

Abstract

The topic was used of Altera DE2-115 board as the core, and to implement a music player, which controlled using smartphone Bluetooth.

With the topic, we learned design architectures of Altera DE2-115 and features of hardware. The concept of design was based on the examples, which were in the DE2-115 manual. We also modified it and added the function of Bluetooth. In addition to DE2-115, we added audio output. The part of the music input, we used SD card to store archives, and then burned into DE2-115. Finally, we outputted it to audio equipment.

The side of software, we used Quartus II and NiosII. These were popular softwares.

Finally, with wireless control made player to play, paused, adjust the volume and speed. The audio player became more diverse and practical.