

Bill of Materials

VIN = 12V, VOUT = 1.8V, IOUT = 6A, fsw = 1100kHz						
Reference	Count	Part Number	Value	Description	Package	Manufacturer
U1	1	RTQ2806AGQWF	--	Step-Down Converter	WQFN-14TL 2x3 (FC)	RICHTEK
L1	1	74437346010	1μH	Inductor, Isat = 29A, 10mΩ	--	Würth Elektronik
C1, C2	2	GRM31CR71E106KA12L	10μF	Capacitor, Ceramic, 25V, X7R	1206	MURATA
C3, C4	2	GRM31CR71H475KA12L	4.7μF	Capacitor, Ceramic, 50V, X7R	1206	MURATA
C5, C7, C10, C17	2	C1608X7R1H104KT000N	0.1μF	Capacitor, Ceramic, 50V, X7R	0603	TDK
C6	1	GRM188R61E475KE11D	4.7μF	Capacitor, Ceramic, 25V, X5R	0603	MURATA
C8	1	0603N331J500CT	330pF	Capacitor, Ceramic, 50V, NPO	0603	WALSIN
C9	1	GRM188R71H223KA01D	22nF	Capacitor, Ceramic, 50V, X7R	0603	MURATA
C11, C12, C13, C14, C15, C16	6	GRM31CR60J476ME19L	47μF	Capacitor, Ceramic, 6.3V, X5R	1206	MURATA
R1	1	WR06X2002FTL	20k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R2	1	WR06X1002FTL	10k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R3, R4, R5	3	WR06X1003FTL	100k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R6	1	RC0603FR-075K1L	5.1k	Resistor, Chip, 1/10W, 1%	0603	YAGEO
R7	1	WR06X000 PTL	0	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R8	1	WR06X2433FTL	243k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R9	1	RTT031213FTP	121k	Resistor, Chip, 1/10W, 1%	0603	RALEC
R10	1	CR0603F60K4P05Z	60.4k	Resistor, Chip, 1/10W, 1%	0603	EVER OHMS
R11	1	RTT033012FTP	30.1k	Resistor, Chip, 1/10W, 1%	0603	RALEC

More Information

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

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