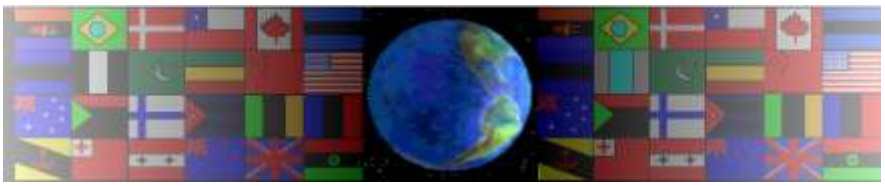
# PIC MICROCONTROLLER EXAMINATION QUESTION



On behalf of The World Association of Technology Teachers

# W.A.T.T.



World Association of Technology Teachers

This exercise can be printed and used by teachers and students. It is recommended that you view the website (www.technologystudent.com) before attempting the design sheet .

# PIC MICROCONTROLLER EXAMINATION QUESTION



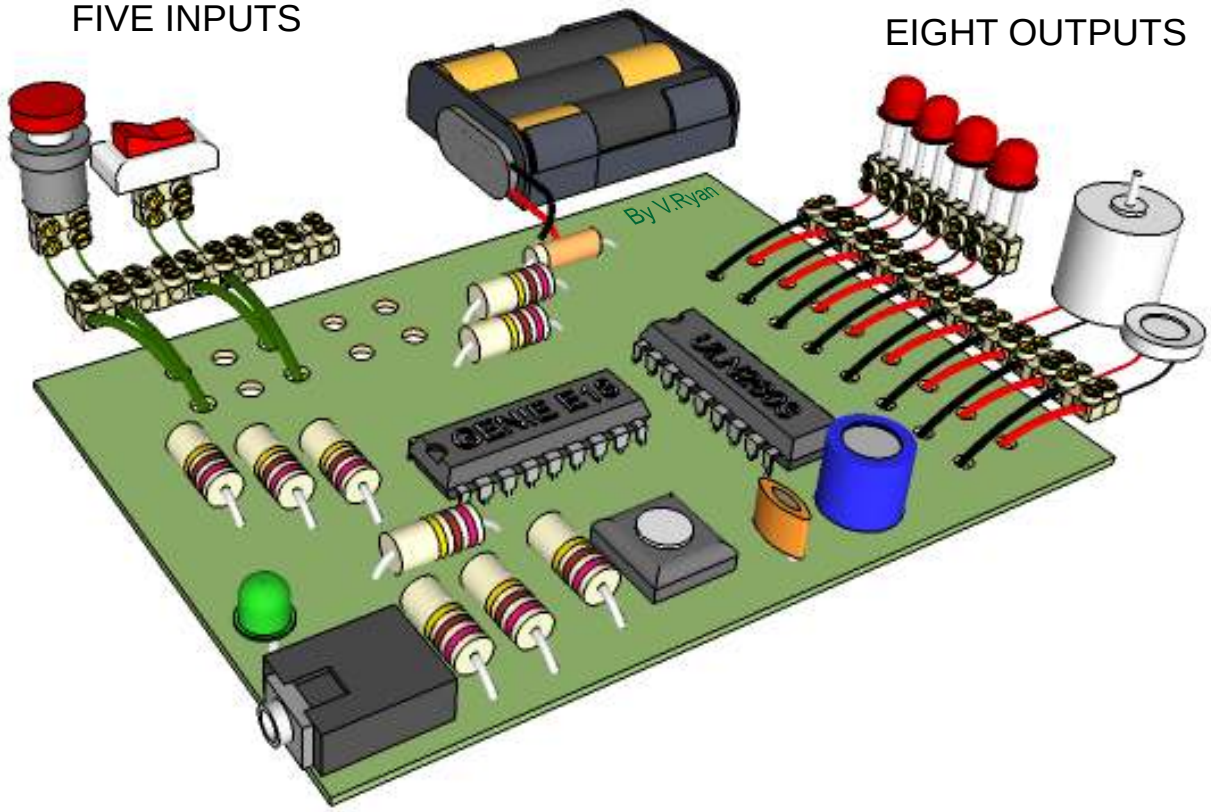
Below is a GENIE E18 microcontoller circuit (project board). It has been set up to show INPUTS and OUTPUTS. The GENIE E18 has a total of five inputs and eight outputs.

## 3D VIEW

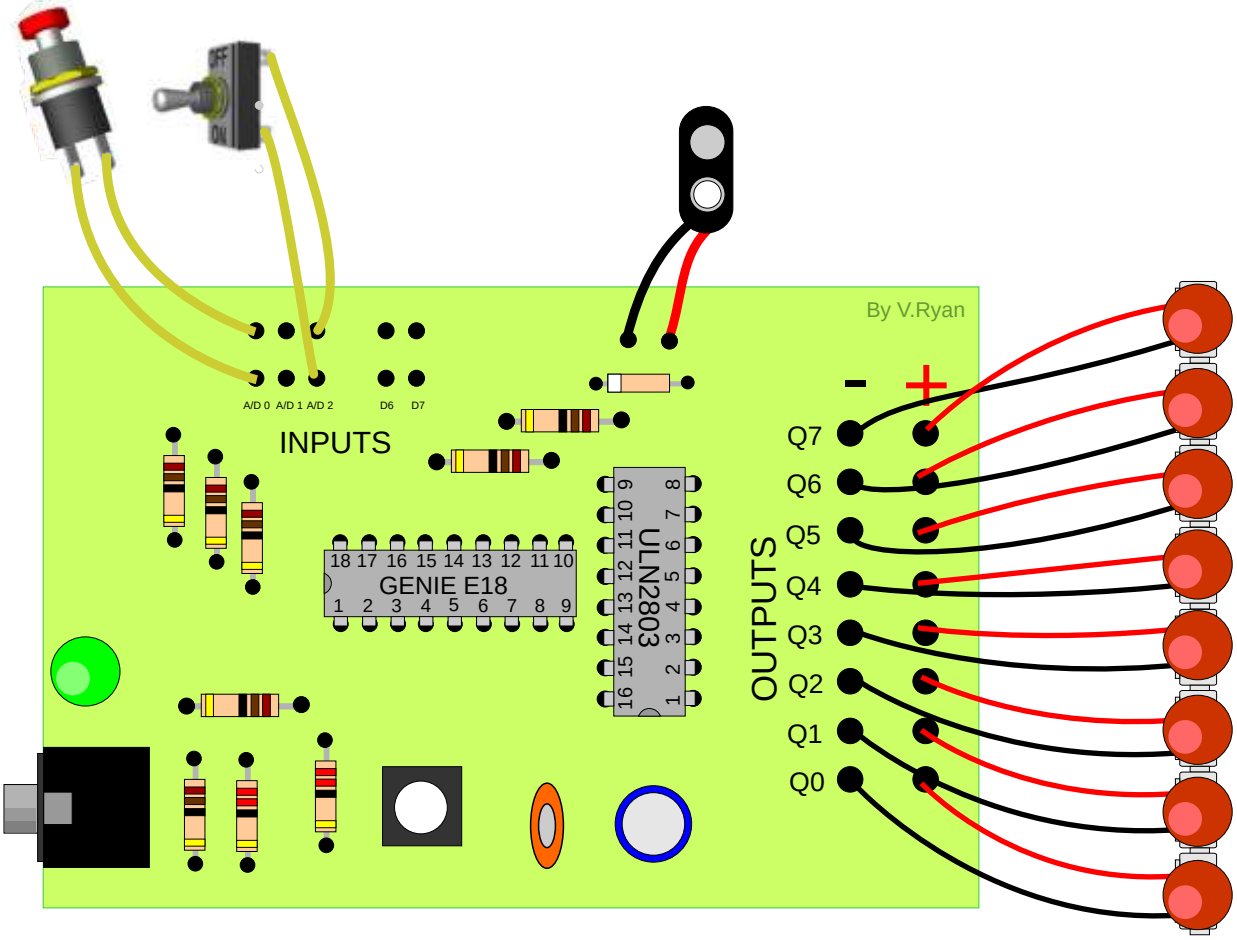
4.5 to 6 VOLTS

FIVE INPUTS

EIGHT OUTPUTS



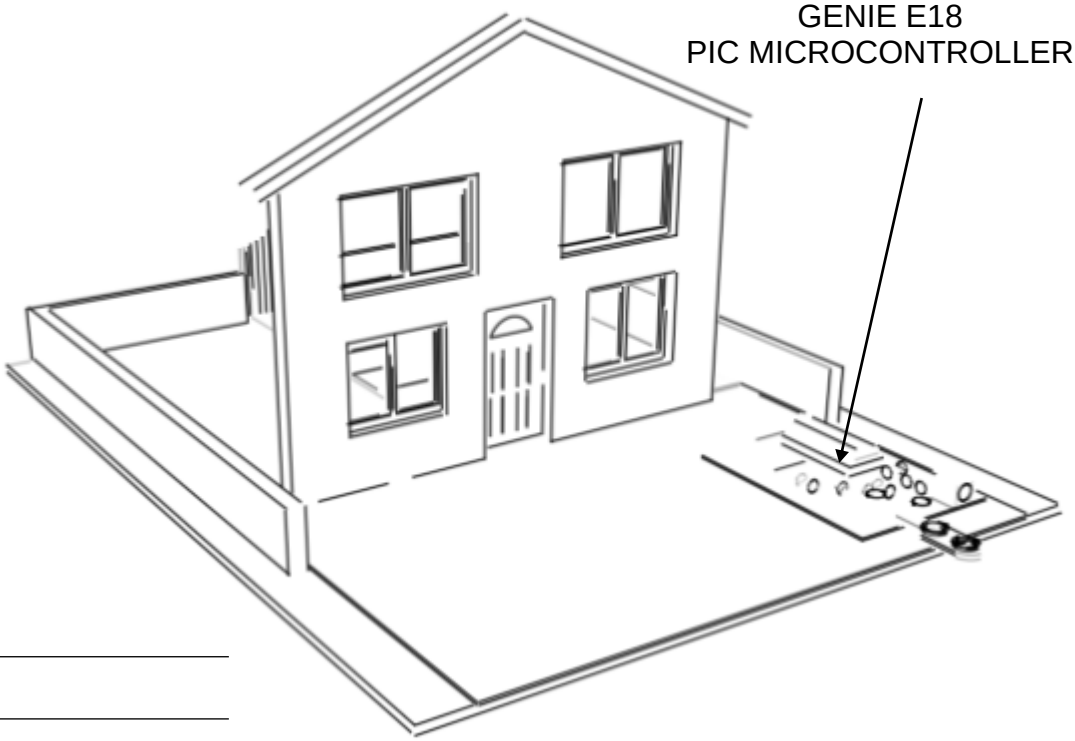

## PLAN VIEW



Two sketches of a model, of a typical house are seen below (sketch 'A' shows the BACK' and sketch 'B' shows the FRONT. A PIC microcontroller circuit is positioned at the back of the model house (see sketch 'A'). It has five inputs and eight outputs.
Add an effective security system to the model house, using the microcontroller to detect inputs and to activate outputs. You may wish to use all inputs and all outputs or a limited number.
Draw additional detail to the existing sketches. For example, a sensor to detect movement or a buzzer to represent an alarm siren.
Add notes and labels, to explain how your security system works.



# SKETCH 'A'

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