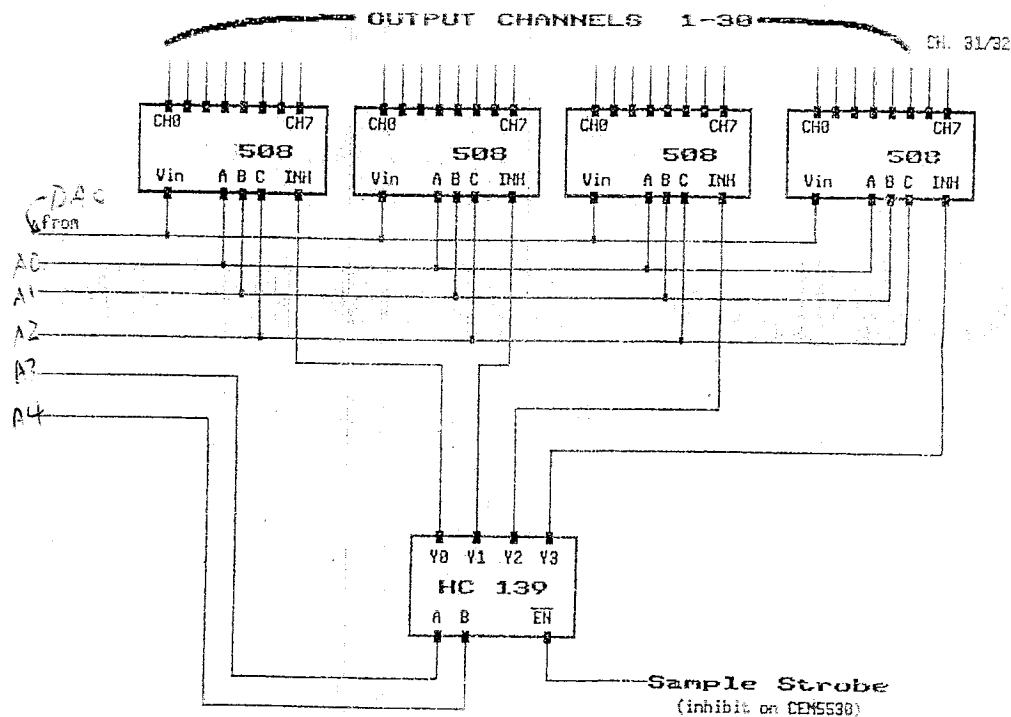


CEM 5530 replacement

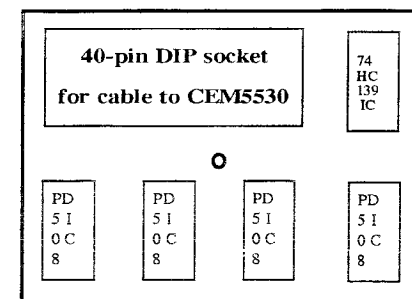


Note: This solution has the advantage that each output now has variable output slew capability.

WINE COUNTRY PRODUCTIONS, INC.

1572 PARK CREST CT., Suite #505, SAN JOSE, CALIFORNIA 95118-3347 USA
Phone (408)265-2008 ** FAX (408)266-6591 ** E-mail: WINECNTRY@AOL.COM

CEM5530 Thirty Channel Sample & Hold IC Equivalent Circuit Kit PC Board Layout Recommendations.



Recommended PC Board Layout & Fabrication & Assembly Tips.

- PC Board Size: 3.0" x 2.25"
- Drill 5/32" diameter hole Centered on PC board for mounting on standoffs.
- Use an 8.0" Length *Ribbon Cable* with a 40-pin Male connector on each end to connect to the CEM5530's socket.
- Use precision machined *wire-wrap sockets* for all components.



MC54/74HC139

Advance Information

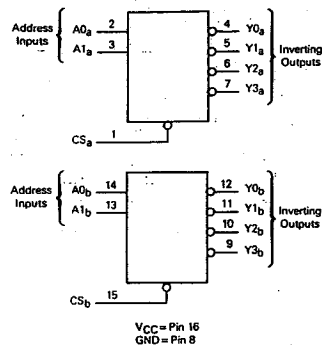
DUAL 1-OF-4 DECODER/DEMULPLEXER

The MC54/74HC139 is identical in pinout to the LS139. The device inputs are compatible with standard CMOS outputs; with pullup resistors, they are compatible with LSTTL outputs.

This device consists of two independent 1-of-4 decoders, each of which decodes a two-bit address to one-of-four active-low outputs. Active-low Chip Selects are provided to facilitate the demultiplexing, cascading, and chip-selecting functions. The demultiplexing function is accomplished by using the Address inputs to select the desired device output, and utilizing the Chip Select as a data input.

- Low Power Consumption Characteristic of CMOS Devices
- Output Drive Capability: 10 LSTTL Loads Minimum
- Operating Speeds Similar to LSTTL
- Wide Operating Voltage Range: 2 to 6 Volts
- Low Input Current: 1 μ A Maximum
- Low Quiescent Current: 80 μ A Maximum (74HC Series)
- High Noise Immunity Characteristic of CMOS Devices
- Diode Protection on All Inputs

BLOCK DIAGRAM



V_{CC} = Pin 16
GND = Pin 8

HIGH-PERFORMANCE CMOS LOW-POWER COMPLEMENTARY MOS SILICON-GATE

DUAL 1-OF-4 DECODER/ DEMULPLEXER



J SUFFIX
CERAMIC PACKAGE
CASE 620

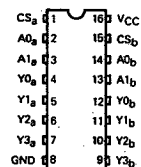
N SUFFIX
PLASTIC PACKAGE
CASE 648

ORDERING INFORMATION

54 Series: -55°C to +125°C
MC54HCXXXJ (Ceramic Package Only)

74 Series: -40°C to +85°C
MC74HCXXXN (Plastic Package)
MC74HCXXXJ (Ceramic Package)

PIN ASSIGNMENT



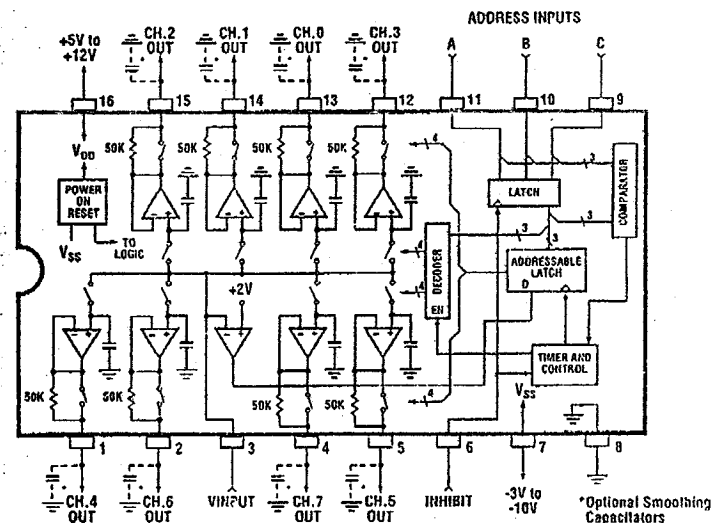
TRUTH TABLE

Inputs			Outputs			
CS	A1	A0	Y0	Y1	Y2	Y3
H	X	X	H	H	H	H
L	L	L	L	H	H	H
L	L	H	H	L	H	H
L	H	L	H	H	L	H
L	H	H	H	H	H	L

X = Don't Care

PD 508 $\frac{1}{2}$ CEM5508

Octal Sample & Hold



PD 508 Block Diagram and Typical Connection