



# COP470 V.F. Display Driver

## General Description

The COP470 is a peripheral member of National's COPS™ Microcontroller family. It is designed to directly drive a multiplexed Vacuum Fluorescent display. Data is loaded serially and held in internal latches. The COP470 has an on-chip oscillator to multiplex four digits of eight segment display, and may be cascaded and/or stacked to drive more digits, more segments, or both.

With the addition of external drivers, the COP470 also provides a convenient means of interfacing to a large-digit LED display.

## Features

- Directly interfaces to multiplexed 4 digit by 8 segment Vacuum Fluorescent displays
- Expandable to drive 8 digits and/or 16 segments
- Compatible with all COP400 processors
- Needs no refresh from processor
- Internal or external oscillator
- No "glitches" on outputs when loading data
- Drives large and small displays
- Programmable display brightness
- Small (20 pin) dual-in-line package
- Operates from 4.5V to 9.5V
- Outputs switch 35 volts and require no external resistors
- Static latches
- Microwire™ compatible serial I/O

## Connection and Block Diagrams

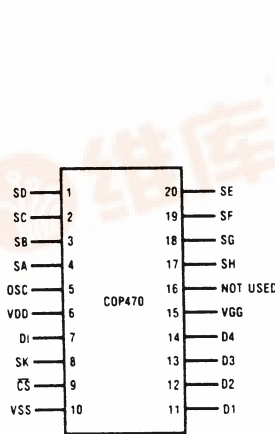


Figure 1. COP470 Pin Connection

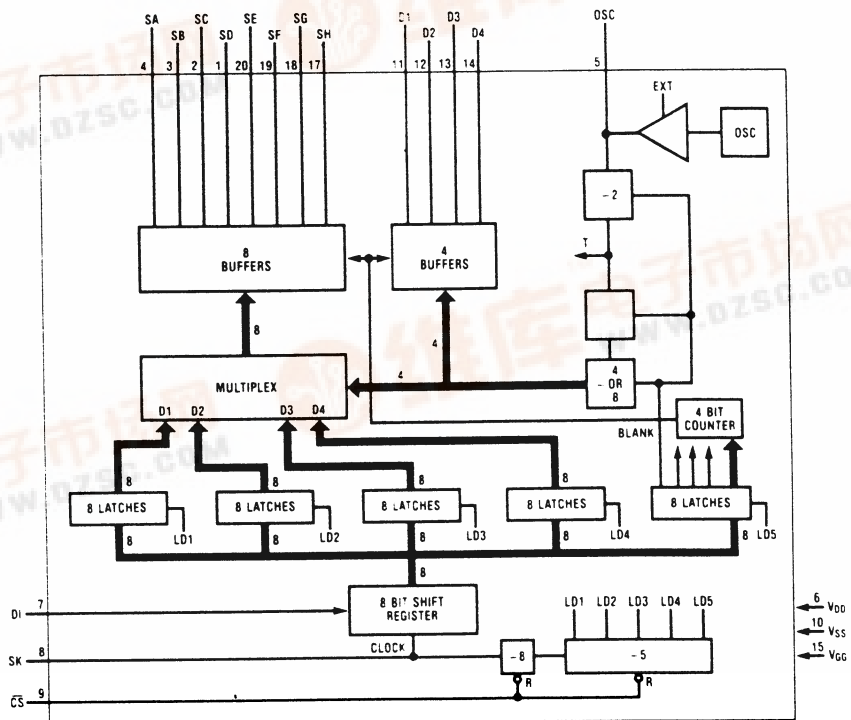


Figure 2. COP470 Block Diagram