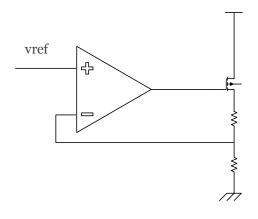
# SIVI-LDO1205



TSMC 130nm-G (1P5M)

## **MAIN FEATURES**

- Designed on TSMC130nm GenericProcess
- Supply a load current up to 5mA
- Input voltage range from 3.6V to 2V
- Output Voltage is 1.2V
- Low Quiescent current



 $SiVi\text{-}LDO1205\ Block\ Diagram$ 

### IP DESCRIPTION

SiVi-LDO1205 is a voltage regulator with low quiescent current while supplying a load current up to 5mA. The regulator is fully integrated with no need of any external components. High supply rejection ratio is provided with super noise performance is provided which is required by clock generators, ADCs and other noise sensitive analog blocks.

SiVi-LDO1205 is silicon proven on TSMC – 130nm Generic technology.

## **ELECTRICAL SPECIFICATIONS**

Spec / Result		Min	Тур	Max	Unit
Supply Voltage		2	3.3	3.6	V
Temperature Range		-40	27	125	°C
Output Voltage			1.2		V
Output Voltage Accuracy		-3		3	%
Load Current				5	mA
PSRR	@1kHz		-65		dB
	@1MHz		-35		
Quiescent Current				220	uA
Spot noise @100kHz				100	nV/√Hz

#### PIN DESCRIPTION

Pin Name	Direction	Description	
vdd	Input	Analog supply rail	
VSS	Input	Analog ground rail	
Iref_20uA	Input	20uA Bandgap current internally referred for reference generation	
LDO_pd	Input	Power down signal for the LDO	
vout	Output	Output voltage for the LDO	

