PRODUCT PREVIEW

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

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•	Members	of	Texas	Instruments	Widebus™
	Family				

- Packaged in Shrink Smail-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 V_{CC} 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)

1GAB	1	O56	∏1ĞBA
1 B1	2	55	1A1
182	3	54	1A2
GND[4	53	GND
183	5	52	1A3
184	6	51	144
V _{CC}	7	50	≣v _{cc}
185	8	49	1A5
1B6	9	48	1A6
1B7	10	47	1A7
GND	11	46	GND
1 B8	12	45	1A8
1B9	13	44	1A9
1810	14	43	1A10
2B1	15	42	2A1
2B2	16	41	2A2
283	17	40	2A3
GND	18	39	GND
284	19	38	2A4
2B5	20	37	2 A 5
286	21	36	2A6
v _{cc} [22	35	∇_{cc}
287	23	34	2Ă7
2B8	24	33	2A8
GND[25	32	GND
2B9[26	31	2 A 9
2B10[27	30	2A10
2GAB	28	29	☐2ĞBA
	_		

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	UTS	OPERATION	
GAB	ĞBA		
L	Н	Ā to B	
н	L	B to A	
Н	Н	Isolation	
		Latch A and B	
L	١ ـ	(A = <u>B</u>)	

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logic diagram (positive logic)



