

| Count | RefDes | Part Number        | Value  | Description                                     | Mfr     | Size    |
|-------|--------|--------------------|--------|---|---------|---------|
| 2     | C14    | Std                | .022uF | Capacitor, Ceramic, 0.022uF, 50V, X7R, 10%      | Std     | 603     |
|       | C29    | Std                | .022uF | Capacitor, Ceramic, 0.022uF, 50V, X7R, 10%      | Std     | 603     |
| 2     | C1     | Std                | 100pF  | Capacitor, Ceramic, 100pF, 50V, NPO, 10%        | Std     | 603     |
|       | C17    | Std                | 100pF  | Capacitor, Ceramic, 100pF, 50V, NPO, 10%        | Std     | 603     |
| 2     | C12    | Std                | 470pF  | Capacitor, Ceramic, 470pF, 50V, NPO, 10%        | Std     | 603     |
|       | C27    | Std                | 470pF  | Capacitor, Ceramic, 470pF, 50V, NPO, 10%        | Std     | 603     |
| 2     | C15    | Std                | 470pF  | Capacitor, Ceramic, 470pF, 50V, X7R, 10%        | Std     | 603     |
|       | C30    | Std                | 470pF  | Capacitor, Ceramic, 470pF, 50V, X7R, 10%        | Std     | 603     |
| 3     | C7     | Std                | 4700pF | Capacitor, Ceramic, 4700pF, 50V, X7R, 10%       | Std     | 603     |
|       | C22    | Std                | 4700pF | Capacitor, Ceramic, 4700pF, 50V, X7R, 10%       | Std     | 603     |
|       | C4     | Std                | 4700pF | Capacitor, Ceramic, 4700pF, 50V, X7R, 10%       | Std     | 603     |
| 2     | C16    | Std                | 8200pF | Capacitor, Ceramic, 8200pF, 50V, X7R, 10%       | Std     | 603     |
|       | C31    | Std                | 8200pF | Capacitor, Ceramic, 8200pF, 50V, X7R, 10%       | Std     | 603     |
| 2     | C6     | Std                | .1uF   | Capacitor, Ceramic, .1uF, 16V, X7R, 10%         | Std     | 805     |
|       | C21    | Std                | .1uF   | Capacitor, Ceramic, .1uF, 16V, X7R, 10%         | Std     | 805     |
| 2     | C5     | Std                | .22uF  | Capacitor, Ceramic, .22-uF, 50-V, X7R, 10%      | Std     | 1206    |
|       | C20    | Std                | .22uF  | Capacitor, Ceramic, .22-uF, 50-V, X7R, 10%      | Std     | 1206    |
| 2     | C13    | Std                | .47uF  | Capacitor, Ceramic, .47-uF, 16-V, X7R, 10%      | Std     | 1206    |
|       | C28    | Std                | .47uF  | Capacitor, Ceramic, .47-uF, 16-V, X7R, 10%      | Std     | 1206    |
| 2     | C11    | Std                | 1uF    | Capacitor, Ceramic, 1uF, 50V, X5R, 10%          | Std     | 1210    |
|       | C26    | Std                | 1uF    | Capacitor, Ceramic, 1uF, 50V, X5R, 10%          | Std     | 1210    |
| 2     | C10    | Std                | 10uF   | Capacitor, Ceramic, 10uF, 16V, X5R, 10%         | Std     | 1210    |
|       | C25    | Std                | 10uF   | Capacitor, Ceramic, 10uF, 16V, X5R, 10%         | Std     | 1210    |
| 6     | C2     | 35ZL560M 10 x 23   | 560uF  | Capacitor, Aluminum, 560-uF, 35-V, 20%          | Rubycon | 10 x 23 |
|       | C3     | 35ZL560M 10 x 23   | 560uF  | Capacitor, Aluminum, 560-uF, 35-V, 20%          | Rubycon | 10 x 23 |
|       | C8     | 35ZL560M 10 x 23   | 560uF  | Capacitor, Aluminum, 560-uF, 35-V, 20%          | Rubycon | 10 x 23 |
|       | C18    | 35ZL560M 10 x 23   | 560uF  | Capacitor, Aluminum, 560-uF, 35-V, 20%          | Rubycon | 10 x 23 |
|       | C19    | 35ZL560M 10 x 23   | 560uF  | Capacitor, Aluminum, 560-uF, 35-V, 20%          | Rubycon | 10 x 23 |
|       | C23    | 35ZL560M 10 x 23   | 560uF  | Capacitor, Aluminum, 560-uF, 35-V, 20%          | Rubycon | 10 x 23 |
| 2     | C9     | 16MBZ1500M 10 x 20 | 1500uF | Capacitor, Aluminum, 1500-uF, 16-V, 20%         | Rubycon | 10 x 20 |
|       | C24    | 16MBZ1500M 10 x 20 | 1500uF | Capacitor, Aluminum, 1500-uF, 16-V, 20%         | Rubycon | 10 x 20 |
| 2     | D1     | BAS16              | BAS16  | Diode, Switching, 10-mA, 85-V, 350-mW           | Vishay  | SOT23   |
|       | D2     | BAS16              | BAS16  | Diode, Switching, 10-mA, 85-V, 350-mW           | Vishay  | SOT23   |
| 2     | L1     | XF0106A-VO         |        | Inductor, 8uH, 15A, 12%, T80-60B, 15T (2 x #18) | XFMR5   |         |

|   |     |               |             |   |         |       |
|---|-----|---------------|-------------|---|---------|-------|
|   | L2  | XF0106A-VO    |             | Inductor, 8uH, 15A, 12%, T80-60B, 15T (2 x #18) | XFMR5   |       |
| 2 | R15 | Std           | 0           | Resistor, Chip, 0 Ohms, 1/16-W, 1%              | Std     | 603   |
|   | R28 | Std           | 0           | Resistor, Chip, 0 Ohms, 1/16-W, 1%              | Std     | 603   |
| 2 | R5  | Std           | 1K          | Resistor, Chip, 1K Ohms, 1/16-W, 5%             | Std     | 603   |
|   | R25 | Std           | 1K          | Resistor, Chip, 1K Ohms, 1/16-W, 5%             | Std     | 603   |
| 1 | R7  | Std           | 2K          | Resistor, Chip, 2K Ohms, 1/16-W, 5%             | Std     | 603   |
| 1 | R29 | Std           | 4.7K        | Resistor, Chip, 4.7K Ohms, 1/16-W, 5%           | Std     | 603   |
| 2 | R14 | Std           | 10K         | Resistor, Chip, 10K Ohms, 1/16-W, 1%            | Std     | 603   |
|   | R27 | Std           | 10K         | Resistor, Chip, 10K Ohms, 1/16-W, 1%            | Std     | 603   |
| 2 | R2  | Std           | 10K         | Resistor, Chip, 10K Ohms, 1/16-W, 5%            | Std     | 603   |
|   | R8  | Std           | 10K         | Resistor, Chip, 10K Ohms, 1/16-W, 5%            | Std     | 603   |
| 2 | R10 | Std           | 18.2K       | Resistor, Chip, 18.2K Ohms, 1/16-W, 1%          | Std     | 603   |
|   | R21 | Std           | 18.2K       | Resistor, Chip, 18.2K Ohms, 1/16-W, 1%          | Std     | 603   |
| 2 | R1  | Std           | 38.3K       | Resistor, Chip, 38.3K Ohms, 1/16-W, 1%          | Std     | 603   |
|   | R16 | Std           | 38.3K       | Resistor, Chip, 38.3K Ohms, 1/16-W, 1%          | Std     | 603   |
| 2 | R3  | Std           | 84.5K       | Resistor, Chip, 84.5K Ohms, 1/16-W, 1%          | Std     | 603   |
|   | R17 | Std           | 84.5K       | Resistor, Chip, 84.5K Ohms, 1/16-W, 1%          | Std     | 603   |
| 1 | R23 | Std           | 200K        | Resistor, Chip, 200K Ohms, 1/16-W, 1%           | Std     | 603   |
| 1 | R12 | Std           | 255K        | Resistor, Chip, 255K Ohms, 1/16-W, 1%           | Std     | 603   |
| 2 | R4  | Std           | 576K        | Resistor, Chip, 576K Ohms, 1/16-W, 1%           | Std     | 603   |
|   | R18 | Std           | 576K        | Resistor, Chip, 576K Ohms, 1/16-W, 1%           | Std     | 603   |
| 2 | R13 | Std           | 931         | Resistor, Chip, 931 Ohms, 1/16-W, 1%            | Std     | 603   |
|   | R26 | Std           | 931         | Resistor, Chip, 931 Ohms, 1/16-W, 1%            | Std     | 603   |
| 2 | R11 | Std           | 1.62K       | Resistor, Chip, 1.62K Ohms, 1/8-W, 1%           | Std     | 805   |
|   | R22 | Std           | 1.62K       | Resistor, Chip, 1.62K Ohms, 1/8-W, 1%           | Std     | 805   |
| 2 | R6  | Std           | 2.2         | Resistor, Chip, 2.2 Ohms, 1/8-W, 5%             | Std     | 805   |
|   | R19 | Std           | 2.2         | Resistor, Chip, 2.2 Ohms, 1/8-W, 5%             | Std     | 805   |
| 2 | R9  | Std           | 4.7         | Resistor, Chip, 4.7 Ohms, 1/8-W, 5%             | Std     | 805   |
|   | R20 | Std           | 4.7         | Resistor, Chip, 4.7 Ohms, 1/8-W, 5%             | Std     | 805   |
| 1 | R24 | Std           | 750         | Resistor, Chip, 750 Ohms, 1/8-W, 5%             | Std     | 805   |
| 2 | R30 | Not Installed |             |   |         |       |
|   | R31 | Not Installed |             |   |         |       |
| 2 | U1  | TPS40051PWP   | TPS40051PWP | IC, Wide Input Synchronuos Buck Controller      | TI      | PWP16 |
|   | U2  | TPS40051PWP   | TPS40051PWP | IC, Wide Input Synchronuos Buck Controller      | TI      | PWP16 |
| 2 | TP2 | 240-333       |             | Test Point, Black, 1mm                          | Farnell |       |
|   | TP6 | 240-333       |             | Test Point, Black, 1mm                          | Farnell |       |

|   |     |               |               |   |          |       |
|---|-----|---------------|---------------|---|----------|-------|
| 7 | TP1 | 240-345       |               | Test Point, Red, 1mm                    | Farnell  |       |
|   | TP3 | 240-345       |               | Test Point, Red, 1mm                    | Farnell  |       |
|   | TP4 | 240-345       |               | Test Point, Red, 1mm                    | Farnell  |       |
|   | TP5 | 240-345       |               | Test Point, Red, 1mm                    | Farnell  |       |
|   | TP7 | 240-345       |               | Test Point, Red, 1mm                    | Farnell  |       |
|   | TP8 | 240-345       |               | Test Point, Red, 1mm                    | Farnell  |       |
|   | TP9 | 240-345       |               | Test Point, Red, 1mm                    | Farnell  |       |
| 4 | Q3  | SPD50N03S2-07 | SPD50N03S2-07 | MOSFET, N-ch, 30-V, 50-A, 7.3-milliOhms | Infineon | DPAK  |
|   | Q4  | SPD50N03S2-07 | SPD50N03S2-07 | MOSFET, N-ch, 30-V, 50-A, 7.3-milliOhms | Infineon | DPAK  |
|   | Q5  | SPD50N03S2-07 | SPD50N03S2-07 | MOSFET, N-ch, 30-V, 50-A, 7.3-milliOhms | Infineon | DPAK  |
|   | Q6  | SPD50N03S2-07 | SPD50N03S2-07 | MOSFET, N-ch, 30-V, 50-A, 7.3-milliOhms | Infineon | DPAK  |
| 3 | Q1  | 2N7002LT1     | 2N7002        | MOSFET, N-ch, 60-V, 115-mA, 7.5-Ohms    | Onsemi   | SOT23 |
|   | Q2  | 2N7002LT1     | 2N7002        | MOSFET, N-ch, 60-V, 115-mA, 7.5-Ohms    | Onsemi   | SOT23 |
|   | Q7  | 2N7002LT1     | 2N7002        | MOSFET, N-ch, 60-V, 115-mA, 7.5-Ohms    | Onsemi   | SOT23 |

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