Executive Tutorial
How to run a demonstration in 3 clicks

This 3-click tutorial is intended to demonstrate that you can go through a product demonstration with state-of-the-art features without lengthy typing or project setup. For more information on CodeWarrior for 68HC08 and how to create a project, please read QTQY Project Build Tutorial.

Environment setup

You must have CodeWarrior for 68HC08 Release 2.1 Special Edition installed on your computer. In order to run the Tutorial, you need the examples installed (this is done with a 'full' installation). You can add them by running the 'Setup or uninstall' shortcut created by the installation.

Description of the demo

The demonstration runs a small application using a 68HC908QT4, a 8-pin device with Flash memory, Analog to Digital converter, Timer and General Purpose ports.

The application will read an analog value, compare the value against preset values and display the result of the comparison through a LED. The analog value may be a temperature or the level of a liquid in a tank. The result indicated by the LED may be any action to be taken when the measured value compares with the preset values according to the following:
- For analog values between 0 and 86 (of a range of 255), LED is OFF,
- For analog values between 170 and 255 (of a range of 255), LED is ON,
- For analog values between 86 and 170 (of a range of 255), LED is blinking.

Running the 3-click demo

Click #1: Loading the demo

- Got to , launch CodeWarrior with the shortcut '**CodeWarrior QT_QY Tutorial**' created by the installation:

- This loads CodeWarrior for 68HC08 and then opens the project ' MyQT4project'
- You can see the Processor Expert windows along with the usual CodeWarrior windows.

Click #2: Building the code and Debugging it

- Click on the green arrow in the Project Manager window or use the drop down

menu: **Debug>Connect**
- This generates the object code (Make), opens the CodeWarrior Debugger, calls the full chip Simulator, and loads the executable code.

Click #3: Running the demo

- Click on 'Run'   to let the program execute. The program now runs.

Testing inputs and outputs operations

We can verify that the codes executes properly by using the data visualization tool.

- In the Data Visualization window (with graphical objects), click-hold the top of the red column and drag it up and down (if there is no red column, click anywhere in the column, a red section will appear). See the LED change from green to red when the cursor reaches the top-third of the range and change from red to green when the cursor reaches the lower third of the range.
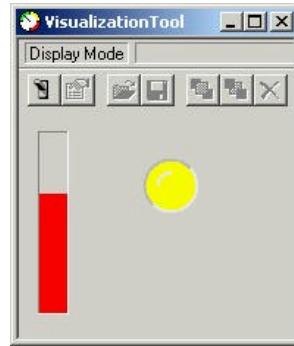
- Bring the red column in the middle and watch the LED blink.
- Click on 'Stop'   and 'Single-step'   through the code. You can drag the Analog input cursor to another level and step through the code and see the LED change accordingly.
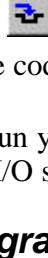
CONGRATULATIONS, you have run your first 68HC08 demonstration using unmatched features such as full chip simulation, I/O stimulation and Data Visualization.

Halting and closing the program

- Click on 'Stop'   to halt the program,
- Close the Debugger window,
- Close the CodeWarrior window.

This demonstration has taken you through the major steps of developing a project. It was quick (3 clicks) to show how easy it is to use. Nevertheless, it contains many state-of-the-art features and the capability to stimulate and display analog inputs as well as digital pins. This combination of features offered by CodeWarrior is yet unmatched on the market.