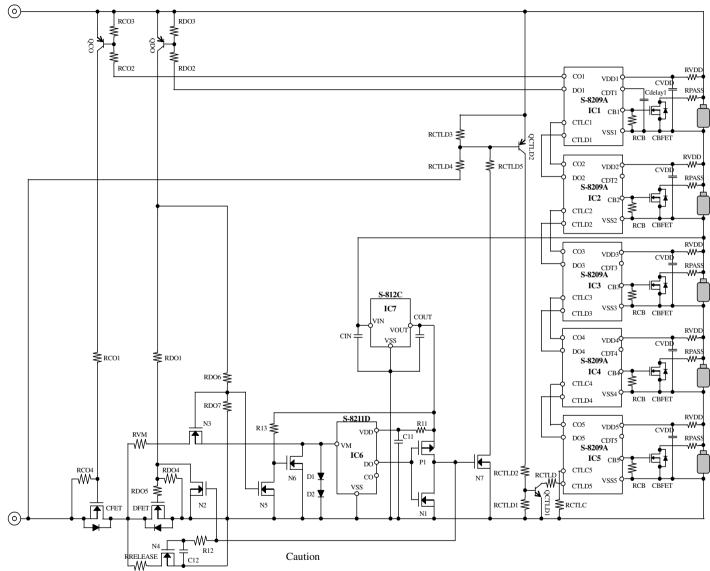
## 5cell Reference circuit with OCP



Above circuit is only for reference. It has not been confirmed whether the operation of above circuit is normal or not for all application, the example of connection do not guarantee proper operation. Please evaluate above circuit carefully with your real application condition before using it.

## Parts List

No.	Symbol	Value	Unit	Standard Parts	Maker	Note
1	CBFET	_	_	SSM3K301T	TOSHIBA	
2	IC1∼IC5	_	_	S-8209A**	SII	Must
3	RPASS	_	_	_	_	Please note the rated power.
4	RVDD	470	Ω	MCR03	Rohm	
5	CVDD	0.1	uF	GRM188	murata	
6	RCB	10	ΜΩ	MCR03	Rohm	
7	RCTLC	1	kΩ	MCR03	Rohm	
8	RCTLD	1	kΩ	MCR03	Rohm	
9	Cdelay1	0.01	uF	GRM188	murata	
10	RCO1	1	ΜΩ	MCR03	Rohm	
11	RCO2	510	kΩ	MCR03	Rohm	
12	RCO3	1	ΜΩ	MCR03	Rohm	
13	RCO4	1	ΜΩ	MCR03	Rohm	
14	RDO1	1	ΜΩ	MCR03	Rohm	
15	RDO2	510	kΩ	MCR03	Rohm	
16	RDO3	1	ΜΩ	MCR03	Rohm	
17	RDO4	1	ΜΩ	MCR03	Rohm	
18	RDO5	10	kΩ	MCR03	Rohm	
19	RDO6	1	ΜΩ	MCR03	Rohm	
20	RDO7	1	ΜΩ	MCR03	Rohm	
21	QCO	pnp	_	2SA1037AK	Rohm	
22	QDO	pnp	_	2SA1037AK	Rohm	
23	S8211	_	_	S-8211D**	SII	Must
24	S812C	_		S-812C***	SII	Must
25	RCTLD1	1	ΜΩ	MCR03	Rohm	
26	RCTLD2	4.7	ΜΩ	MCR03	Rohm	
27	RCTLD3	1	ΜΩ	MCR03	Rohm	
28	RCTLD4	4.7	ΜΩ	MCR03	Rohm	
29	RCTLD5	4.7	ΜΩ	MCR03	Rohm	
30	RVM	3.9	kΩ	MCR18	Rohm	Please note the rated power.
31	RRELEASE	10	kΩ	MCR10	Rohm	Please note the rated power.
32	R11	220	Ω	MCR03	Rohm	
33	R12	100	kΩ	MCR03	Rohm	
34	R13	1	ΜΩ	MCR03	Rohm	
35	C11	0.1	uF	GRM188	murata	
36	C12	1	uF	GRM188	murata	
37	CIN	1	uF	GRM188	murata	
38	COUT	4.7	uF	GRM21B	murata	
39	QCTLD1	npn		2SC2412K	Rohm	
40	QCTLD2	pnp		2SA1037AK	Rohm	
41	P1	Pch		2SJ210	NEC	
42	N1	Nch		2SK 1590	NEC	
43	N2	Nch		2SK 1590	NEC	
44	N3	Nch		2SK1590	NEC	
45	N4	Nch	_	2SK1590	NEC	
46	N5	Nch	_	2SK 1590	NEC	
47	N6	Nch		2SK1590	NEC	
48	N7	Nch		2SK1590	NEC	
49	D1	Diode		1SS355	Rohm	
50	D2	Diode	_	1SS355	Rohm	
51	CFET	Nch				
52	DFET	Nch	_	_		

## Caution

The constant do not guarantee proper operation. Please evaluate them carefully with your real application condition before using it.