Voltage reference cell

NSBG_XF180_1V8_VREF

Main characteristics

- XFAB XH018
- 1.8V/3.3V±10% power supply
- -40 to +125°C

Deliverables

- GDS II layouts
- LEF abstracts
- CDL netlists
- Liberty timings
- Verilog description
- A full datasheet
- An integration note

Status

- Silicon proven

Product description

The VREF cell of the nSBG_XF180_1V8 library is a buffered high precision bandgap reference voltage generator IP cell powered at 1.8V ±10% (bandgap) and 3.3V ±10% (buffer), designed on the XFAB XH018 technology.

Applications

- AD and DA converters
- Precision regulators
- Battery-powered instrumentation
- Portable medical equipment

Main features

- 1.8V/3.3V ±10% power supply
- 1.4V to 2.0V programmable output voltage
- 1mA output current capability (sink/drive)
- -40 to +125°C junction temperature
- Less than 15ppm/K temperature drift
- 68dB power supply rejection
- Standby/power down mode
- Embedded bias circuitry
- Low silicon surface

nSilition
Smaller, Smarter, Stronger

31, bd Dolez, 7000 Mons (Belgium)
VAT: BE 885821519

Further information

For further information about this product and other nSilition IPs, development roadmap, availability and licensing terms, please e-mail to sales@nsilition.com.

Delivery and support

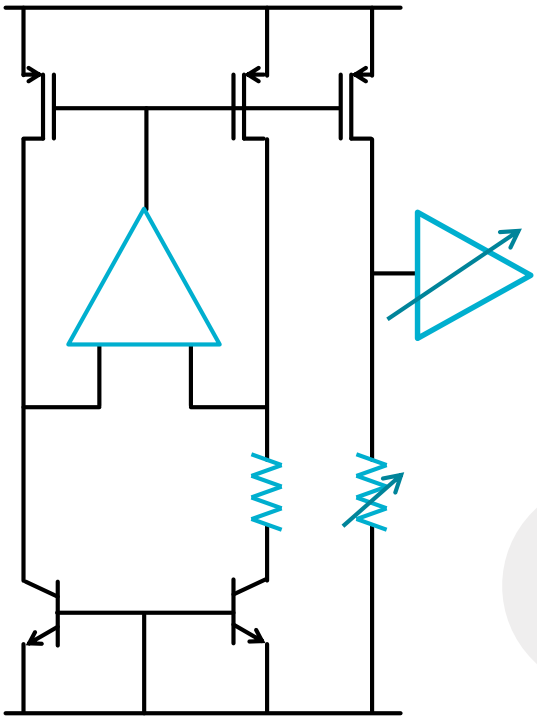
This reference voltage cell is available as hard macro-cell for reuse in any design based on the XFAB XH018 CMOS process. No extra IP license from any third party will be needed for the cells or the cell library.

Support can include close integration follow-up by our design team or custom-made cells or features

In addition, full support service is available on request. Support can include close integration follow-up by our design team or custom-made cells or features.

Porting to another process

The nSBG_XF180_1V8_VREF voltage reference cell is silicon proven in the XFAB XH018 CMOS process. It can be easily ported to another foundry and/or another similar CMOS process node upon request. Please contact us for details and availability.



Voltage reference block diagram

About nSilition

nSilition is a leading analog and mixed-signal semiconductor IP provider.

nSilition specializes in the development of high quality analog and mixed-signal high performance semiconductor IPs. With reference designs available for 10b to 14b A/D and D/A converters, high-speed IO circuits, PFM and PWM high efficiency DC/DC integrated converters and high precision bandgap references; nSilition enables the highest value analog and mixed-signal functionalities at the lowest risk.

The "IP design" service of nSilition offers top-class quality, customization and support dedicated to your needs and your specifications.

Disclaimer

The information provided by nSilition has been verified and is believed to be accurate. nSilition and all its right holders reserve the right to make changes to the information contained herein without notice. They reserve also the right to make changes to the product without notification. No liability shall be incurred as a result of the use or application of the information provided in this data sheet and/or the use of the corresponding product in any case.

nSilition
Smaller, Smarter, Stronger