National Semiconductor

CD4529BM/CD4529BC Dual 4-Channel or Single 8-Channel Analog Data Selector

General Description

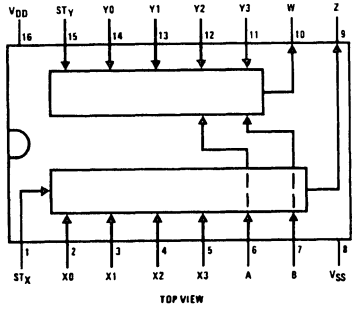
The CD4529B is a dual 4-channel or a single 8-channel analog data selector, implemented with complementary MOS (CMOS) circuits constructed with N- and P-channel enhancement mode transistors. Dual 4-channel or 8-channel mode operation is selected by proper input coding, with outputs Z and W tied together for the single 8-bit mode. The device is suitable for digital as well as analog applications, including various 1-of-4 and 1-of-8 data selector functions. Since the device is analog and bidirectional, it can also be used for dual binary to 1-of-4 or single 1-of-8 decoder applications.

Features

- Wide supply voltage range — 3.0V to 15V
- High noise immunity — 0.45 V_{DD} (typ.)
- Low quiescent power dissipation — 0.005 μW/package (typ.)@5.0 V_{DC}
- 10 MHz frequency operation (typ.)
- Data paths are bidirectional
- Linear ON resistance [120Ω (typ.)@15V]
- TRI-STATE® outputs (high impedance disable strobe)
- Plug-in replacement for MC14529B

Connection Diagram

Dual-In-Line Package



Order Number CD4529B*

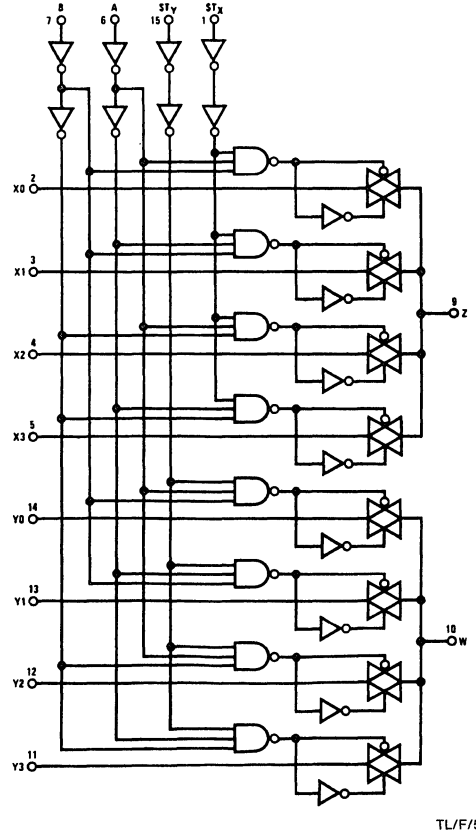
*Please look into Section 8, Appendix D for availability of various package types.

Truth Table

ST_X	ST_Y	B	A	Z	W	
1	1	0	0	X0	Y0	Dual 4-Channel Mode 2 Outputs
1	1	0	1	X1	Y1	
1	1	1	0	X2	Y2	
1	1	1	1	X3	Y3	
1	0	0	0	X0		Single 8-Channel Mode 1 Output (Z and W tied together)
1	0	0	1	X1		
1	0	1	0	X2		
1	0	1	1	X3		
0	1	0	0	Y0		
0	1	0	1	Y1		
0	1	1	0	Y2		
0	1	1	1	Y3		
0	0	X	X	High Impedance (TRI-STATE)		

X = Don't care

Logic Diagram



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See the CMOS Logic Databook for Complete Specifications