

THV1031

3ch Buck, Boost and Inverting Controller

General Description

THine's new 3ch Buck/Boost & Inverting controller enables simple & low cost multi-channel power supply system design. Ch-1 is selectable Buck/Boost controller, ch-2 is Buck converter, and ch-3 is selectable Inverting / Buck converter.

All channels are PWM controllers and are designed to make phase compensation easy for output ceramic capacitors.

SS_1,2,3, DTC_1,3, and SCP pins help to design user defined soft start time, dead time and timer latch delay time. Utilizing those pins and P_GOOD 1,2,3, the ensured sequence control can be easily set and linked to the external circuit.

This IC is suitable for power supply system of TFT LCD bias and for system board with multi-channel power supply.

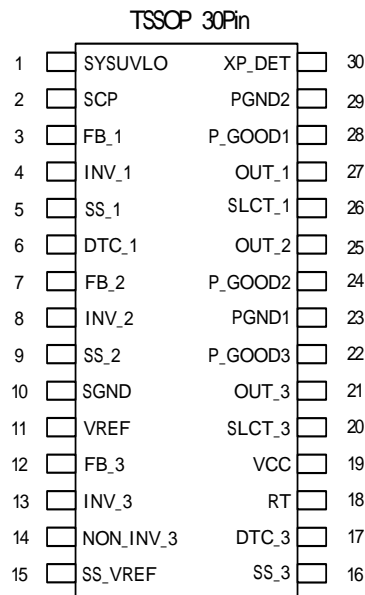
Features

- TSSOP 30Pin package
- Input Voltage range : 4.2 to 15.0V
- Push Pull output for direct Power Mos driving
- Optimized for Ceramic output capacitor
- Complete PWM mode controller
- Adjustable switching frequency up to 1MHz by external resistor
- Timer Latch Protection
- System UVLO Function
- Adjustable Soft Start time by external capacitor
- Adjustable Timer Latch Delay time by external capacitor
- Adjustable Dead Time Control by external resistor
- Boost mode selectable on ch-1
- Inverting mode selectable on ch-3
- Buck mode selectable on ch-1, 2, 3

Applications

- TFT LCD Bias voltage supply
- General use

Pin Assignment



TOP VIEW