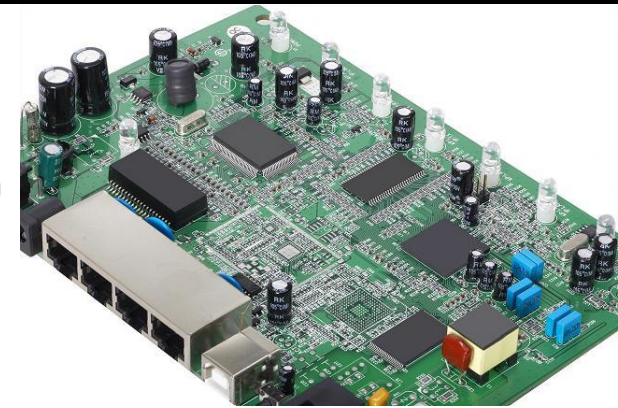


Urban mining: The metal content in WEEE printed circuit boards



Background

The world-wide generation of Waste Electric and Electronic Equipment (WEEE) is increasing for each year and has now become a major environmental issue in the industrial-developed countries. Toxic metals such as Pb, Cd and Hg are contained in printed circuit boards of PCs but also significant amounts of precious or semi-precious metals. The precious metal (PM) concentration of printed circuit boards were still in 2009 **ten times higher** than the concentration found in mining ores. Therefore it is of interest to determine metal content in the printed circuit boards of different WEEE categories.

Project Description

In this project you will collect and disassemble products of a certain small-size (<30cm) WEEE category (for example computer products, telecom products, game consoles or whatever product you would like to take apart) for obtaining the printed circuit boards. These will then be shredded and dissolved in acid. Analysis of metal content will be done with ICP-MS analysis.

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