

Abstract

An apparatus and method for intra-predicting an image. In the method, parameters representing a correlation between a chrominance block to be intra-predicted and a luminance block are obtained based on restored neighboring pixels of the chrominance block and restored neighboring pixels of a luminance pixel, and the chrominance block is predicted from the luminance block by using the parameters. The obtaining of the parameters may include obtaining the parameters by performing a predetermined operation on the restored neighboring pixels of the chrominance block and the restored neighboring pixels of the luminance block. The predetermined operation may include a scaling process of changing bit depths of the parameters to prevent occurrence of a bit overflow.