

**Bill of Materials**

VIN = 12V, VOUT = 5V, IOUT = 0.5A, fsw = 500kHz						
Reference	Count	Part Number	Value	Description	Package	Manufacturer
U1	1	RT8525DGQW	RT8525DGQW	Step-Up Controller	WDFN-12L 3x3	RICHTEK
C1	1	GJ821BR71H105KA12	1 $\mu$ F	Capacitor, Ceramic, 50V, X7R	0805	MURATA
C2	1	GRM188R61H105KAALD	1 $\mu$ F	Capacitor, Ceramic, 50V, X7R	0603	MURATA
C3	1	0603B273K500CT	27nF	Capacitor, Ceramic, 50V, X7R	0603	WALSIN
C5	1	C1608X7R1C334K080AC	0.33 $\mu$ F	Capacitor, Ceramic, 16V, X7R	0603	TDK
C7, C8, C10, C11, C12	5	TMK325B7226KM-TR	22 $\mu$ F	Capacitor, Ceramic, 25V, X5R	1210	TAIYO YUDEN
D1	1	SK34	Schottky Diode, 40V/3A	Schottky Diode, 40V/3A	SMC	PANJIT
L1	1	NRS8040T100MJGJ	10 $\mu$ H	Inductor, Isat = 3.4A, 34m $\Omega$	8x8	TAIYO YUDEN
Q1	1	IPD20N03L	AOD2810	AOD2810	TO-252-3	AOS
R1, R10, R13	3	WR06X000 PTL	0	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R2	1	WR06X5601FTL	5.6k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R3	1	WR06X5602FTL	56k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R4	1	WR06X1003FTL	100k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R5	1	RTT033001FTP	3k	Resistor, Chip, 1/10W, 1%	0603	RALEC
R6	1	CR0603F6K04P05	6.04k	Resistor, Chip, 1/10W, 1%	0603	EVER OHMS
R7	1	WR06X6202FTL	62k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R8	1	WR06X4302FTL	43k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R12	1	WR06X2401FTL	2.4k	Resistor, Chip, 1/10W, 1%	0603	WALSIN
R14	1	CR2512FR050E04Z	0.05	Resistor, Chip, 3W, 1%	2512	EVER OHMS

## ***More Information***

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

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