

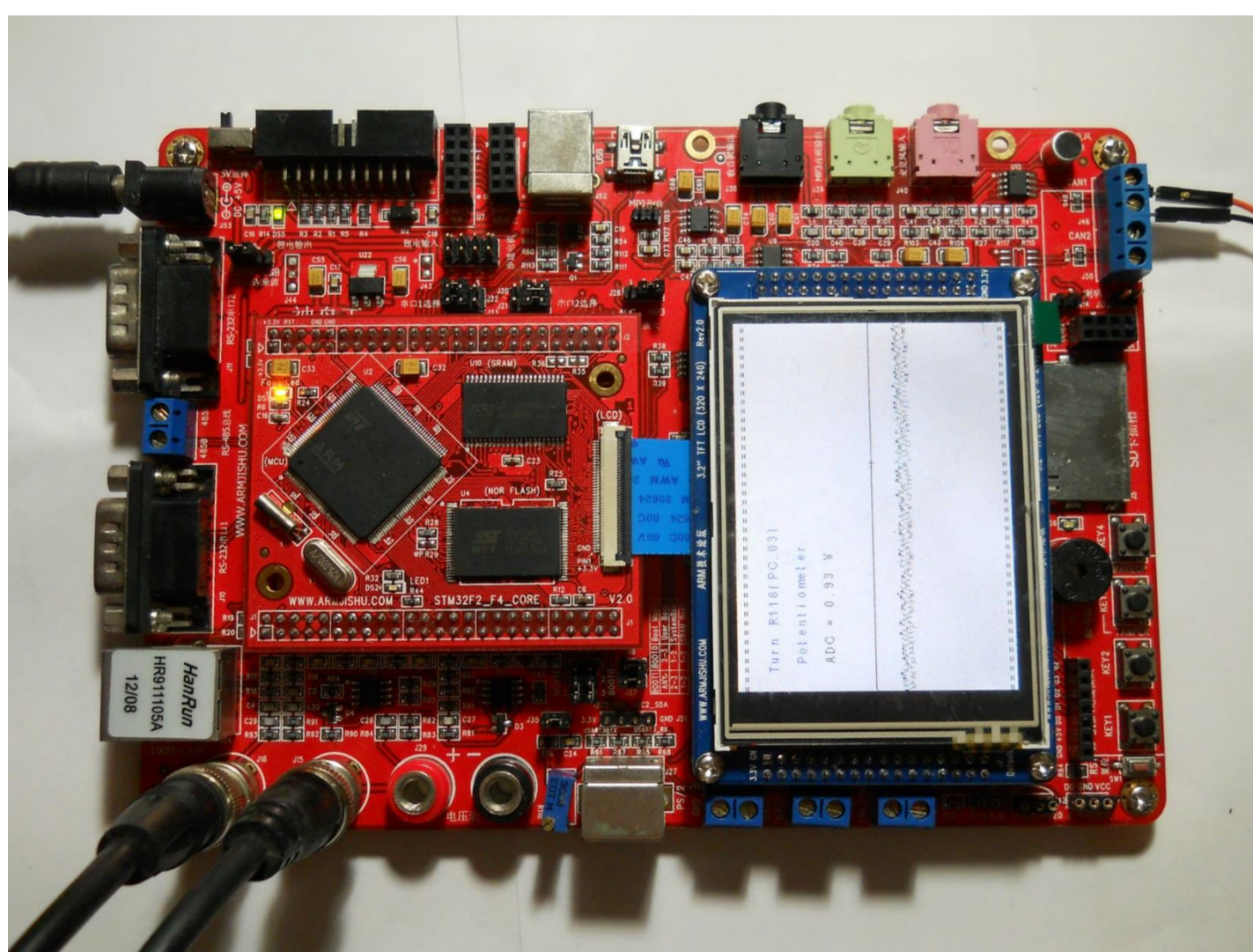
A Novel Embedded Handheld Oscilloscope

(A Novel Embedded Handheld Oscilloscope based on hardware signal convert sample-and-hold)

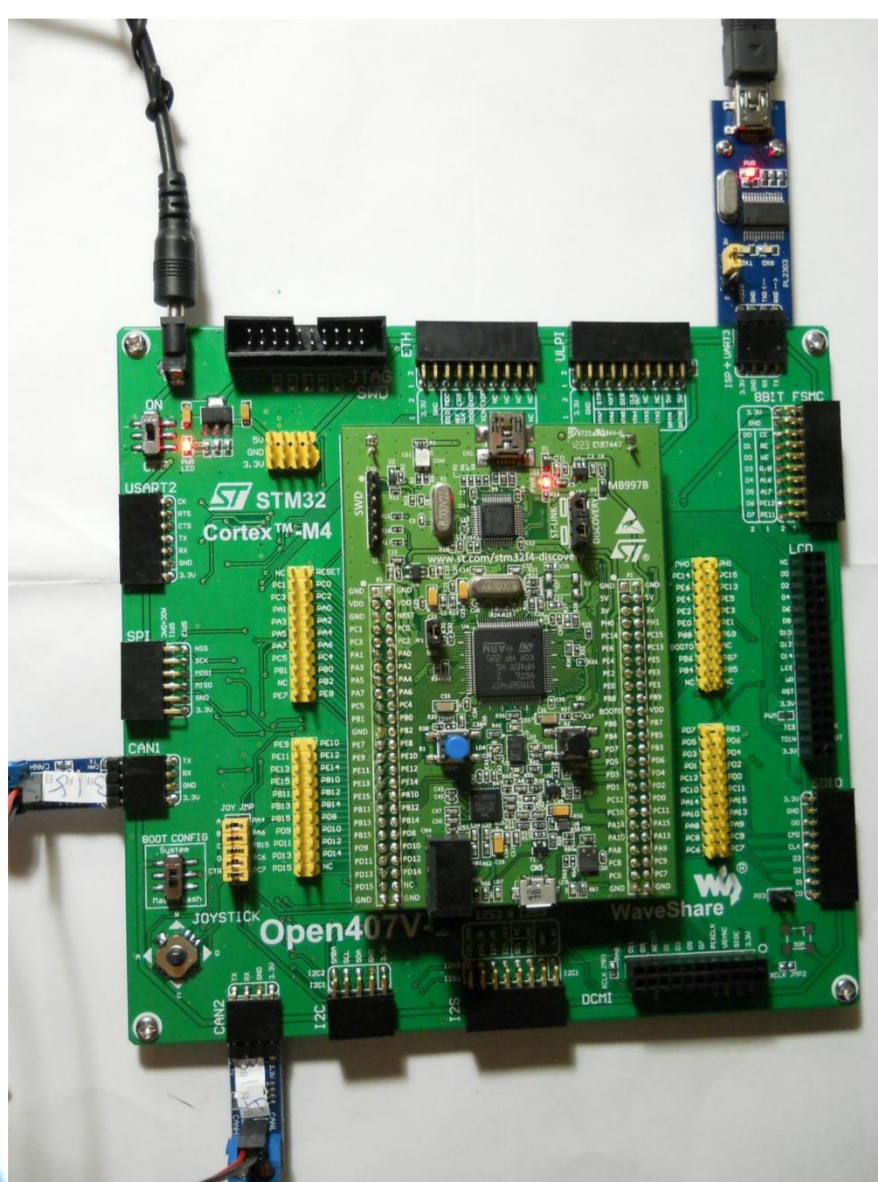
Taiwan Invention Patent, Appl. No. 102108986

To make sure the Handheld Oscilloscope can keep working for a sufficient lifetime when powered by the batteries, it is necessary to optimize the design for power consumption, battery capacity, and power conversion efficiency.

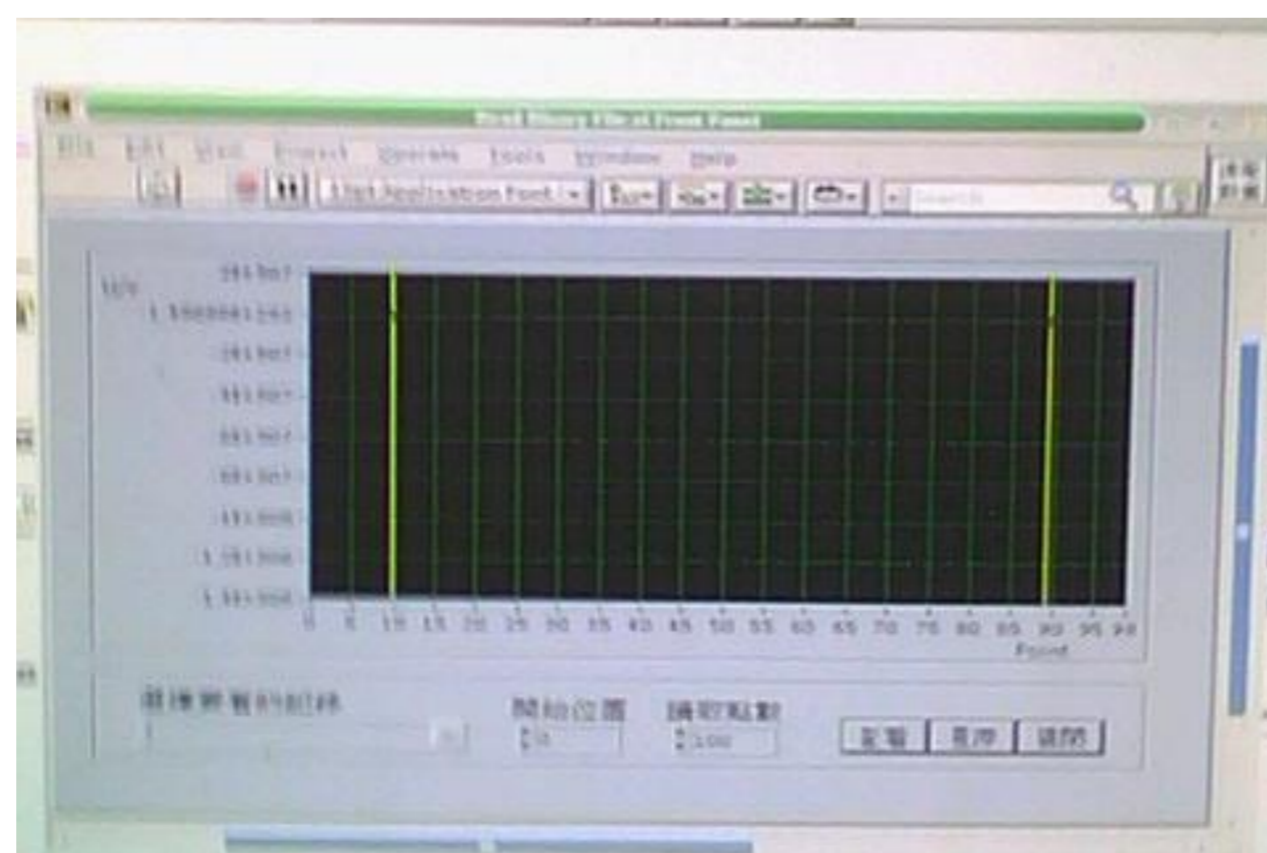
Frost & Sullivan (F&S) analysts forecast the world oscilloscope market generated \$1,152 million in 2010. Going forward, revenues are expected to reach \$1513.4 million in 2014.



The invention proposes the first handheld oscilloscope product with hardware sample-and-hold technology. In addition, use of new embedded system design, dramatically reducing hardware circuit size and cost, and improve the signal resolution and sampling rate.



The invention develops an automatic testing system with CAN BUS communication interface for our embedded handheld oscilloscope. The automatic testing system can be used to monitor the data collection and command control of oscilloscope.



Using LabVIEW development platform, our handheld oscilloscope converts a value to graphics and displayed on a computer screen.