

ANALOG BUFFER CIRCUIT, DISPLAY DEVICE, AND PORTABLE TERMINAL

ABSTRACT

An analog buffer circuit which has small input and output offsets and reduced power consumption even if it is formed on an insulating substrate by TFTs, a display device which uses the analog buffer circuit as a peripheral driving circuit for a display unit, and a portable terminal in which the display device is provided as a screen display unit are provided. By performing offset detection on a source follower in such a manner that, for example, two capacitors Cn1 and Cn2 are connected to the gate of a NMOS transistor Qn11 as a source follower, and conduction/nonconduction control of switches Sn1 to Sn5 are performed, if needed, and by sequentially canceling the detected offsets, a final offset voltage is sufficiently reduced and high precision offset cancellation is realized.

Figure 1