Bio-Sensing and Monitor System Design with Micro Array Probes and Amplifier on an Active RFID Tag 林君明,張博光 Communication Engineering Engineering jmlin@chu.edu.tw

Abstract

This research provides a micro array bio-probe device, integrated with Thin-Film-Transistor (TFT) amplifier formed of bottom-gate MOS (Metal-Oxide Semiconductor) type thin film transistors, on an active RFID tag to improve the signal-to-noise ratio and impedance matching problems. The bio-probe device can be disposed to conform to the profile of a living body's portion so as to improve the electrical contact property.

Keyword: bio-sensing probe, thin film transistor amplifier, signal-tonoise ratio, active RFID tag