

STRUCTURE AND METHOD OF FORMING ELECTRICALLY BLOWN METAL FUSES FOR INTEGRATED CIRCUITS

Abstract

[00031] A fuse structure for an integrated circuit device includes an elongated metal interconnect layer (106) defined within an insulating layer; a metal cap layer (108) formed on only a portion of a top surface of the metal interconnect layer; and a dielectric cap layer (112) formed on both the metal cap layer (108) and the remaining portions of the metal interconnect layer not having the metal cap layer (108) formed thereon; wherein the remaining portions of the metal interconnect layer not having the metal cap layer (108) formed thereon are susceptible to an electromigration failure mechanism so as to facilitate programming of the fuse structure by application of electric current through the elongated metal interconnect layer (106).