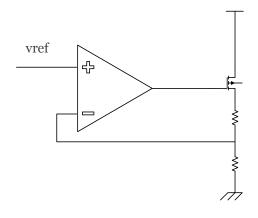
SIVI-LDO1205



TSMC 130nm-G (1P5M)

MAIN FEATURES

- Designed on TSMC
 130nm Generic
 Process
- Supply a load current up to 5mA
- Input voltage range from 3.6V to 2V
- Output Voltage is 1.2V
- Low Quiescent current



SiVi-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 | |

