

# SIVI-LDO1806C

TSMC 180nm-G (1P5M)

## MAIN FEATURES

- Designed on TSMC 180nm Generic Process
- Supply a load current up to 6mA
- Input voltage range from 3.6V to 2V
- Output Voltage is 1.2V
- Low Quiescent current
- Operation Temperature -40C° to 125 C°

## IP DESCRIPTION

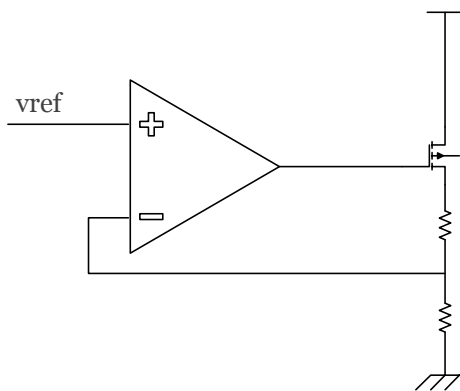
SiVi-LDO1806C is a voltage regulator with low quiescent current while supplying a load current up to 80mA. The regulator needs an external capacitor of 100nA but the design is independent on the ESR for stability. High supply rejection ratio is provided

## ELECTRICAL SPECIFICATIONS

Spec / Result		Min	Typ	Max	Unit
Supply Voltage		2	3.3	3.6	V
Temperature Range		-40	27	125	°C
Output Voltage			1.8		V
Output Voltage Accuracy		-3		3	%
Load Current				6	mA
PSRR	@1kHz		-35		dB
	@1MHz		-15		
Quiescent Current			50		uA
External Cap		0.1			uF

## PIN DESCRIPTION

Pin Name	Direction	Description
vdd	Input	Analog supply rail
vss	Input	Analog ground rail
Iref_10uA	Input	10uA Bandgap current internally referred for reference generation
LDO_pd	Input	Power down signal for the LDO
vout	Output	Output voltage for the LDO



SiVi-LDO1806C Block Diagram