

TAS5805M Trouble Shooting (Draft)

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Hardware checking

6. DVDD? PVDD?

PWP Package
28-Pin TSSOP

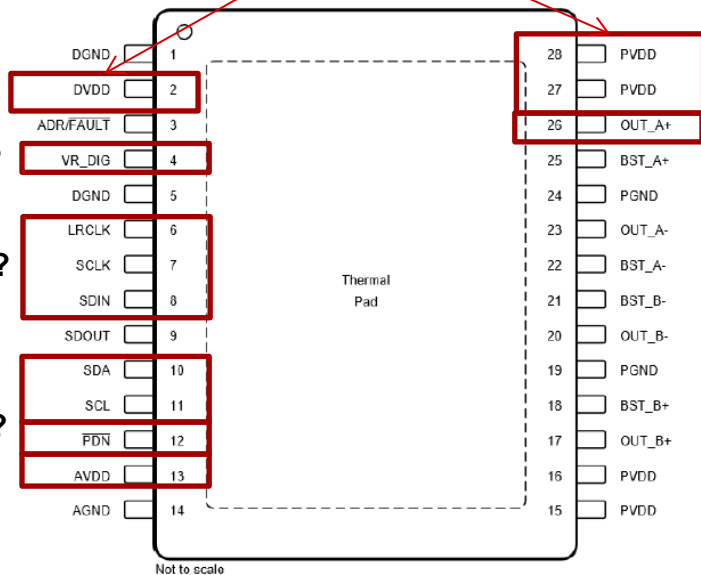
1. 1.5V?

2. Valid?

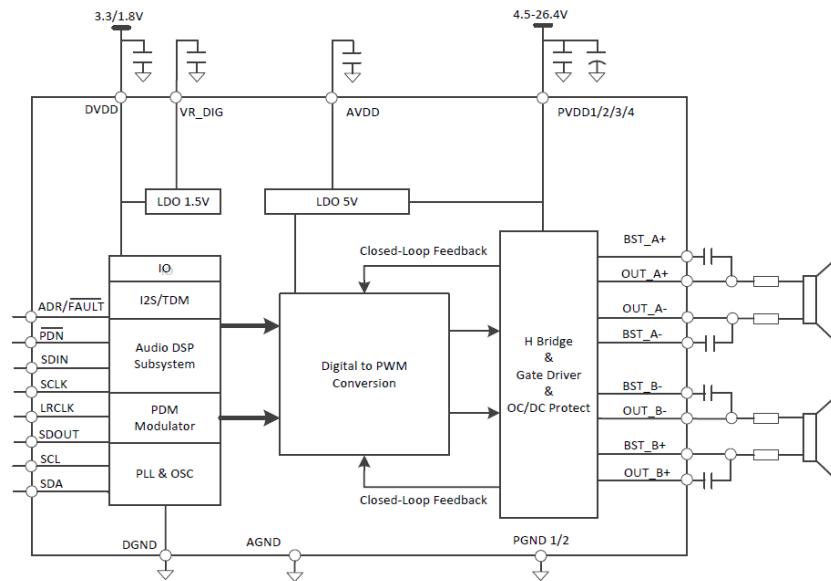
3. i2C?

4. High?

5. 5V?



7. PWM?



Software debug

The screenshot displays the PurePath™ Console -TAS5805M interface. The main window is divided into several sections: Input Mixer, Equalizer, Output Crossbar, and Simple Register Tuning. The I2C Monitor window is open, showing a list of I2C commands and their results. The commands are as follows:

Line	Command	Result
1	W 58 00 00	Successfully written
2	W 58 7f 00	Successfully written
3	R 58 70 04	#check datasheet to see what fault
4	R 58 68 01	#check datasheet to see status
5		
6		
7	W 5a 00 00	Successfully written
8	W 5a 7f 00	Successfully written
9	W 5a 70 04	Successfully written
10	W 5a 68 01	Successfully written
11		
12		

The I2C Monitor window is labeled with a red box and the number 2. The I2C Monitor window is labeled with a red box and the number 3. The I2C Monitor window is labeled with a red box and the number 4. The I2C Monitor window is labeled with a red box and the number 5. The I2C Monitor window is labeled with a red box and the number 6. The I2C Monitor window is labeled with a red box and the number 7. The I2C Monitor window is labeled with a red box and the number 8. The I2C Monitor window is labeled with a red box and the number 9. The I2C Monitor window is labeled with a red box and the number 10. The I2C Monitor window is labeled with a red box and the number 11. The I2C Monitor window is labeled with a red box and the number 12.

I2C commands to read fault

See next page to see what is the fault?

1 2 3 4

Global fault and status of TAS5805

9.6.1.36 CHAN_FAULT Register (Offset = 70h) [reset = 0x00]

CHAN_FAULT is shown in Figure 134 and described in Table 42.

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Figure 134. CHAN_FAULT Register

7	6	5	4	3	2	1	0
RESERVED				CH1_DC_1	CH2_DC_1	CH1_OC_I	CH2_OC_I
R				R	R	R	R

Table 42. CHAN_FAULT Register Field Descriptions

Bit	Field	Type	Reset	Description
7-4	RESERVED	R	0000	This bit is reserved
3	CH1_DC_1	R	0	Left channel DC fault
2	CH2_DC_1	R	0	Right channel DC fault
1	CH1_OC_I	R	0	Left channel over current fault
0	CH2_OC_I	R	0	Right channel over current fault

9.6.1.38 GLOBAL_FAULT2 Register (Offset = 72h) [reset = 0h]

GLOBAL_FAULT2 is shown in Figure 136 and described in Table 44.

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Figure 136. GLOBAL_FAULT2 Register

7	6	5	4	3	2	1	0
RESERVED				RESERVED		OTSD_I	
R				R		R	

Table 44. GLOBAL_FAULT2 Register Field Descriptions

Bit	Field	Type	Reset	Description
7-1	RESERVED	R	0000000	This bit is reserved
0	OTSD_I	R	0	Over temperature shut down fault

9.6.1.28 POWER_STATE Register (Offset = 68h) [reset = 0x00]

POWER_STATE is shown in Figure 126 and described in Table 34.

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Figure 126. POWER_STATE Register

7	6	5	4	3	2	1	0
STATE_RPT							
R							

Table 34. POWER_STATE Register Field Descriptions

Bit	Field	Type	Reset	Description
7-0	STATE_RPT	R	00000000	0: Deep sleep 1: Sleep 2: HIZ 3: Play Others: reserved

9.6.1.37 GLOBAL_FAULT1 Register (Offset = 71h) [reset = 0h]

GLOBAL_FAULT1 is shown in Figure 135 and described in Table 43.

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Figure 135. GLOBAL_FAULT1 Register

7	6	5	4	3	2	1	0
OTP_CRC_ER ROR	BQ_WR_ERRO R				CLK_FAULT_I	PVDD_OV_I	PVDD_UV_I
R	R				R	R	R

Table 43. GLOBAL_FAULT1 Register Field Descriptions

Bit	Field	Type	Reset	Description
7	OTP_CRC_ERROR	R	0h	Indicate OTP CRC check error.
6	BQ_WR_ERROR	R	0h	The recent BQ is written failed
5-3	RESERVED	R	0h	This bit is reserved
2	CLK_FAULT_I	R	0h	Clock fault
1	PVDD_OV_I	R	0h	PVDD OV fault
0	PVDD_UV_I	R	0h	PVDD UV fault

9.6.1.39 OT_WARNING Register (Offset = 73h) [reset = 0x00]

OT_WARNING is shown in Figure 137 and described in Table 45.

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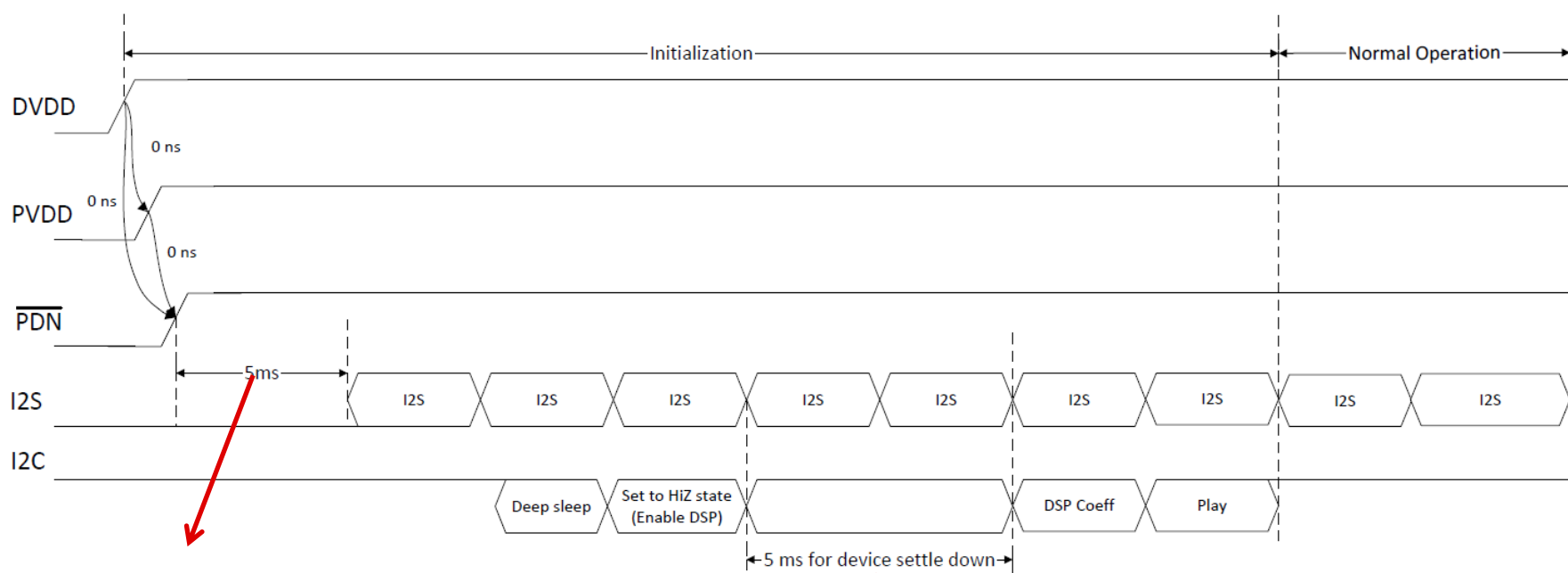
Figure 137. OT_WARNING Register

7	6	5	4	3	2	1	0
RESERVED		RESERVED			OTW	RESERVED	
R		R			R	R	

Table 45. OT_WARNING Register Field Descriptions

Bit	Field	Type	Reset	Description
7-6	RESERVED	R	00	This bit is reserved
5-3	RESERVED	R	000	This bit is reserved
2	OTW	R	0	Over temperature warning ,135C
1-0	RESERVED	R	00	This bit is reserved

Power on sequence check



1. Please scope PDN/VR_DIG/I2S for check;
2. Please scope I2C/I2S/PDN for trouble shooting

Further trouble shooting

- After you finish steps above, if anything is wrong, please debug;
- If everything above is ok, please email to me.