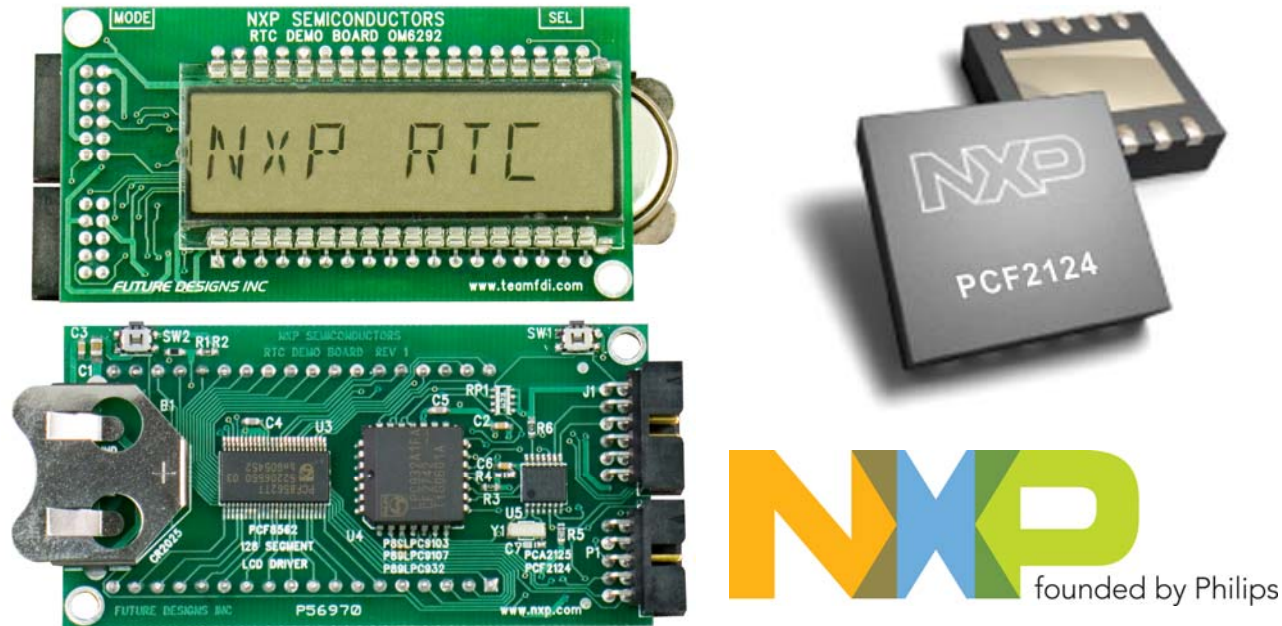


# RTC Demo



## Highlights

- Low power, SPI based Real Time Clock driven by a 32.768 KHz quartz crystal
- Flexible PCB layout supports two RTC package options
  - 14-pin TSSOP for PCF2125
  - 10-pin HVSON for PCA2124
- Powered by a single 3V coin cell battery
- 8-character alphanumeric LCD
- I2C based LCD driver with 128 segment support
- Two miniature push-buttons for user control; additional User Interface via header
- User reprogrammable via 10-pin ICP header

The NXP RTC Demo is a reference design for a low power Real Time Clock and LCD solution. The Demo Board is controlled by a simple two-button user interface (MODE and SELECT). Example code for several sample applications: a programmable time and date display, a programmable countdown timer, and a repeating pattern of text lines, can all be found on the website at [www.teamFDI.com/RTCDemo](http://www.teamFDI.com/RTCDemo). The user can edit this code and download to the reprogrammable Flash microcontroller via a 10-pin header included on the board using any external ICP style programmer.

A small USB based ICP programmer that allows ICP programming of the P89LPC932A1 and many other NXP microcontrollers from any PC is available from Future Designs, Inc. Details can be found at [www.teamfdi.com/USB-ICP](http://www.teamfdi.com/USB-ICP).