



# **Kitchen's Helper**

## **Operation Manual**

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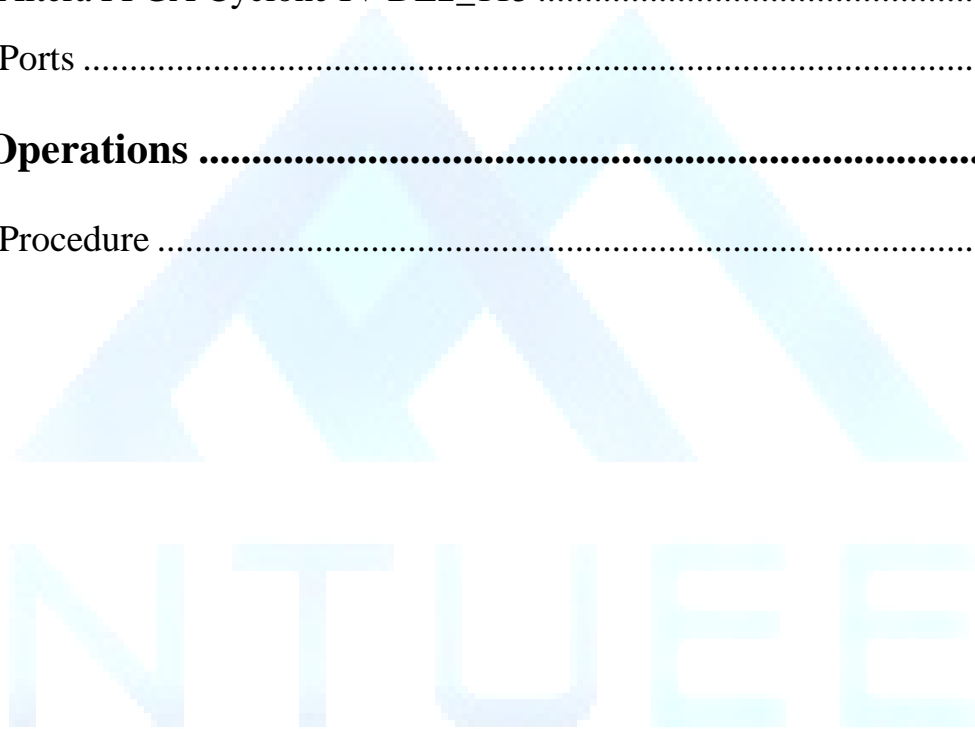
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## *1. Introduction*

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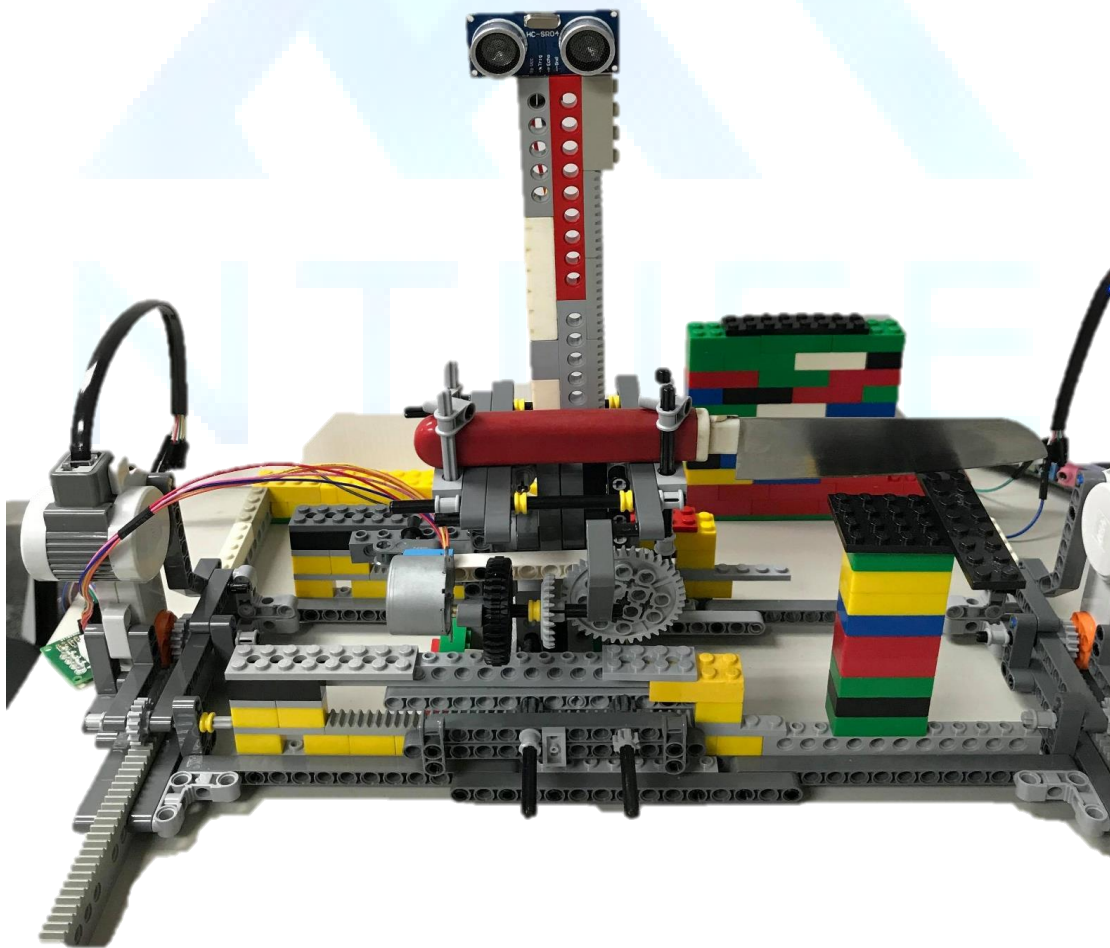
### **Kitchen's Helper**

To deal with the fact that people usually can't focus on cutting food in a kitchen, which may result from that you still need to take care of your kids at the same time or you have to answer a call from your friends. Therefore, this automatic cutting machine can let you do other things while cutting food. This kitchen's helper can help you reduce the burden on cooking.

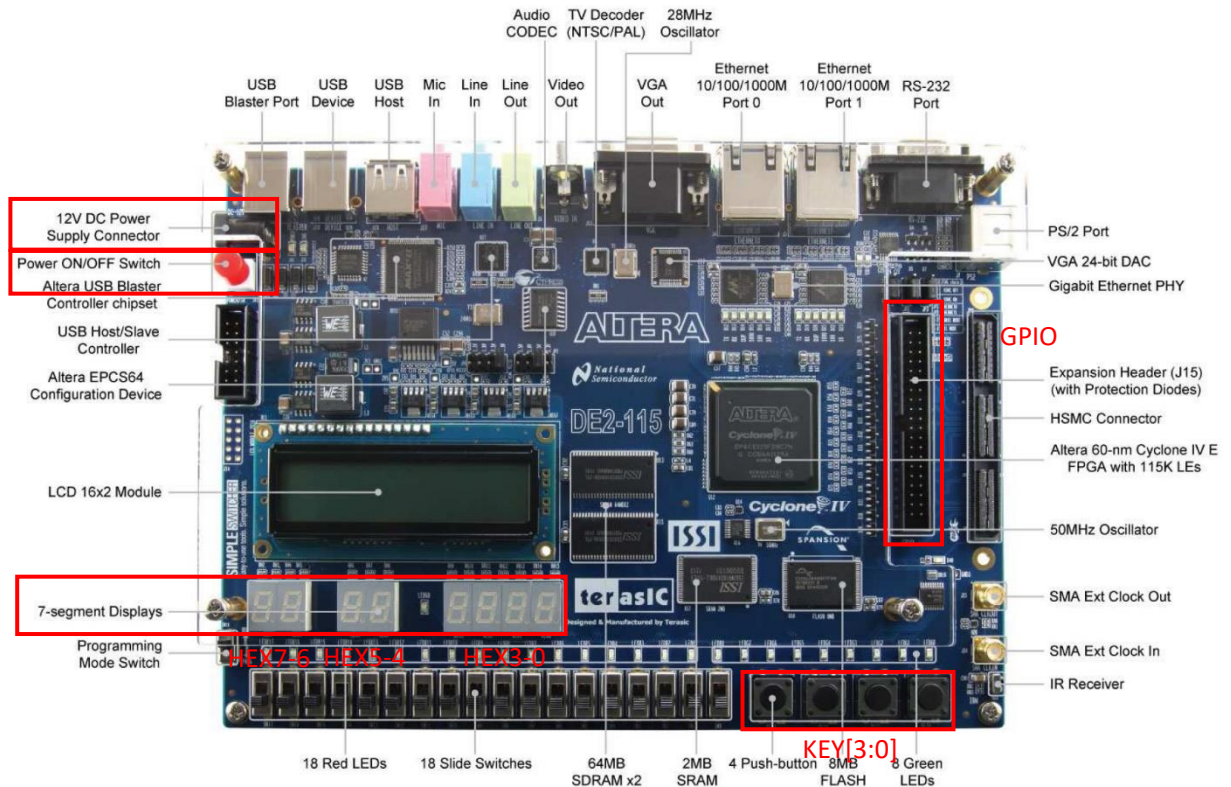
## *2. Devices*

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### **Kitchen's Helper**



## Altera FPGA Cyclone IV DE2\_115



### Ports

Port name	Pin name	Function
DC power supply		Provide power for FPGA
ON/OFF switch		Switch
KEY[0]	Reset	Reset the whole FPGA
KEY[1]	Start	Start kitchen's help to automatically cut things
KEY[2]	Pause	While operating kitchen's helper, you can press this button to pause the machine
KEY[3]	Slice	Press this button to choose how many slices you want to cut into. Press one time for 2 slices, twice for 4 slices, three times for 8 slices and four times for 16 slices
HEX4-0		When you press reset button, this displayer display "RESET". When you press start button, this displayer display "GO". When you press pause button, this displayer display "PAUSE".

HEX7-6		Display how many slices you want to cut into
GPIO		Connect to Kitchen's Helper

### 3. Operations

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#### Procedure

- Step 1. Put a thing you want to cut on Kitchen's Helper platform
- Step 2. Plug power supply line to FPGA.
- Step 3. Press the power switch to turn ON the FPGA.
- Step 4. Press the RESET (KEY[0]) button.
- Step 5. Press Slice (KEY[3]) to choose how many slices you want to cut into. Press one time for 2 slices, twice for 4 slices, three times for 8 slices and four times for 16 slices
- Step 6. Press the Start (KEY[1]) button.
- Step 7. If you want to pause while Kitchen's Helper is operating, press the Pause (KEY[2]) button. And press again Pause (KEY[2]) button to restart it.