


本原理图大多数注释的出处：
詹工谈芯：SC8701同步升降压控制芯片 https://blog.csdn.net/linkedin_38804946/article/details/128421762
8bit_in_1byte：SC8701 buck-boost 可调DC-DC验证 https://oshwlab.com/8bit_in_1byte/sc8701-ke-diao-dc

Title SC8701-EVM-RE0			* Author: OldGerman License: CC BY-SA 4.0 *		
Size: A3	Number:*	Revision:*	* *		
Date: 2023/6/17	Time: 17:07:23	Sheet 1 of 1	* *		
File: D:\ODG-PROJECT\DS-PPK\AD Project\SC8701_EVM_RE\SC8701_EVM_RE0\SC8701_EVM_RE0.SchDoc					



Item #	Designator	Description	Comment	Quantity	Manufacturer 1	Manufacturer Part Number 1	Footprint	LibRef	Note
1	C5, C6, C25, C26, C27	Capacitor	10uF/50V	12			C1206	CAP	
2	C7, C8, C15	Capacitor	NC	3			C0603	CAP	
3	C9, C10	Capacitor	47pF/6.3V	2			C0603	CAP	
4	C11, C12	Capacitor	100nF/16V	2			C0603	CAP	
5	C13, C14, C20	Capacitor	1uF/50V	3			C0603	CAP	
6	C16	Capacitor	15nF/6.3V	1			C0603	CAP	
7	C17, C18	Capacitor	10nF/6.3V	2			C0603	CAP	
8	C19	Capacitor	1uF/16V	1			C0603	CAP	
9	C21, C22, C23, C24	Capacitor	100nF/50V	4			C0603	CAP	
10	C31, C32	Capacitor	100uF/50V	2			CAP OS-CON D=10.0 L=10.0 F10	CAP Polar Aluminum	
11	D1, D2, D3, D4, D5, D6	二极管	1N4148	6			SOD-323	Diode	
12	D9	LED	BLUE-LED	1			LED0603_BLUE	LED	
13	H1, H2, H3, H4		HOLE	4			M3.2 D=8	HOLE	
14	J1, J2, J3, J4	Banana Jack	U6047	4			JACK_BANANA_U6047	JACK_BANANA	
15	L1	135 功率电感 额定电流15A	3.3uH	1			INDUCTOR 1350 12.6X13.5X5.0mm	Inductor_power	
16	P1, P7		CONN_X2	2			2.54mm_Male_x2	CONN_X2	
17	P2, P3, P4, P5, P6		CONN_X3	5			2.54mm_Male_x3	CONN_X3	
18	Q1, Q2, Q3, Q4		N-MOS_GDS	4			SON 3X3 NexFET Q3	N-MOS_GDS	
19	Q1B, Q2B, Q3B, Q4B		N-MOS_GDS	4			SO8FL ROUND	N-MOS_GDS	
20	Q5	N-MOS	2N7002	1			INFINEON SOT-23-3	N-MOS_123	
21	R1-1, R2-1	IEC Standard	NC	2			R1206	RES	
22	R1, R2	IEC Standard	10mR	2			R1206	RES	
23	R3, R4	IEC Standard	NC	2			R0805	RES	
24	R7, R8, R9, R10, R11, R12	IEC Standard	0R	9			R0603	RES	
25	R13, R14, R15, R16	IEC Standard	1K	4			R0603	RES	
26	R17	IEC Standard	200K	1			R0603	RES	
27	R18	IEC Standard	10K	1			R0603	RES	
28	R19, R24, R27, R29, R30	IEC Standard	100K	5			R0603	RES	
29	R20	IEC Standard	32.4K	1			R0603	RES	
30	R25	IEC Standard	68K	1			R0603	RES	
31	R26	IEC Standard	15K	1			R0603	RES	
32	R28	IEC Standard	150K	1			R0603	RES	
33	R30, R33	IEC Standard	20K	2			R0603	RES	
34	R32	IEC Standard	24K	1			R0603	RES	
35	P1, TP2, TP3, TP4, TP5		CONN_X1_DOT	5			2.54mm_Male_x1	CONN_X1_DOT	
36	U1	高效率, 同步, 4 管升降压控制器	SC8701 (A)	1			TQFN-32 4X4MM 0.4 VIA	SC8701 (A)	