

Octave Keyboard

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1 Introduction and Problem Statement

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This keyboard is a simple one octave keyboard with the capability to autoplay “Kids” by MGMT when a switch is turned on. When the keys are pressed, the appropriate notes are played through the speaker, and LEDs which correspond to the keys that are lit up. The LEDs can be disabled using a switch.

2 Design Solution

2.1 Specifications

The Constructor

getAllowableCombinations()

main()

2.2 Operating Instructions

2.3 Theory of Operation

2.4 Construction and Debugging

```
process
begin
    CLK <= '1'; wait for 10 NS;
    CLK <= '0'; wait for 10 NS;
end process;
```

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