

FOUR CHANNEL ARINC 429 LINE RECEIVER

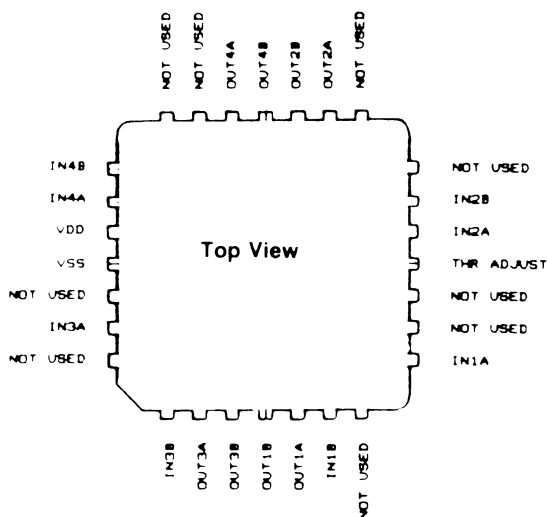
- Converts received ARINC 429 data levels to 2 line CMOS compatible levels
- Adjustable threshold using 1 resistor
- Single 5V supply with low power consumption < 50mW
- Full MIL operating range
- Reduces system package count.
- Can be used as ARINC 429, 561, 568, 575, or Tacan interface

PIN CONFIGURATION

VSS	1	24	VDD
NOT USED	2	23	IN4A
IN3A	3	22	IN4B
IN3B	4	21	NOT USED
OUT3A	5	20	OUT4A
OUT3B	6	19	OUT4B
OUT1B	7	18	OUT2B
OUT1A	8	17	OUT2A
IN1B	9	16	NOT USED
IN1A	10	15	IN2B
NOT USED	11	14	IN2A
NOT USED	12	13	THR ADJUST

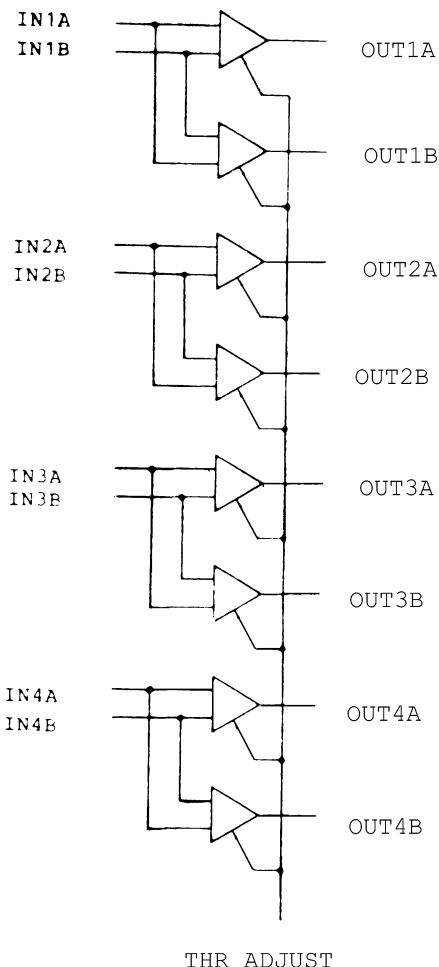
Top View

24 PIN DIL PACKAGE



28 PIN J LEAD SURFACE MOUNT PACKAGE.

BLOCK DIAGRAM



MAXIMUM RATINGS (Above which the useful life may be impaired)

Storage Temperature	- 65°C to +150°C
Temperature (Ambient) under Bias	- 55°C to +125°C
Supply Voltage VDD	-0.3V to + 7V
DC Input Voltage	-0.3 to VDD +0.3V
Output Current (Single O/P)	10mA
Output Current (Total O/P)	20mA

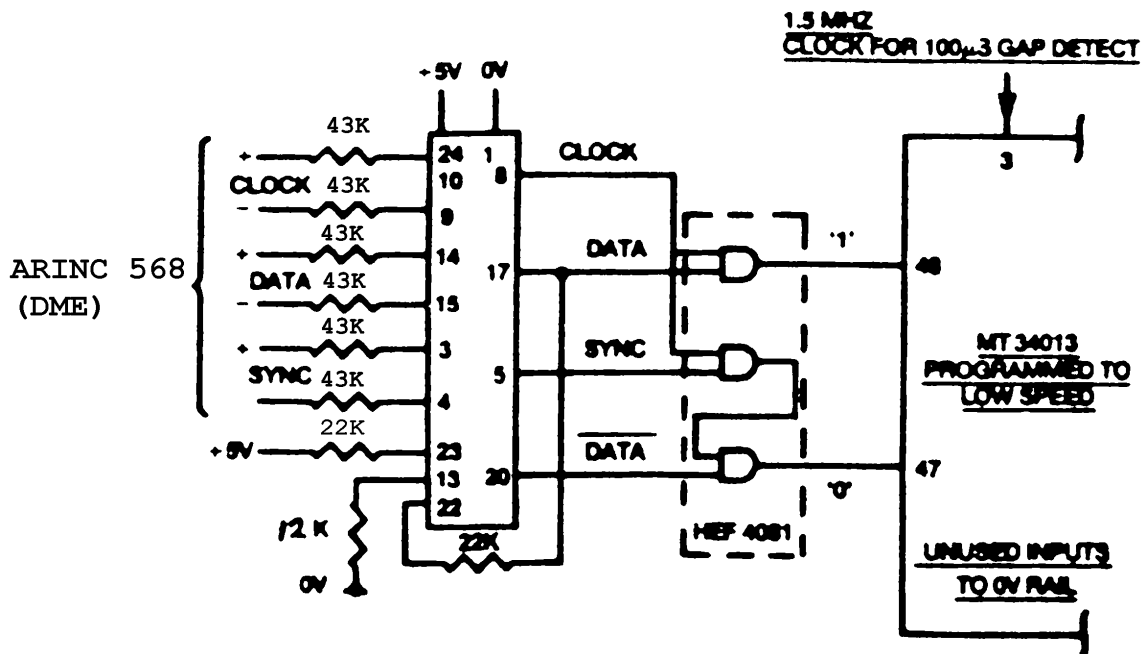
ELECTRICAL CHARACTERISTICS over operating range

PARAMETER	DESCRIPTION	TEST CONDITIONS	MIN	TYP	MAX	UNITS
IOH	Output High Current	VOH=2.8V VDD= 4.5V	80			mA
IOL	Output Low Current	VOL=0.4V	1			mA
VIH	Input High Voltage	NOTE 1	-6.5		VCC	Volts
VIL	Input Low Voltage	NOTE 1	-2.5		0.8	Volts
CI	Input Capacitance	Test Frequency = 1.0 MHZ		2	40	pF
CI/O	I/O Capacitance			7	40	pF
IDD	Supply Current	VDD = MAX. All inputs LOW, All outputs open.		10	2.6	mA

NOTE 1 Voltage applied to inputs of recommended circuit.

APPLICATION NOTE

The circuit below may be used to interface with a single channel of ARINC 561/568.



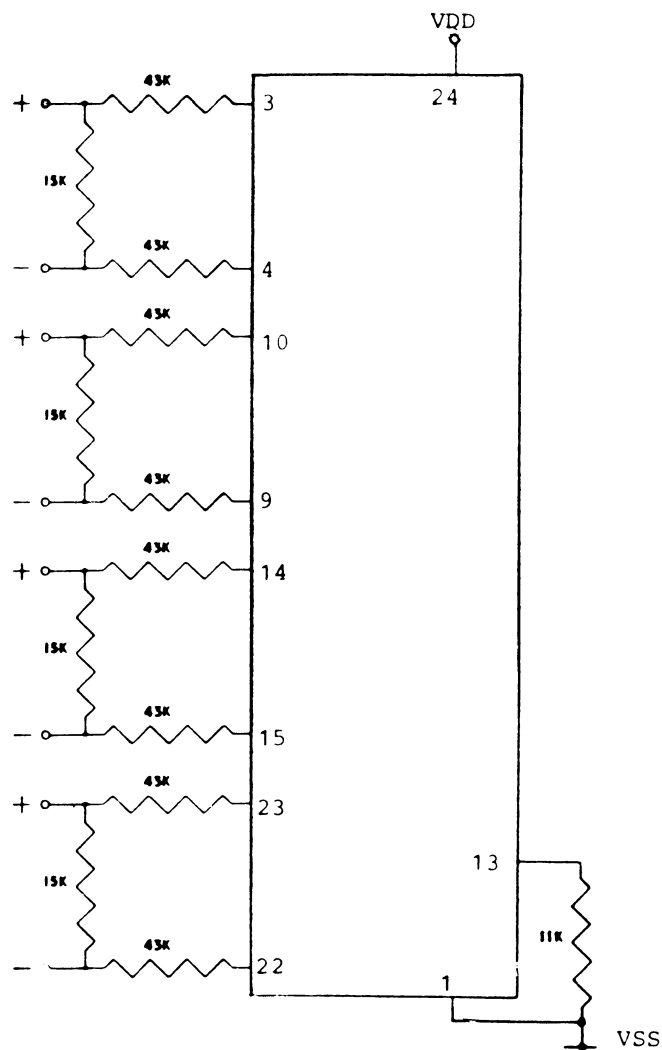
This device together with associated resistors meets the I/P requirements of ARINC 429 specification for 4 independent channels of input. It consists of 4 pairs of Norton type CMOS comparators with a common current mirror threshold circuit set by a single external resistor.

Each pair of comparators requires a 15K resistor across the ARINC I/P and 43K between each ARINC single line and the low impedance inputs. High common mode rejection is achieved so that if one input wire is removed from the Receiver Circuit, there is no output signal.

Internal clamping diodes are present providing full protection from external transients of > 600V for 10µs or 100V continuous at the 43K to ARINC interface.

The package operates from a single 5V supply taking typically a total of 10mA over the full MIL temperature range.

RECOMMENDED CIRCUIT



Pin Compatible replacement for MT60005 and MT60009

NOTE : THRESHOLD RESISTOR VALUE CHANGE IN REPLACEMENT.

PHYSICAL DIMENSIONS 24-Pin Side Brazed

