

# **ON-CHIP PASSIVE POWER SUPPLY COMPENSATION CIRCUIT AND OPERATION UNIT, CHIP, HASH BOARD AND COMPUTING DEVICE USING SAME**

## **ABSTRACT**

The invention provides an on-chip passive power supply compensation circuit, and an operational unit, a chip, a hash board and a computing device using the same. The on-chip passive power supply compensation circuit comprises: two or more to-be-powered voltage domains, wherein the to-be-powered voltage domains are connected in series between a power supply and ground; and two or more isolation regions, wherein the to-be-powered voltage domains are formed in the isolation regions, and the isolation regions are configured for isolating the to-be-powered voltage domains; the isolation regions are connected in series between the power supply and the ground, wherein the on-chip passive power supply compensation circuit further comprises power supply compensation units connected between the to-be-powered voltage domains and the isolation regions for providing power supply compensation to the to-be-powered voltage domains. The on-chip passive power supply compensation circuit of the invention can effectively reduce power consumption and design difficulty, save an on-chip area, and reduce production costs.

[FIG. 4]