



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

WT7036

Fan Speed Controller

Preliminary Specification

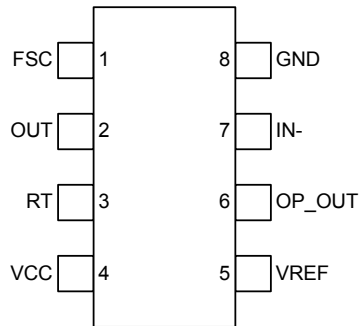
Rev. 0.20

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Features

- Ambient temperature proportional ratio fan speed control
- Built-In Internal reference voltage
- Package Type:8-Pin DIP

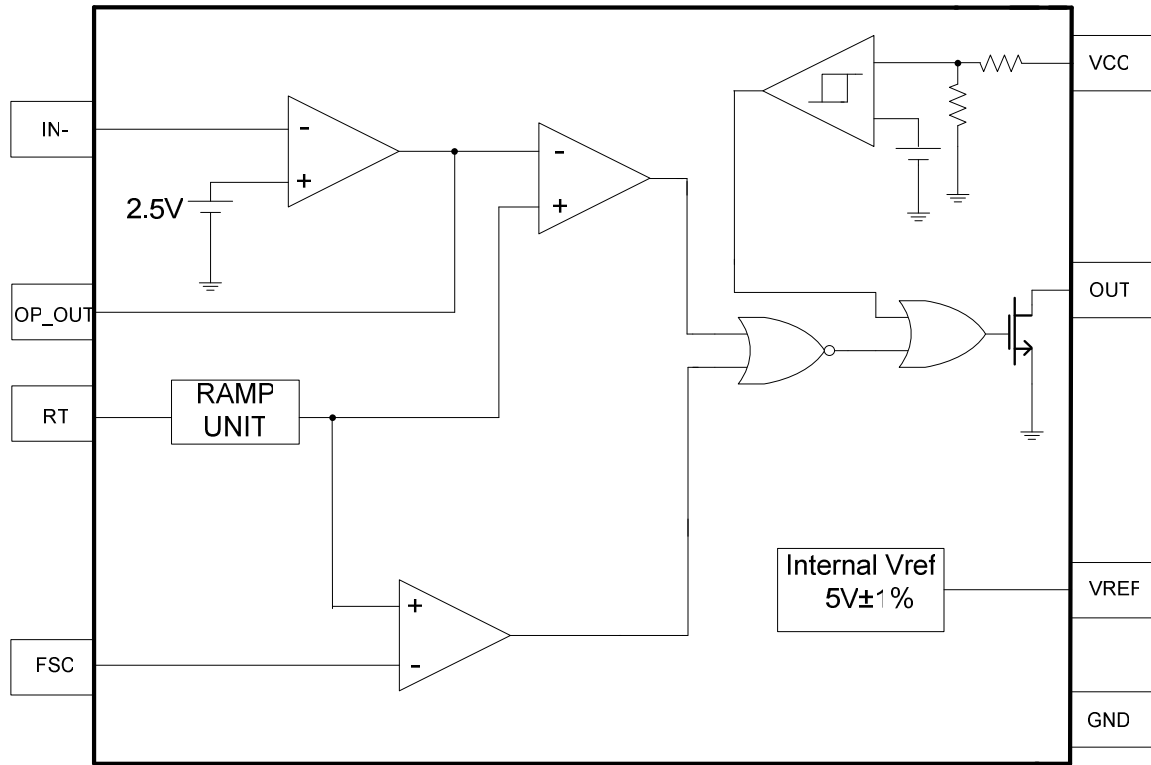


Pin Assignment

PIN DESCRIPTION

Pin No.	Pin Name	Type	Function
1	FSC	I	Fan Speed Control Pin
2	OUT	O	Output fan control signal (PWM_TYPE).
3	RT	O	PWM frequency programming resistor.
4	VCC	P	Supply power voltage.
5	VREF	O	Reference voltage output
6	OP_OUT	O	Operational Amplifier output.
7	IN-	I	Operational amplifier negative input.
8	GND	P	Ground.

BLOCK DIAGRAM



ELECTRICAL CHARACTERISTICS

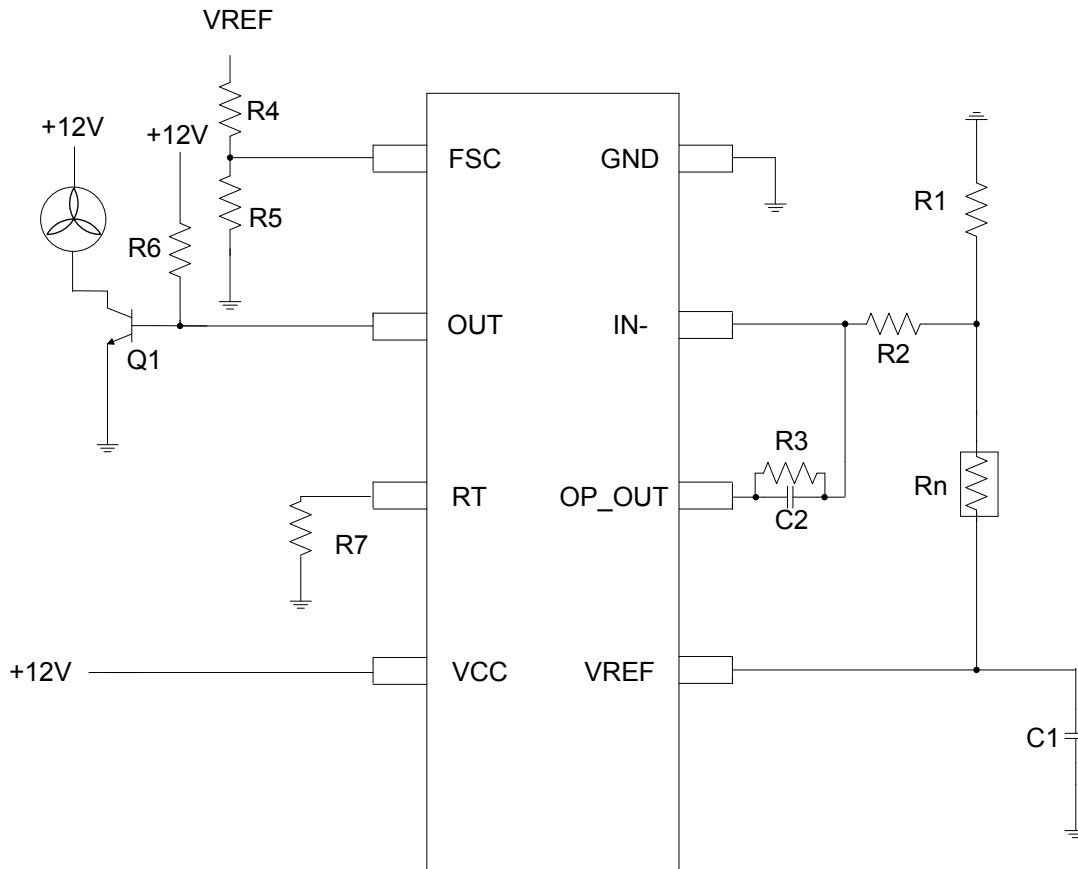
ABSOLUTE MAXIMUM RATINGS

Parameter	Min.	Max.	Unit
Supply Voltage V_{CC}	-0.3	15	V
Input voltage(IN-,OP_OUT,FSC)	-0.3	$V_{CC}+0.3$	V
Output voltage(OUT)	-0.3	15	V
Operating temperature	-40	125	°C
Storage temperature	-55	150	°C

D.C CHARACTERISTICS ($V_{CC}=12V$, $T_A=25^{\circ}C$)

Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
DEVICE SECTION						
V_{CC}	Supply voltage			12		V
V_{CC1}	Start up voltage				7.5	V
I_{CC1}	Operating current	$V_{CC}=12V$		2.5		mA
V_{UVLO}	Under Voltage Lockout		6.2	6.5	6.8	V
REFERENCE SECTION						
V_{REF}	Reference voltage	$\pm 1\%$	4.95	5	5.05	V
$R_{eg.LINE}$	Line regulation	$V_{CC}=7V$ to 12V			50	mV
$R_{eg.LOAD}$	Load regulation	$I_O=0mA$ to 1mA			10	mV
I_{REF}	Output source current	$V_{CC}=12V$	10			mA
FREQUENCY SECTION						
F_{OSC}	Internal frequency	$R_T=120k\Omega$		30		KHz
F_{OSC_MAX}	Maximum frequency			40		KHz
F_{OSC_MIN}	Minimum frequency			1		KHz
FAN SPEED CONTROL						
V_{FSC}	FSC input voltage (20KHZ~40KHZ)	PWM Minimum duty= 0%	3.2	3.25	3.3	V
		PWM Maximum duty= 100%	0.65	0.7	0.75	V
OUTPUT SECTION						
$V_{TH.OP_OUT}$	V_{OP_OUT} threshold voltage(20KHZ~40KHZ)	Minimum duty= 0%	3.2	3.25	3.3	V
		Maximum duty= 100%	0.65	0.7	0.75	V
$V_{OL}(OUT)$	Low Level output voltage	$I_{SINK}=10mA$			0.4	V

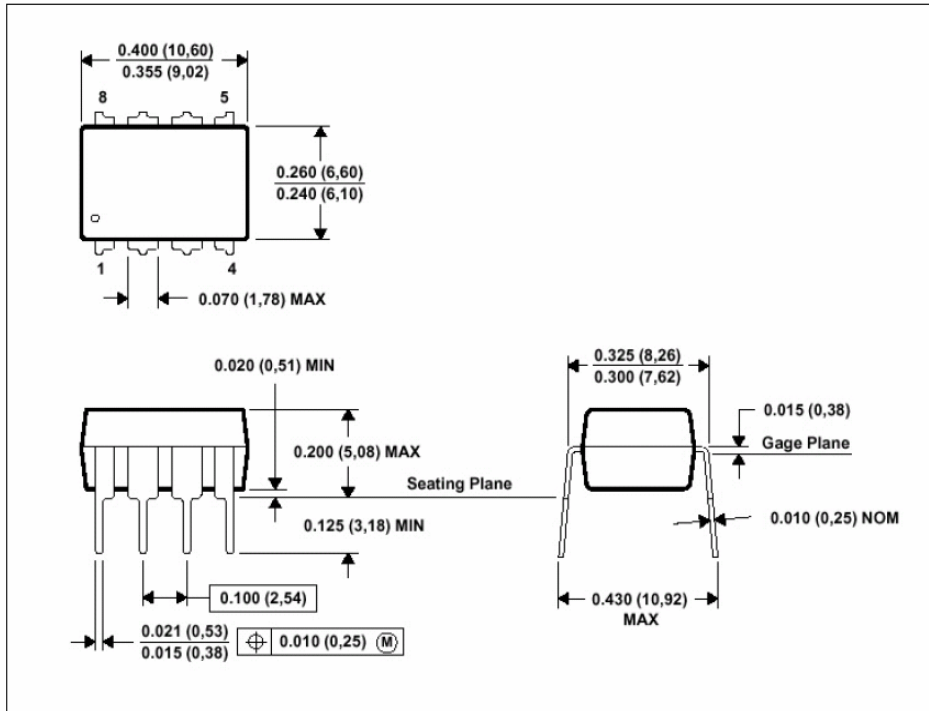
APPLICATION CIRCUIT



PACKAGE OUTLINE

MECHANICAL INFORMATION

PLASTIC DUAL-IN-LINE 8PIN PACKAGE



NOTE 1 : All linear dimensions are in inches (millimeters) .

NOTE 2 : This drawing is subject to change without notice.

NOTE 3 : Falls within JEDEC MS-001