METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE

Abstract

A highly reliable semiconductor device which includes a thin film transistor having stable electric characteristics, and a manufacturing method thereof. In the manufacturing method of the semiconductor device which includes a thin film transistor where a semiconductor layer including a channel formation region is an oxide semiconductor layer, heat treatment which reduces impurities such as moisture to improve the purity of the oxide semiconductor layer and oxidize the oxide semiconductor layer (heat treatment for dehydration or dehydrogenation) is performed. Not only impurities such as moisture in the oxide semiconductor layer but also those existing in a gate insulating layer are reduced, and impurities such as moisture existing in interfaces between the oxide semiconductor layer and films provided over and under and in contact with the oxide semiconductor layer are reduced.

Figure 1D