

**TRI-STATE VIDEO DIFFERENTIAL DRIVER****Abstract**

A differential current source (51) provides first and second complementary output currents (I1, I2) responsive to a video input signal (S1) which are coupled via respective load networks (52,54) to a common supply terminal (22) and develop first and second complementary video output signals (V1,V2). A first output circuit (56) applies the first output signal to a first output terminal (16) via a voltage follower transistor (Q6) and applies the second output signal to the first output terminal via a current source transistor (Q8). A second output terminal (18) is similarly driven by a second voltage follower transistor (Q5) and a second current source transistor (Q7), all transistors being of the same conductivity type. A tri-state control circuit (Q1,Q2) coupled to the differential current source enables the differential current source in a first operating mode to produce the first and second complementary currents whereby push pull output signals are produced at the output terminals. In a second operating mode, the tri-state control circuit forces the complementary currents to zero whereby the common supply terminal (22) applies turn-off bias via the two load networks to the control electrodes of all of the output transistors thereby "tri-stating" (isolating) the output terminals. Advantageously, in the tri-state mode, there is zero quiescent power dissipation in the output circuits, the load networks, the differential current source and the tri-state control circuit.

FIGURE 1