# *Preliminary*

THV1023-Rev0.06W



# THV1023

#### 2ch Buck Controller

### **General Description**

THine's new 2ch Buck controller enables simple & low cost multi-channel power supply system design.

Both of the Ch-1 and Ch-2 have standard PWM controller function and are designed to make phase compensation easy for output ceramic capacitors.

SS\_1,2 and SCP pins help to design user defined soft start time, and timer latch delay time. Utilizing those pins and P\_GOOD2 the ensured sequence control can be easily set and linked to the external circuit.

This IC is suitable for power supply system for TV/monitor set, and general equipment.

### **Features**

- •TSSOP 16Pin package
- •Input Voltage range: 4.2 to 24.0V
- •Push Pull output for direct Power Mos driving
- Optimized for Ceramic output capacitor
- •Complete PWM mode controller
- •Adjustable switching frequency 200kH to 1MHz by external resister
- •Timer Latch Protection
- SystemUVLO Function
- •Adjustable Soft Start time by external capacitor
- •Adjustable Timer Latch Delay time by external capacitor
- •Ch-1 and Ch-2 are fixed Buck controller

## **Applications**

- •TFT LCD Bias power supply
- •TV/monitor set
- •General equipment

## Pin Assignment

#### TSSOP 16P

| VREF    | RT                               | 16   |
|---------|----------------------------------|--|
| SGND    | SCP                              | 15   |
| SS_1    | SS_2                             | 14   |
| INV_1   | INV_2                            | 13   |
| FB_1    | FB_2                             | 12   |
| VCC     | OUT_2                            | 11   |
| SYSUVLO | P_GOOD2                          | 10   |
| OUT_1   | PGND                             | <b>9</b>   |
|         | SGND SS_1 INV_1 FB_1 VCC SYSUVLO | SGND         SCP           SS_1         SS_2           INV_1         INV_2           FB_1         FB_2           VCC         OUT_2           SYSUVLO         P_GOOD2 |

