# Article information:

Digital-compatible high-performance operational amplifier with rail-to-rail input and output ranges | IEEE Journals & Magazine | IEEE Xplore  
<https://ieeexplore.ieee.org/abstract/document/272096>

# Article summary:

1. Presents a CMOS buffer amplifier which operates on a single 5-V power supply.

2. Advantages include rail-to-rail linear, symmetrical operation at both the input and output; large gain-bandwidth product; high power supply rejection ratio; good common-mode rejection ratio; and easy compact layout suitable for design automation.

3. Capable of driving 300 /spl Omega//spl par/100 pF with a loaded gain-bandwidth product of more than 4 MHz and a fully loaded slew rate of greater than 4 V//spl mu/S.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy, as it provides detailed information about the design of the CMOS buffer amplifier, its advantages, and its capabilities. The article is well written and provides evidence to support its claims, such as the fact that it can drive 300 /spl Omega//spl par/100 pF with a loaded gain-bandwidth product of more than 4 MHz and a fully loaded slew rate of greater than 4 V//spl mu/S. However, there are some potential biases in the article that should be noted. For example, the article does not explore any potential drawbacks or risks associated with using this type of amplifier, nor does it present any counterarguments to its claims. Additionally, there is no mention of any other competing designs or technologies that could potentially provide similar benefits or performance levels as this one. Finally, there is no indication that the authors have considered any ethical implications associated with their design or research. All in all, while this article is generally reliable and trustworthy, it could benefit from further exploration into potential drawbacks or risks associated with using this type of amplifier as well as exploring alternative designs or technologies that could provide similar benefits or performance levels.

# Topics for further research:

* Drawbacks of CMOS buffer amplifier
* Alternatives to CMOS buffer amplifier
* Ethical implications of CMOS buffer amplifier
* Risks associated with CMOS buffer amplifier
* Competing designs for CMOS buffer amplifier
* CMOS buffer amplifier performance comparison

# Report location:

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