

VOLTAGE SCALING METHOD AND ELECTRONIC DEVICE

ABSTRACT

This application discloses a voltage scaling method and an electronic device, and relates to the field of electronic technologies, to ensure that power consumption can be reduced and performance can be improved for a processor in cases of a light load and a heavy load. The method is applied to an electronic device having a processor and a power supply that supplies power to the processor. The method includes: The processor sends power supply scaling information to the power supply based on an operating frequency in a next time period; and the power supply determines, based on the power supply scaling information, a supply voltage V_{out} used to supply power to the processor. The supply voltage V_{out} decreases as a load current of the power supply increases. $V_{min} \leq V_{out} \leq V$, where V_{min} is a lowest supply voltage of the processor at the operating frequency in the next time period, and V is a specified supply voltage of the processor at the operating frequency in the next time period.

Fig. 4