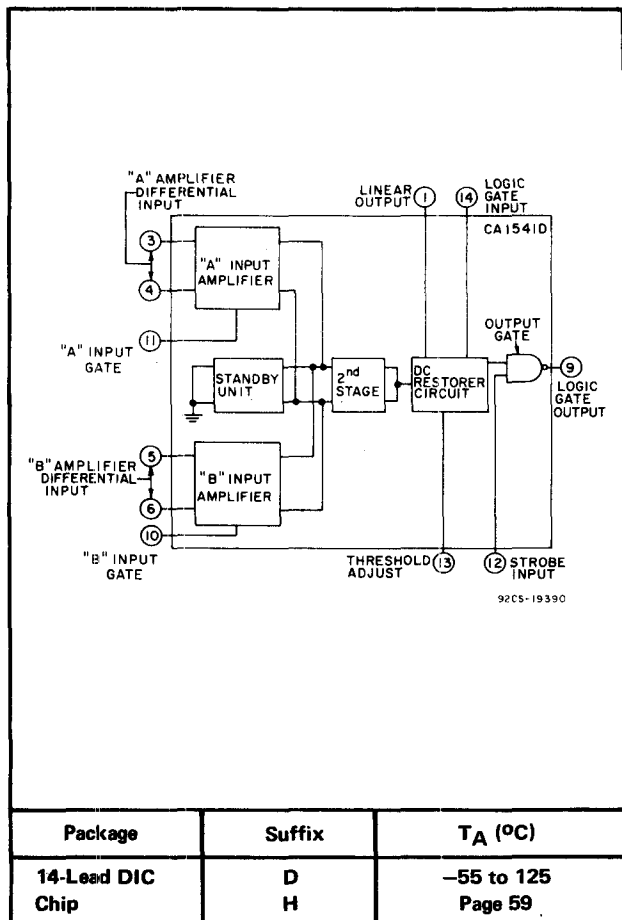


5 Computer Interface Circuits

Dual-Input Memory Sense Amplifier

CA1541



File No. 536*

Features

Complete dual-input core-memory sense amplifier

Two available outputs:

- Saturated logic output
- Linear output (positive output for either polarity input)

Nominal threshold voltage: 17 mV

Adjustable threshold: 10 to 35 mV

Low threshold uncertainty range: ± 3 mV

Fast overload recovery time:

- Differential-Mode: 15 ns typ.
- Common-Mode: 30 ns typ.

Independent channel gate and strobe terminals compatible with saturated logic levels

Suitable for core memories having cycle times $\leq 0.4 \mu s$

Input offset voltage: 6 mV max.

Maximum Ratings at T_A = 25°C

Except for Differential Input Voltage, all voltages are measured with respect to ground (Term. 8)

DC Supply Voltage:

V ⁺ (Term. 2)	.....	+10 V
V ⁻ (Term. 7)	.....	-10 V
Differential Input Voltage	± 5 V
Common-Mode Input Voltage	± 5 V
"A" or "B"-Gate Input Voltage	.....	V ⁻ to V ⁺
Strobe Terminal Voltage	.....	V ⁻ to +6V
Output Terminal Load Current	± 25 mA

Switching Characteristics at T_A = 25°C, V[±] = ± 5 V

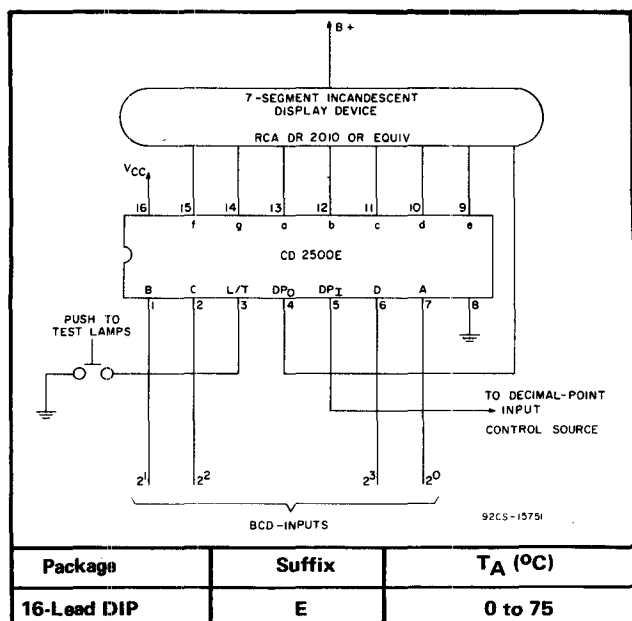
Input Threshold Voltage Range	.....	14 to 20	mV
Input Gate Voltage: High	.....	1.6	V typ.
Input Gate Voltage: Low	.....	0.7	V typ.
Common-Mode Recovery Time:			
Input Gate High or Low	.....	30	ns max.
Differential-Mode Recovery Time:			
Input Gate High	.....	30	ns typ.
Input Gate Low	.....	0	ns typ.

BCD to 7-Segment Decoder-Drivers

(30 mA/ and 80 mA/Segment)

CD2500, CD2502

CD2501, CD2503



File No. 392; ICAN-No. 6294*

CD2500E, CD2502E — Provide Decimal Point Driver

CD2501E, CD2503E — Provide Ripple Blanking

Applications and Features

For Use with Low-Voltage Digital Display Devices, Lamps, and Relays

High current-sinking capability for direct display driving Intensity control provision

BCD inputs are compatible with commercially available DTL & TTL devices

Lamp test provision

5 V power supply

Clamp diodes on all inputs

Lamp supply up to +8 volts

Over-range detection (automatic blanking of display device when BCD input > 9)

30 mA/Segment (CD2500E, CD2501E)

80 mA/Segment (CD2502E, CD2503E)