

Bill of Materials

RT5716P-ABA/RT5716P-BBA/RT5716P-CBA/RT5716P-DBA

Reference	Qty	Part Number	Value	Description	Package	Manufacturer
U1	1	RT5716P-ABA RT5716P-BBA RT5716P-CBA RT5716P-DBA	RT5716	Step-Down Converter	TWL-CSP-6B 0.69x1.04 (BSC)	RICHTEK
C3, C4, C5	3	GRM155R60J475ME47D	4.7 μ F	Capacitor, Ceramic, 6.3V, X5R	0402	Murata
C9	1	GRM21BC80J476ME01	47 μ F	Capacitor, Ceramic, 6.3V, X6S	0805	Murata
L1	1	DFE18SANR47MG0L	0.47 μ H	0.47 μ H	0603	Murata
JP21	16	RC0201FR-0710KL (Resistor E96 series)	Refer to Table 1	1%, TC \pm 200ppm	0201	YAGEO

Output Voltage Selection

The RT5716 provides 1 fixed and 16 different levels of V_{OUT} which can be set by an external resistor connected between the RSEL/MODE pin and GND. Table 1 indicates the setting to different output voltage level.

Table 1. Output Voltage Setting

Type	Output-1 (V)	Output-2 (V)	Output-3 (V)	Output-4 (V)	RSEL (k Ω) *		
					Min	Nom	Max
Level	0.4V to 3.3V	0.4V to 0.775V	0.8V to 1.55V	1.8 V to 3.3V			
0	3.3	0.7	1.2	1.8	Connected to GND (No resistor needed)		
1	0.4	0.4	0.8	1.8	9.9	10	10.1
2	0.58	0.425	0.85	1.9	12	12.1	12.2
3	0.6	0.45	0.9	2	15.2	15.4	15.6
4	0.7	0.475	0.95	2.1	18.5	18.7	18.9
5	0.75	0.5	1	2.2	23.5	23.7	23.9
6	0.8	0.525	1.05	2.3	28.4	28.7	29
7	1.1	0.55	1.1	2.4	36.1	36.5	36.9
8	1.2	0.575	1.15	2.5	43.8	44.2	44.6
9	1.3	0.6	1.2	2.6	55.6	56.2	56.8
10	1.5	0.625	1.25	2.7	67.4	68.1	68.8
11	1.6	0.65	1.3	2.8	85.7	86.6	87.5
12	1.8	0.675	1.35	2.9	104	105	106.1
13	1.9	0.7	1.4	3	131.7	133	134.3
14	2.5	0.725	1.45	3.1	160.4	162	163.6
15	3	0.75	1.5	3.2	203	205	207.1
16	3.3	0.775	1.55	3.3	\geq 249	\geq 249	\geq 249

*: E96 resistor series, 1% accuracy, temperature coefficient better or equal than \pm 200 ppm/ $^{\circ}$ C.

More Information

For more information, please find the related datasheet or application notes from Richtek website
<http://www.richtek.com>.

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