |  |  |

