ABSTRACT

SEMICONDUCTOR DEVICE

Stable electrical characteristics and high reliability are provided for a semiconductor device including an oxide semiconductor. In a transistor including an oxide semiconductor layer, a buffer layer containing a constituent similar to that of the oxide semiconductor layer is provided in contact with a top surface and a bottom surface of the oxide semiconductor layer. Such a transistor and a semiconductor device including the transistor are provided. As the buffer layer in contact with the oxide semiconductor layer, a film containing an oxide of one or more elements selected from aluminum, gallium, zirconium, hafnium, and a rare earth element can be used.

Fig. 1