

## عنوان مقاله:

Investigating and Analyzing the Effect of Router Components on Network Performance on the Chip with Regard to Power Consumption

## محل انتشار:

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## خلاصه مقاله:

A network on the chip is a solution to connection problems compared with traditional-based chip which can fulfil multi-dimensional communication requirements. The router is a key component of the communication network which is referred as its backbone. Since the router occupies the largest area on the chip and it is the most widely used network component, in this paper, the architecture of the router in the network on the chip is examined and its roles with its components and their effect on the performance of the network are investigated, considering the parameters including time (delay), the area and more importantly the power consumption. It is shown that any modification, combination, or correction in any of the component effect on power consumption of the router and hence on the power consumption of the whole chip. To this end, the related works are examined to make an appropriate estimation of their analogy. This article will help researchers who are trying to design an optimal router based on power consumption

## کلمات کلیدی:

Power Consumption, Network on chip, router architecture

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1660973>

