

**Bill of Materials**

| VIN = 12V, VOUT = 5.0V, IOUT = 5A, fsw = 400kHz |       |                    |                        |                                |              |              |
|---|-------|--------------------|------------------------|--------------------------------|--------------|--------------|
| Reference                                       | Count | Part Number        | Value                  | Description                    | Package      | Manufacturer |
| U1  | 1     | RTQ6365GSP         | RTQ6365GSP             | Step-Down Converter            | WDFN-10L 4x4 | RICHTEK      |
| C1, C2, C3, C4                                  | 4     | GRM31CR72A225KA73L | 2.2μF                  | Capacitor, Ceramic, 100V, X7R  | 1206         | MURATA       |
| C5  | 1     | 0603B822K500CT     | 8.2nF                  | Capacitor, Ceramic, 50V, X7R   | 0603         | WALSIN       |
| C6  | 1     | 0603N101J500CT     | 100pF                  | Capacitor, Ceramic, 50V, NPO   | 0603         | WALSIN       |
| C7, C8, C9                                      | 3     | GRM32ER61C476KE15L | 47μF                   | Capacitor, Ceramic, 16V, X5R   | 1210         | MURATA       |
| C11   | 1     | 0603B104K500CT     | 0.1μF                  | Capacitor, Ceramic, 50V, X7R   | 0603         | WALSIN       |
| CBOOT   | 1     | 0603B104K500CT     | 0.1μF                  | Capacitor, Ceramic, 50V, X7R   | 0603         | WALSIN       |
| D1  | 1     | SS5P6              | Schottky Diode, 60V/5A | Schottky Diode, 60V/5A         | TO-277A      | VISHAY       |
| L1  | 1     | VCHA075D-6R8MS6    | 6.8μH                  | Inductor, Isat = 10.2A, 24.2mΩ |              | Cyntec       |
| R1  | 1     | WR06X5232FTL       | 52.3k                  | Resistor, Chip, 1/10W, 1%      | 0603         | WALSIN       |
| R2  | 1     | WR06X1002FTL       | 10k                    | Resistor, Chip, 1/10W, 1%      | 0603         | WALSIN       |
| R3  | 1     | WR06X1052FTL       | 10.5k                  | Resistor, Chip, 1/10W, 1%      | 0603         | WALSIN       |
| R7, RBOOT                                       | 2     | WR06X000 PTL       | 0                      | Resistor, Chip, 1/10W, 1%      | 0603         | WALSIN       |
| RT  | 1     | WR06X2493FTL       | 249k                   | Resistor, Chip, 1/10W, 1%      | 0603         | WALSIN       |

## ***More Information***

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

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