

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

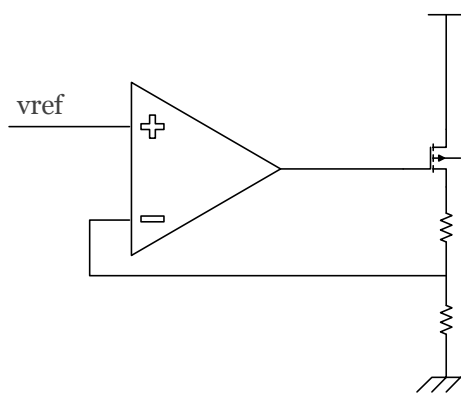
SiVi-LDO1806C is a voltage regulator with low quiescent current while supplying a load current up to 80mA. The regulator needs an external capacitor of 100nA but the design is independent on the ESR for stability. High supply rejection ratio is provided

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