



# 偉詮電子股份有限公司 Weltrend Semiconductor, Inc.

## WT7515

### GENERAL DESCRIPTION

The WT7515 provides protection circuits, power good output (PGO), fault protection latch (FPOB), and a protection detector function (PSONB) control. It can minimize external components of switching power supply systems in personal computer.

The Over / Under Voltage Detector (OVD / UVD) monitors 3.3V, 5V, 12V input voltage level. The Over Current Detector (OCD) monitor IS33, IS5, IS12 input current sense. When OVD or UVD or OCD detect the fault voltage level, the FPOB is latched HIGH and PGO go low. The latch can be reset by PSONB go HIGH. There is 2.4 ms delay time for PSONB turn off FPOB.

When OVD and UVD and OCD detect the right voltage level, the power good output (PGO) will be issue.

### FEATURES

- The Over / Under Voltage Detector (OVD / UVD) monitors 3.3V, 5V, 12V input voltage level.
- The Over Current Detector (OCD) monitors IS33, IS5, IS12 input current sense.
- Both of the power good output (PGO) and fault protection latch (FPOB) are Open Drain Output.
- 75 / 300 ms time delay for UVD.
- 300 ms time delay for PGO.
- 38 ms for PSONB input signal De-bounce.
- 73 us for internal signal De-glitches.
- 2.4 ms time delay for PSONB turn-off FPOB.

### PIN ASSIGNMENT AND PACKAGE TYPE

#### Pin assignment

WT7515-140WT				WT7515-141WT				WT7515-142WT			
PGI	1	14	PGO	PGI	1	14	PGO	PGI	1	14	PGO
GND	2	13	VCC	GND	2	13	VCC	GND	2	13	VCC
FPOB	3	12	V5	FPOB	3	12	V5	FPOB	3	12	V5
PSONB	4	11	V33	PSONB	4	11	V33	PSONB	4	11	V33
IS12	5	10	V12	IS12	5	10	VCC2	IS12	5	10	V12
RI	6	9	IS33	RI	6	9	V12	RI	6	9	IS33
NC	7	8	IS5	IS5	7	8	IS33	VCC2	7	8	IS5





Package type	ORDERING INFORMATION
14-Pin Plastic DIP	WT7515-N140WT
14-Pin Plastic SO	WT7515-S140WT
14-Pin Plastic DIP	WT7515-N141WT
14-Pin Plastic SO	WT7515-S141WT
14-Pin Plastic DIP	WT7515-N142WT
14-Pin Plastic SO	WT7515-S142WT

### PIN DESCRIPTION

Pin Name	TYPE	Description
PGI	I	Power good input signal pin
GND	P	Ground
FPOB	O	Fault protection output pin, open drain output
PSONB	I	On/Off switch input
IS12	I	12V over current protection sense input
RI	I	Current sense adjust input
VCC2	I	Current sense power supply
IS5	I	5V over current protection sense input
IS33	I	3.3V over current protection sense input
V12	I	12V over/under voltage input pin
V33	I	3.3V over/under voltage input pin
V5	I	5V over/under voltage input pin
VCC	I	Power supply
PGO	O	Power good output signal pin, open drain output