TEXAS INSTR (LOGIC)

54AC16862, 54ACT16862 74AC16862, 74ACT16862 20-BIT BUS TRANSCEIVERS WITH 3-STATE OUTPUTS

•	Members	of	Texas	Instruments	Widebus™
	Family				

- Packaged In Shrink Small-Outline 300-mil Packages (SSOP) and 380-mil Fine-Pitch Ceramic Flat Packages Using 25-mil Centerto-Center Pin Spacings
- Inputs are TTL- or CMOS-Voltage Compatible
- 3-State Outputs Drive Bus Lines Directly
- Flow-Through Architecture Optimizes PCB Layout
- Distributed VCC and GND Pin Configuration Minimizes High-Speed Switching Noise
- EPIC™ (Enhanced-Performance Implanted CMOS) 1-µm Process
- 500-mA Typical Latch-Up Immunity at 125°C

## description

The 'AC16862 and 'ACT16862 are Inverting 20-bit bus transceivers composed of two 10-bit transceiver sections with separate control signals. These devices allow data transmission from the A bus to the B bus or from the B bus to the A bus, depending upon the levels present at the output-enable inputs (1GAB, 2GAB, 1GBA, and 2GBA). The control logic also allows for isolation and latching.

54AC16862, 54ACT16862 ... WD PACKAGE 74AC16862, 74ACT16862 ... DL PACKAGE (TOP VIEW)

1 GAB	1	56	1 GBA
181	2	55	141
182	3	54	142
GND	4	53	GND
183	5	52	1A3
1B4	6	51	184
Vcc	7	50	V <sub>CC</sub>
185	8	49	1A5
186	9	48	11A6
187	10	47	1A7
GND	11	46	GND
188	12	45	148
189	13	44	1A9
1B10	14	43	1410
281	15	42	2A1
2B2[	16	41	2A2
2B3[	17	40	2A3
GND	18	39	GND
2B4[	19	38	]2A4
2B5[	20	37	]2A5
2B6[	21	36	]2A6
Vcc	22	35	]V <sub>cc</sub>
297	23	34	]2Ă7
288	24	33	]2A8
GND	25	32	GND
289	26	31	2A9
2B10	27	30	]2A10
2GAB	28	29	]2ĞB/
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The 74AC16862 and 74ACT16862 are packaged in TI's shrink small-outline package (SSOP) with 25-mil center-to-center pin spacings. This package provides twice the I/O pin count and functionality of a standard small-outline package in the same printed-circuit-board area.

The 'AC16862 has CMOS-compatible input thresholds. The 'ACT16862 has TTL-compatible input thresholds.

The 54AC16862 and 54ACT16862 are characterized over the full military temperature range of -55°C to 125°C. The 74AC16862 and 74ACT16862 are characterized for operation from -40°C to 85°C.

## FUNCTION TABLE, EACH SECTION

INP		OPERATION
GAB	GBA	OPERATION
7	н	ÃtoB
Н	L	B to A
Н	Н	Isolation
L		Latch A and B
	L	(A ≠ B)

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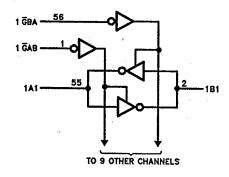
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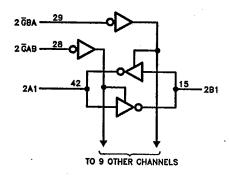
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TEXAS INSTR (LOGIC)

T-52-31

logic diagram (positive logic)





PRODUCT PREVIEW

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