





## OTP 原理资料 应用开发系列 (TF020)

电话 Tel: 0755-28149272 29058191 传真 Fax: 29018191

地址 Add: 深圳市宝安区龙华东环一路港之都大厦 703

邮编 Ps.: 518109

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- **Play rate level :**

TF020 can provide different play rate in one code as follow

Play rate(K)	Play rate(K)
3	6
3.2	6.4
3.31	6.85
3.42	7.38
3.55	8
3.69	8.72
3.84	9.6
4	10.66
4.17	12
4.36	13.71
4.57	16
4.8	19.2
5.05	24
5.33	
5.64	



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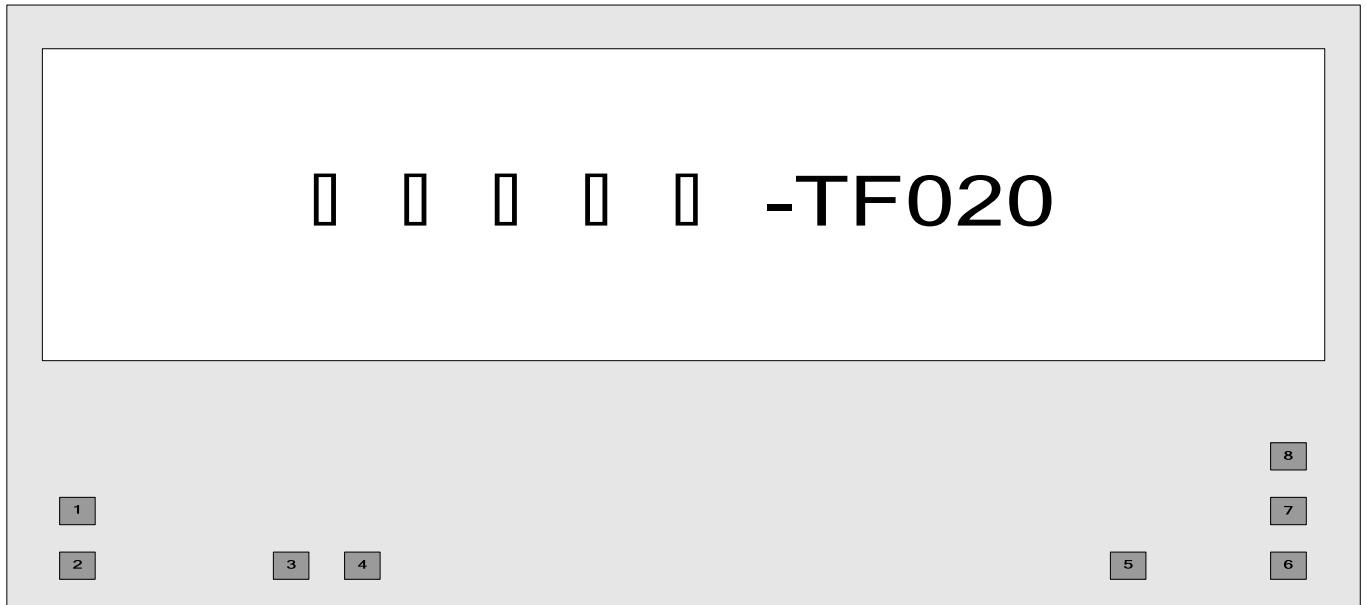
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## ◆ TF020 Pad Location

CHIP SIZE: (0, 0) (1734,715) UM



NO	PAD NAME	X	Y	NO	PAD NAME	X	Y
1	TG2	-777	-184	5	VSS	443	-267
2	TG1	-777	-269	6	PWM2	794	-289
3	TG11	-606	-268	7	VDD	797	-204
4	TG12	-521	-268	8	PWM1	794	-119



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### ◆ TF020 DC character

Item	Symbol	Min	Typ	Max	Unit	Condition
Operating voltage	VDD	2.4	3.0	3.6	V	
Standby current	I <sub>sb</sub>		1	5	uA	VDD=3V,no load
Operating current	I <sub>op</sub>		600		uA	VDD=3V,no load
Drive current of O	I <sub>od</sub>		5		mA	VDD=3V
Sink current of O	I <sub>os</sub>		10		mA	VDD=3V
Drive current of PWM	I <sub>od</sub>		200		mA	VDD=3V,VOUT=1.5V
Sink current of PWM	I <sub>os</sub>		200		mA	VDD=3V,VOUT=1.5V



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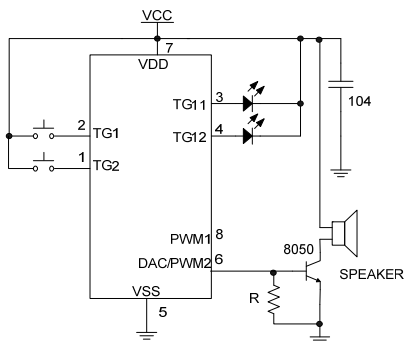
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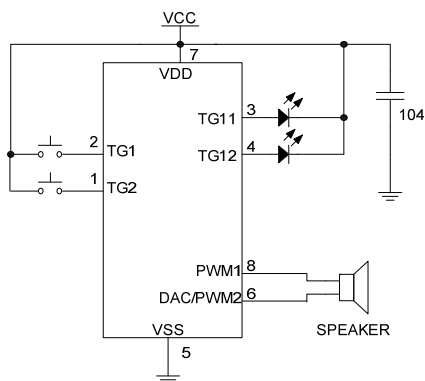
## ◆ TF020 Application Circuit

### TF020 DAC APPLICATION



- System Power 2.4~3.6V
- DAC Output, Connected with 8050 & Resistor driving SpeTFer

### TF020 PWM APPLICATION



- System Power 2.4~3.6V
- PWM1 & PWM2 directly drive SpeTFer



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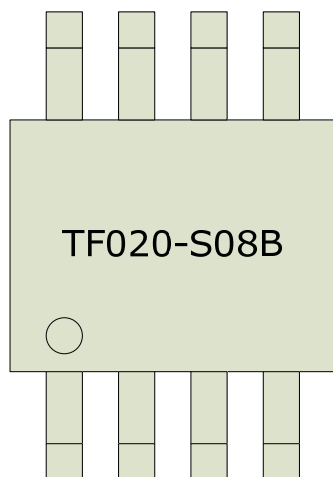
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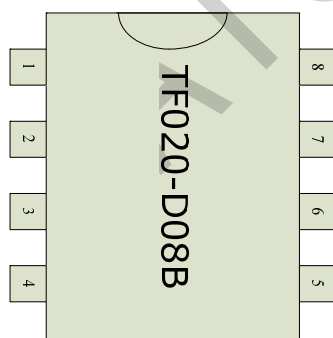
### ◆ TF020 Package Information

#### TF020-S08B



PIN	NAME
1	TG2
2	TG1
3	TG11
4	TG12
5	VSS
6	PWM2/DAC
7	VDD
8	PWM1

#### TF020-D08B



PIN	NAME
1	TG2
2	TG1
3	TG11
4	TG12
5	VSS
6	PWM2/DAC
7	VDD
8	PWM1



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### ◆ Writer Mapping Description

Writer Pin : **TG2,TG11,TG12,VSS,PWM2,PWM1,VDD**

Write Board Revised from 2M Writer Board --- Pin Assignment

#### Reference

OTP Writer Power Board Pin Mapping Table			
DIP 48	Pin No-Pin Name ( 2M 40Pin COB)	Pin No-Pin Name (1M 40 Pin COB)	Pin No-PinName (512K 40 Pin COB)
10	5 – RST_N		
11	12- GND	12-GND	12-GND
<b>12</b>	<b>9-TG4</b>	<b>16-PWM2</b>	<b>16-PWM2</b>
<b>13</b>	<b>8-TG3</b>	<b>18-PWM1</b>	<b>18-PWM1</b>
14	7-VDD	19,20-VDD5,VDD	17-VDD
36	13-TEST		
37	6-VPP	1-TG2	1-TG2



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38	10-TG11	2-TG1	10-TG11
39	11-TG12	3-TG5	11-TG12

### ◆ Writer Board Slot Location

