DATA LINE DRIVERS WITH COLUMN INITIALIZATION TRANSISTOR

ABSTRACT

A video display driver applies a video signal to column electrodes of a liquid crystal display. The display driver includes a reference ramp generator and column data line drivers. A reference ramp signal is combined with the video signal and applied to an input of a comparator. The comparator controls a first transistor that couples a data ramp signal to a given column of pixels. The first transistor at least partially initializes a voltage developed in the given column of pixels prior to an instant when the data ramp signal begins upramping. A second transistor that is coupled in parallel with the first transistor insures that the column voltage is fully initialized.

FIGURE 2