



# Consumer Appliance, Widget, Gadget

## Personal Ecology Widget

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This consumer product in some variation, may be used in different areas of human life, such as personal cars, homes, and in the work environment with high levels of pollution emissions, as in mines, chemical manufacturers, etc.

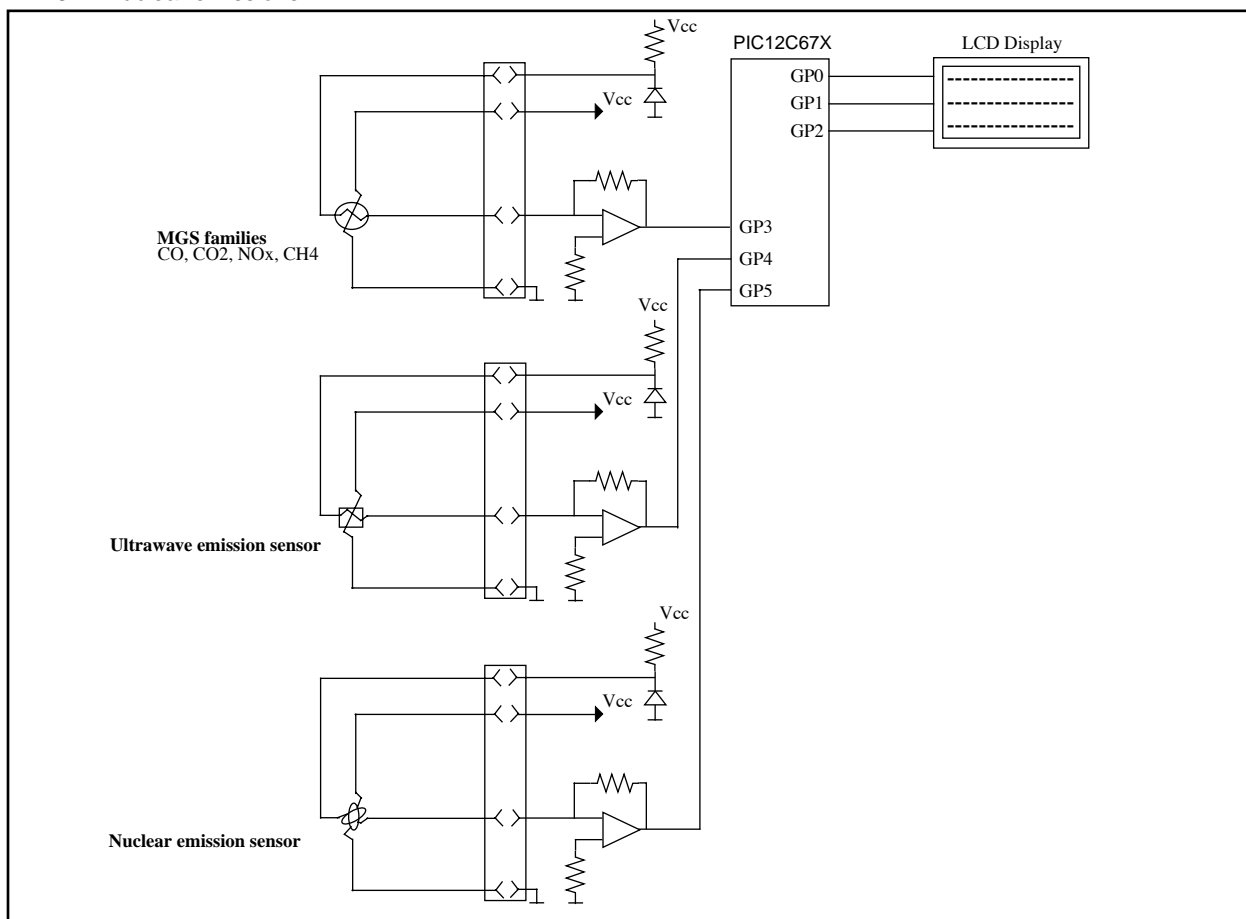
### INTRODUCTION:

The Personal Ecology Widget would be necessary for everybody who likes to live in harmony with nature. This widget will be able to register some important factors, such as:

1. Pollution emission - CO<sub>2</sub>, CO, NO<sub>x</sub>, CH<sub>4</sub>
2. Ultra-wave emission from the ozone hole in the atmosphere
3. Nuclear emissions

### DESCRIPTION:

On the sketch diagram is presented the widget. Some details are omitted, because have not principal meaning of the design.



The widget is made up of three basic parts:

- Input sensors - The input sensors that may be used

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are gas-sensitive sensors from Motorola's family MGS. They have good sensitive features and are suitable in small, compact applications. To the widget, it is possible to connect (an option) additional sensors for ultrawave and nuclear emissions, in combination with pollution sensors accomplish the input sensor's part.

- PIC12C671, with your hardware and software resources, and three ADC inputs permit appropriate scanning and converting of sensors signals which alarm the person when the emissions exceed the normal levels. On the base of this widget, it is possible to evaluate a vehicle pollution widget that analyzes pollution emissions in engines. For this, it is necessary to include sensors for pressure and heat and a minimum of two sensors for pollution emissions such as CO<sub>2</sub> and CH<sub>4</sub>.

- LCD Display indicates the levels of emissions. The display will be appropriate to design as a custom chip with three input pins.