

DATA SHEET

Part No.	AN80T54
Package Code No.	HSIP012-P-0000A

Maintenance/Discontinued includes following lifecycle stage.
planned maintenance type
maintenance type
planned discontinued type
discontinued type
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Contents

■ Features	3
■ Applications	3
■ Package	3
■ Type	3
■ Block Diagram	4
■ Application Circuit Example	4
■ Pin Descriptions	5
■ Absolute Maximum Ratings	6
■ Operating Supply Voltage Range	6

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AN80T54

Multi voltage regulator IC

■ Features

- 5 outputs voltage regulator
- Peak current protection circuit
- Thermal protection circuit

■ Applications

- For power supply

■ Package

- SIL-12 pins plastic package (power type with fin)

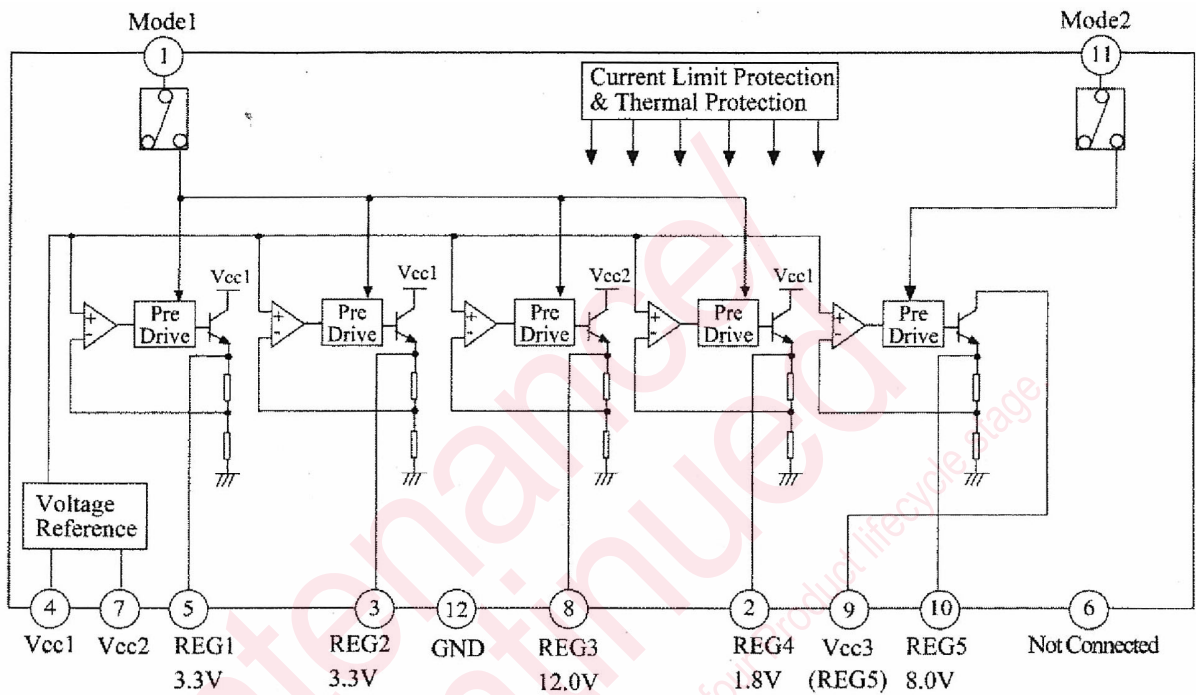
■ Type

- Silicon monolithic bipolar IC

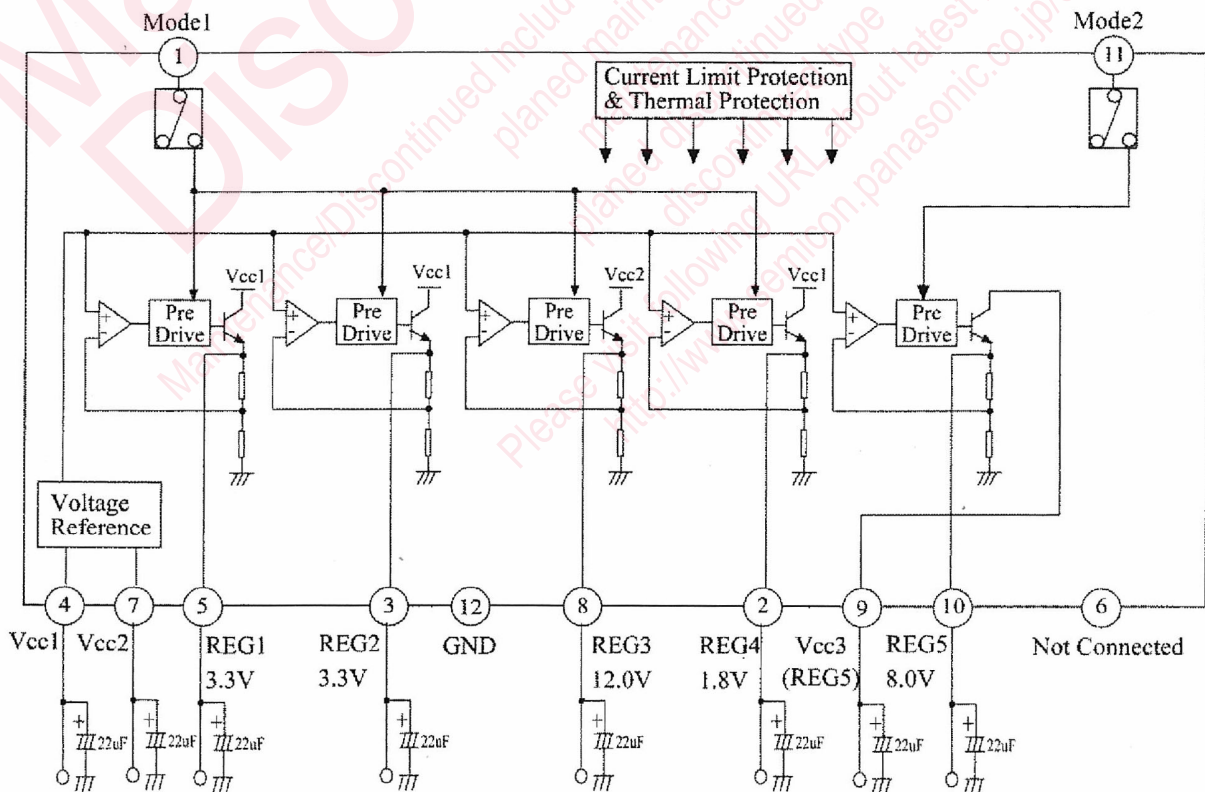
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■ Block Diagram



■ Application Circuit Example



■ Pin Descriptions

Pin No.	Pin name	Description
1	MODE1	When MODE1 = 5 V, REG1, REG2, REG3 and REG4 outputs are "H".
2	REG4	When MODE1 pin is "H". REG4 output is 1.8 V ($I_O = 500$ mA min.).
3	REG2	When MODE1 pin is "H". REG2 output is 3.3 V ($I_O = 600$ mA min.).
4	VCC1	Connected to power supply.
5	REG1	When MODE1 pin is "H". REG1 output is 3.3 V ($I_O = 600$ mA min.).
6	Not Connected	
7	VCC2	Connected to power supply.
8	REG3	When MODE1 pin is "H". REG3 output is 12.0 V ($I_O = 150$ mA min.).
9	VCC3 (REG5)	Connected to power supply.
10	REG5	When MODE2 pin is "H". REG5 output is 8.0 V ($I_O = 300$ mA min.).
11	MODE2	When MODE2 = 5 V, REG5 output is "H".
12	GND	Connected to the IC substrate.

■ Absolute Maximum Ratings

A No.	Parameter	Symbol	Rating	Unit	Note
1	Storage temperature	T_{stg}	-55 to +150	°C	*1
2	Operating ambient temperature	T_{opr}	-25 to +75	°C	*1
3	Operating ambient pressure	P_{opr}	$1.013 \times 10^5 \pm 0.61 \times 10^5$	Pa	
4	Operating constant acceleration	G_{opr}	9 810	m/S ²	
5	Operating shock	S_{opr}	4 900	m/S ²	
6	Supply voltage	V_{CC1}	20.0	V	
		V_{CC2}	20.0		
		V_{CC3}	20.0		
7	Supply current	I_{CC}	6	A	*2
8	Power dissipation	P_D	12.5	W	*3
9	REG1 maximum current	I_{max1}	2.8	A	
10	REG2 maximum current	I_{max2}	2.8	A	
11	REG3 maximum current	I_{max3}	0.7	A	
12	REG4 maximum current	I_{max4}	2.8	A	
13	REG5 maximum current	I_{max5}	2.8	A	

Note) *1: Except these items, all other measurements are taken at $T_a = 25^\circ\text{C}$.

*2: Current limiting circuit.

*3: $T_a = 75^\circ\text{C}$ with 4.0°C/W heat sink attached at fin.

■ Operating Supply Voltage Range

Parameter	Symbol	Range	Unit	Note
Operating supply voltage range	V_{CC1}	3.7 to 7.0	V	
	V_{CC2}	13.5 to 17.0		
	V_{CC3}	11.0 to 17.0		

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