

MC14529AL MC14529CL MC14529CP

DATA SELECTOR

Advance Information

DUAL 4-CHANNEL ANALOG DATA SELECTOR

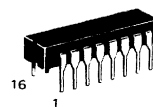
The MC14529 analog data selector is a dual 4-channel or single 8-channel device depending on the input coding. It is constructed with complementary MOS (CMOS) enhancement mode devices in a single monolithic structure. Applications include various one-of-four or one-of-eight data selector functions.

- Low Quiescent Power Dissipation
- 10-MHz Operation (typical)
- 3-State Outputs
- Linear "On" Resistance
- "On" Resistance 140 ohms typical @ 15 V

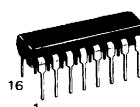
McMOS

(LOW-POWER COMPLEMENTARY MOS)

DUAL 4-CHANNEL ANALOG DATA SELECTOR OR 8-CHANNEL ANALOG DATA SELECTOR



L SUFFIX
CERAMIC PACKAGE
CASE 620



P SUFFIX
PLASTIC PACKAGE
CASE 648

MAXIMUM RATINGS (Voltages referenced to V_{SS} , Pin 8)

Rating	Symbol	Value	Unit
DC Supply Voltage	V_{DD}	+18 to -0.5 +16 to -0.5	Vdc
Input Voltage, All Inputs	V_{in}	V_{DD} to -0.5	Vdc
DC Current Drain per Pin	I	10	mAdc
Operating Temperature Range — MC14529AL MC14529CL/CP	T_A	-55 to +125 -40 to +85	°C
Storage Temperature Range	T_{stg}	-65 to +150	°C

ST _X	ST _Y	B	A	Z	W
1	1	0	0	X0	Y0
1	1	0	1	X1	Y1
1	1	1	0	X2	Y2
1	1	1	1	X3	Y3
1	0	0	0	X0	
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	φ	φ	High Impedance	

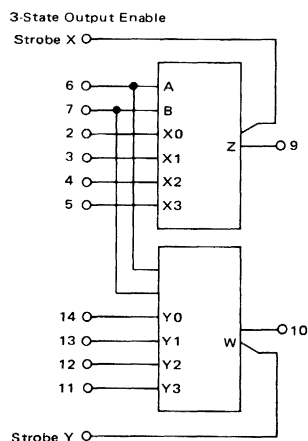
Dual 4-Channel Mode
2 Outputs

Single 8-Channel Mode
1 Output
(Z and W tied together)

φ = Don't Care

This device contains circuitry to protect the inputs against damage due to high static voltages or electric fields; however, it is advised that normal precautions be taken to avoid application of any voltage higher than maximum rated voltages to this high impedance circuit. For proper operation it is recommended that V_{in} and V_{out} be constrained to the range $V_{SS} \leq (V_{in} \text{ or } V_{out}) \leq V_{DD}$. Unused inputs must always be tied to an appropriate logic voltage level (e.g., either V_{SS} or V_{DD}).

BLOCK DIAGRAM



V_{DD} = Pin 16
 V_{SS} = Pin 8

This is advance information and specifications are subject to change without notice.
See Mechanical Data Section for package dimensions.

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	V _{SS} Vdc	V _{DD} Vdc	MC14529AL +25°C			MC14529CL/CP +25°C			Unit
				Min	Typ	Max	Min	Typ	Max	
Quiescent Dissipation	P _D	—	5.0 10 15	—	0.1 0.25 0.4	—	—	0.1 0.25 0.4	—	μW
"ON" Resistance (V _C = V _{DD} , R _L = 10 kΩ) (V _{in} = +5.0 Vdc) (V _{in} = -5.0 Vdc) (V _{in} = ±0.25 Vdc) (V _{in} = +7.5 Vdc) (V _{in} = -7.5 Vdc) (V _{in} = ±0.25 Vdc) (V _{in} = +10 Vdc) (V _{in} = +0.25 Vdc) (V _{in} = +5.6 Vdc) (V _{in} = +15 Vdc) (V _{in} = +0.25 Vdc) (V _{in} = +9.3 Vdc)	R _{ON}	-5.0 -7.5 0 0	5.0 7.5 10 15	— — — —	220 220 340 160 160 260 180 260 260 140 140 180	— — — —	— — — —	220 220 340 160 160 260 180 260 260 140 140 180	— — — —	ohms
Δ"ON" Resistance Between any 2 of 4 circuits in a common package (V _C = V _{DD} , V _{in} = ±5.0 Vdc) (V _C = V _{DD} , V _{in} = ±7.5 Vdc)	ΔR _{ON}	-5.0 -7.5	5.0 7.5	— —	15 10	— —	— —	15 10	— —	ohms

LOGIC DIAGRAM

V_{DD} = Pin 16
V_{SS} = Pin 8

