



2x Gain Amplifier

CCAD902 Datasheet

Product Description

The CCAD902 is a 2x Gain Amplifier which provides a 2x voltage gain between internal amplifier nodes and analog output pads. It is available as a GDSII layout file, and includes a Cadence library containing schematics, symbols and cell layouts. CCAD also provides an AHDL model for system simulation. The circuit was designed and fabricated in TSMC's 0.18u CMOS technology, and has been fully characterized for adherence to the Electrical Performance Specifications. CCAD also offers customization and integration services. The CCAD902 is an ideal circuit for integration into a wide variety of ASICs and ASSPs.

Features

- 2x gain
- Output is High-z when disabled
- Minimal I_{PD} when disabled
- Output can be connected to I/O pad analog port
- Wide input range [0 to $Av_{DD}/2$]
- Single-ended output
- Wide supply range [$V_{DD}=1.58V$ to $2.02V$, $AV_{DD}=1.96V$ to $3.65V$]
- Industrial temperature range [-40C to 125C]
- Low power
- Small circuit area 500u x 105u
- Available in TSMC 0.18u CMOS
- Portable to other CMOS processes

Applications

- To make internal voltages available on a pin for test support or some functionality, such as DAC outputs.

Circuit Diagram

