(TOP VIEW)

16853, 74ACT16853 . . . DL PACKAGE

16853, 54ACT16853 . . . WD PACKAGE

- 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 Center-to-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 'AC16853 and 'ACT16853 contain two noninverting 8-bit-to-9-bit parity bus transceivers. For either transceiver, when data is transmitted from the A bus to the B bus, an odd-parity bit is generated and output on the parity I/O pin (1PARITY or 2PARITY). When data is transmitted from the B bus to the A bus, 1PARITY (or 2PARITY) is configured as an input and combined with the B input data to generate an active-low error flag if odd parity is not detected.

The error output $(1\overline{\text{ERR}} \text{ or } 2\overline{\text{ERR}})$ is an open-collector output. $1\overline{\text{ERR}}$ (or $2\overline{\text{ERR}}$) can be passed, sampled, stored, and cleared from the latch using the latch enable ($1\overline{\text{EN}}$ and $2\overline{\text{EN}}$) and clear ($1\overline{\text{CLR}}$ and $2\overline{\text{CLR}}$) inputs.

10FB	1	56] 10EA
1EN [2] 1CLR
1ERR	3	54] 1PARITY
GND [4	53] GND
1A1 [5	52] 1B1
1A2 [6	51] 1B2
Vcc [7	50]V _{CC}
1A3 [8	49] 1B3
1A4 [9	48] 1B4
1A5 [10	47] 1B5
GND [11	46] GND
1A6 [12	45] 1B6
1A7 [13	44] 1B7
1A8 [14	43] 1B8
2A1 [15	42] 2B1
2A2 [16	41	2B2
2A3 [17	40	2B3
GND [18	39	GND
^{2A4}	19	38	2B4
2A5	20	37	2B5
2A6	21	36	2B6
Vcc [22	35	Vcc
2A7	23	34	2B7
2A8	24	33	2B8
GND	25	32	GND
2ERR	26	31	2 <u>PAR</u> ITY
2EN	27	30	2CLR
20EB	28	29	2 <mark>0EA</mark>
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PRODUCT PREVIEW

The 74AC16853 and 74ACT16853 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 'AC16853 has CMOS-compatible input thresholds. The 'ACT16853 has TTL-compatible input thresholds.

The 54AC16853 and 54ACT16853 are characterized over the full military temperature range of –55°C to 125°C. The 74AC16853 and 74ACT16853 are characterized for operation from –40°C to 85°C.

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