

ABSTRACT

LOGIC OPERATION CIRCUIT, DIFFERENTIAL AMPLIFIER CIRCUIT, AND ELECTRONIC DEVICE

A logic operation circuit, a differential amplification circuit and an electronic device. The logic operation circuit (200) comprises at least one differential logic operation circuit (100). The differential logic operation circuit (100) comprises: a logic network module (1), which comprises a first logic network unit (11) and a second logic network unit (12) that have complementary logic functions, wherein a differential signal is composed of input signals of the first logic network unit (11) and the second logic network unit (12), and is used for implementing a preset logic function according to the input signals and for outputting an operation result; and a differential amplification module (2), which comprises a first input end, a second input end, a first output end and a second output end wherein the first input end and the second input end are respectively connected to output ends of the first logic network unit (11) and the second logic network unit (12), and a differential output end is composed of the first output end and the second output end and is used for amplifying the operation result and outputting a logic operation result. Accordingly, side-channel attacks can be prevented, thereby improving the security of data, and reducing the power consumption of a circuit.

Figure 1