GTL Logic

KEY

★	= available in JEDEC
e	= available in EIAJ
★e	= available in JEDEC and EIAJ
w	= available in wide format
★w	= available in standard and wide format
Pw	= planned in standard; available in wide format
◤	= military temperature range
⊕	= military temperature range and MIL-STD-883
♦	= military temperature range, MIL-STD-883, and SMD
∨	= military temperature range, MIL-STD-883, SMD, MIL S
∅	= military temperature range and SMD
§	= MIL-STD-883
Δ	= SMD
■	= MIL-STD-883 and SMD
∧	= MIL-STD-883, SMD, MIL S
‡	= MIL-STD-883, SMD, JAN B
†	= MIL-STD-883 and JAN B
□	= MIL-STD-883, JAN B, and JAN S
▲	= MIL-STD-883, SMD, JAN B, and JAN S
•	= MIL-STD-883, SMD, JAN B, JAN S, and RHA qualified as ''R''
P	= Planned
TBA	= To Be Announced
CDIP	= Ceramic Dual In-Line Package
PDIP	= Plastic Dual In-Line Package
FPAK	= Ceramic Flatpak
MQUAD	= Metal Quad Flatpak
PQFP	= Quad Flatpak
LCC	= Ceramic Leadless Chip Carrier
SOIC	= Small Outline Integrated Circuit
SSOP	= Small Shrink Outline Package
QSOP	= Quarter Size Outline Package
PPGA	= Plastic Pin Grid Array
1	= CDIP standard package 400-mil wide
2	= Also in 600-mil wide DIP
3	= 300-mil wide
4	= 20-lead package
5	= 400-mil wide

Commercial package width standards:

8-, 14-, 16-lead SOIC = 150-mil wide
20-, 24-, 28-lead SOIC = 300-mil wide
8-, 14-, 16-, 20-, 24-lead PDIP = 300-mil wide
28-lead PDIP = 600-mil wide

GTL (Gunning Transceiver Logic) provides high speed, low power consumption, and cost-effective integration for PC, workstation, and communication systems running at 50 to 100 MHz. Capable of running from either a 5V or 3V supply, it provides an easy migration to high-performance/low-voltage operation.

Process, Voltage, and Temperature (PVT) compensated active GTL edge rate control can be either fixed or pin programmable for precise, consistent edge rates. The result is clean, consistent system performance with enhanced noise immunity.

Since V_{OL} does not vary significantly with changes in output load, GTL provides predictable, low skew for improved system speed. National has further optimized this characteristic with its GTLp (GTLplus) options. Using an optimized GTLplus device yields lower skew for even greater system performance.

National's first introductions will be a GTL and GTLp Universal Bus Transceiver. This function emulates most logic functions, reducing the need to stock multiple part numbers. Both the TTL and GTL ports can be configured as transparent, latched, or clocked.

Description
Future Introductions
CMOS 18-bit GTL/TTL Universal Bus Transceiver
CMOS 18-bit GTLplus/TTL Universal Bus Transceiver

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