

Method and Apparatus for Initializing an Integrated Circuit Using Compressed data From a Remote Fusebox

Abstract

Initializing an integrated circuit (10) using compressed data from a remote fusebox (11) allows a reduction in the number of fuses (12) required to repair or customize the integrated circuit (10), and allows fuses (12) to be grouped outside of the macros (16) repaired by the fuses (12). The remote location of fuses (12) allows flexible placement of macros (16) having redundant repair capability, as well as a preferable grouping of fuses (12) for both programming convenience and circuit layout facilitation. The fuses (12) are arranged in rows and columns and represent control words and run-length compressed data (12), to provide a greater quantity of repair points for each fuse (12). Data can be loaded serially into shift registers (18) and shifted to the macro locations to control the selection of redundant circuits to repair integrated circuits (10) that have defects.

FIG. 6