

**D060431-B****17V variant**

| Designator | Part Number   | Value | Description                           | Footprint   |
|------------|---------------|-------|---------------------------------------|-------------|
| C1         | 478-2567-1-ND | 2.2u  | Capacitor, surface mount              | CC4532-1812 |
| C2         | 311-1099-1-ND | 10p   | Capacitor, surface mount              | CC2013-0805 |
| C3         | 311-1113-1-ND | 150p  | Capacitor, surface mount              | CC2013-0805 |
| C4         | 399-1805-1-ND | 100n  | Capacitor, surface mount              | CC3216-1206 |
| C5         | 478-2567-1-ND | 2.2u  | Capacitor, surface mount              | CC4532-1812 |
| C6         | 445-1657-1-ND | 47u   | 2-chip piled capacitor, surface mount | CKG57N      |
| C7         | 445-1657-1-ND | 47u   | 2-chip piled capacitor, surface mount | CKG57N      |
| C8         | 445-1657-1-ND | 47u   | 2-chip piled capacitor, surface mount | CKG57N      |
| C9         | 445-1657-1-ND | 47u   | 2-chip piled capacitor, surface mount | CKG57N      |
| C10        | 478-1395-1-ND | 100n  | Capacitor, surface mount              | CC2013-0805 |
| C11        |               | NL    | Capacitor, surface mount              | CC2013-0805 |
| C12        | PCC2319CT-ND  | 1u    | Capacitor, surface mount              | CC2013-0805 |
| C13        | 493-1602-ND   | 3900u | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C14        | 493-1602-ND   | 3900u | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C15        | 493-1602-ND   | 3900u | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C16        | 493-1602-ND   | 3900u | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C17        | 493-1602-ND   | 3900u | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C18        | 490-1667-1-ND | 150n  | Capacitor, surface mount              | CC2013-0805 |
| C19        | 478-1395-1-ND | 100n  | Capacitor, surface mount              | CC2013-0805 |
| C20        | 490-1670-1-ND | 220n  | Capacitor, surface mount              | CC2013-0805 |
| C21        | 478-1395-1-ND | 100n  | Capacitor, surface mount              | CC2013-0805 |
| C22        | 478-1395-1-ND | 100n  | Capacitor, surface mount              | CC2013-0805 |
| C23        | PCC2414CT-ND  | 10u   | Capacitor, surface mount              | CC3216-1206 |
| C24        | 490-3908-1-ND | 1u    | Capacitor, surface mount              | CC3216-1206 |
| C25        | 565-1746-ND   | 820uF | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C26        | 565-1746-ND   | 820uF | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C27        | 478-1395-1-ND | 100n  | Capacitor, surface mount              | CC2013-0805 |
| C28        | 478-2567-1-ND | 2.2u  | Capacitor, surface mount              | CC4532-1812 |
| C29        | 565-1746-ND   | 820uF | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C30        | 565-1746-ND   | 820uF | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C31        | 565-1746-ND   | 820uF | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C32        | 565-1746-ND   | 820uF | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C33        | 565-1746-ND   | 820uF | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C34        | 311-1111-1-ND | 100p  | Capacitor, surface mount              | CC2013-0805 |
| C35        | 478-2567-1-ND | 2.2u  | Capacitor, surface mount              | CC4532-1812 |
| C36        | 311-1103-1-ND | 22p   | Capacitor, surface mount              | CC2013-0805 |
| C37        | 565-1746-ND   | 820uF | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C38        | 565-1746-ND   | 820uF | Electrolyte capacitor, leaded, radial | RB18/7.5    |
| C39        | 311-1099-1-ND | 10p   | Capacitor, surface mount              | CC2013-0805 |
| C40        | 478-1395-1-ND | 100n  | Capacitor, surface mount              | CC2013-0805 |
| C41        | 478-1395-1-ND | 100n  | Capacitor, surface mount              | CC2013-0805 |
| C42        | 311-1122-1-ND | 1n    | Capacitor, surface mount              | CC2013-0805 |
| C43        | 399-1805-1-ND | 100n  | Capacitor, surface mount              | CC3216-1206 |
| C44        | 490-3328-1-ND | 470n  | Capacitor, surface mount              | CC2013-0805 |
| C45        |               | NL    | Capacitor, surface mount              | CC2013-0805 |
| C46        | PCC2319CT-ND  | 1u    | Capacitor, surface mount              | CC2013-0805 |
| C47        | 478-1395-1-ND | 100n  | Capacitor, surface mount              | CC2013-0805 |
| C48        | 490-3908-1-ND | 1u    | Capacitor, surface mount              | CC3216-1206 |
| C49        | 490-1667-1-ND | 150n  | Capacitor, surface mount              | CC2013-0805 |
| C50        | 490-1670-1-ND | 220n  | Capacitor, surface mount              | CC2013-0805 |
| C51        | 478-1395-1-ND | 100n  | Capacitor, surface mount              | CC2013-0805 |

|     |                    |       |                                       |                |
|-----|--------------------|-------|---------------------------------------|----------------|
| C52 | 478-2567-1-ND      | 2.2u  | Capacitor, surface mount              | CC4532-1812    |
| C53 | 445-1657-1-ND      | 47u   | 2-chip piled capacitor, surface mount | CKG57N         |
| C54 | 445-1657-1-ND      | 47u   | 2-chip piled capacitor, surface mount | CKG57N         |
| C55 | 445-1657-1-ND      | 47u   | 2-chip piled capacitor, surface mount | CKG57N         |
| C56 | 445-1657-1-ND      | 47u   | 2-chip piled capacitor, surface mount | CKG57N         |
| C57 | 478-1395-1-ND      | 100n  | Capacitor, surface mount              | CC2013-0805    |
| C58 | 478-1395-1-ND      | 100n  | Capacitor, surface mount              | CC2013-0805    |
| C59 | 493-1602-ND        | 3900u | Electrolyte capacitor, leaded, radial | RB18/7.5       |
| C60 | 493-1602-ND        | 3900u | Electrolyte capacitor, leaded, radial | RB18/7.5       |
| C61 | 493-1602-ND        | 3900u | Electrolyte capacitor, leaded, radial | RB18/7.5       |
| C62 | 493-1602-ND        | 3900u | Electrolyte capacitor, leaded, radial | RB18/7.5       |
| C63 | 493-1602-ND        | 3900u | Electrolyte capacitor, leaded, radial | RB18/7.5       |
| C64 | PCC2414CT-ND       | 10u   | Capacitor, surface mount              | CC3216-1206    |
| C65 | 478-1395-1-ND      | 100n  | Capacitor, surface mount              | CC2013-0805    |
| C66 | 399-3908-1-ND      | 68u   | Tantalum capacitor, surface mount     | TC7343-2917    |
| C67 | 478-1395-1-ND      | 100n  | Capacitor, surface mount              | CC2013-0805    |
| D1  | B1100B-FDICT-ND    |       | Single shottky diode                  | DO-SMB         |
| D2  | 511-STPS41H100CG   |       | Dual shottky diode                    | D2PAK          |
| D3  | SD103AW-FDICT-ND   |       | Single shottky diode                  | DO-SOD123      |
| D4  | BZT52C9V1-FDICT-ND |       | Single zener diode                    | DO-SOD123      |
| D5  | 30CTQ100PBF-ND     |       | Schottky Rectifier                    | TO-247AC       |
| D6  | BZT52C16-FDICT-ND  |       | Single zener diode                    | DO-SOD123      |
| D7  | SD103AW-FDICT-ND   |       | Single shottky diode                  | DO-SOD123      |
| D8  | B1100B-FDICT-ND    |       | Single shottky diode                  | DO-SMB         |
| D9  | 511-STPS41H100CG   |       | Dual shottky diode                    | D2PAK          |
| D10 | SD103AW-FDICT-ND   |       | Single shottky diode                  | DO-SOD123      |
| D11 | SD103AW-FDICT-ND   |       | Single shottky diode                  | DO-SOD123      |
| D12 | BZT52C9V1-FDICT-ND |       | Single zener diode                    | DO-SOD123      |
| D13 | SD103AW-FDICT-ND   |       | Single shottky diode                  | DO-SOD123      |
| D14 | SD103AW-FDICT-ND   |       | Single shottky diode                  | DO-SOD123      |
| D15 | SD103AW-FDICT-ND   |       | Single shottky diode                  | DO-SOD123      |
| D16 | SD103AW-FDICT-ND   |       | Single shottky diode                  | DO-SOD123      |
| D17 | SD103AW-FDICT-ND   |       | Single shottky diode                  | DO-SOD123      |
| L1  | HF358-101M-15A     | 100uH | Power inductor, HF358                 | HF358V         |
| L2  | MVR1278C-232MLB    | 2.2uH | Power inductor, MVR series            | MVR1251        |
| L3  | 495-1759-1-ND      | 220u  | Inductor                              | CL4532-1812    |
| L4  | MVR1278C-232MLB    | 2.2uH | Power inductor, MVR series            | MVR1251        |
| L5  | HF358-101M-15A     | 100uH | Power inductor, HF358                 | HF358V         |
| L6  | 495-1759-1-ND      | 220u  | Inductor                              | CL4532-1812    |
| L7  | MVR1278C-232MLB    | 2.2uH | Power inductor, MVR series            | MVR1251        |
| P1  | WM5964-ND          |       | Terminal block, 10.16mm, 2-Pin        | TBLOCK-10.16-2 |
| P2  | WM5964-ND          |       | Terminal block, 10.16mm, 2-Pin        | TBLOCK-10.16-2 |
| P3  | WM5964-ND          |       | Terminal block, 10.16mm, 2-Pin        | TBLOCK-10.16-2 |
| P4  | A31169-ND          |       | Header, 8-Pin, Dual row               | HDR2X8         |
| P5  | A31170-ND          |       | Header, 10-Pin, Dual row              | HDR2X10        |
| Q1  | 512-FDB3682        |       | Power MOSFET, N-channel               | D2PAK          |
| Q2  | 512-FDB3682        |       | Power MOSFET, N-channel               | D2PAK          |
| Q3  | 512-FDB3652        |       | Power MOSFET, N-channel               | D2PAK          |
| Q4  | 512-FDB3652        |       | Power MOSFET, N-channel               | D2PAK          |
| Q5  | MMBT3906FSCT-ND    |       | PNP Switching Transistor              | SOT23          |
| Q6  | IRF5210S-ND        |       | Power MOSFET, P-channel               | D2PAK          |
| Q7  | MMBT3906FSCT-ND    |       | PNP Switching Transistor              | SOT23          |
| Q8  | MMBT3906FSCT-ND    |       | PNP Switching Transistor              | SOT23          |
| Q9  | MMBTA14TPMSCT-ND   |       | NPN Darlington Transistor             | SOT23          |
| Q10 | IRF5210S-ND        |       | Power MOSFET, P-channel               | D2PAK          |

|     |                   |       |  |             |
|-----|-------------------|-------|--|-------------|
| Q11 | MMBT3904FSCT-ND   |       | NPN Switching Transistor               | SOT23       |
| Q12 | FDV301NCT-ND      |       | FDV301N, Digital FET, N-channel, SOT23 | SO-G3/C2.25 |
| Q13 | 512-FDB3682       |       | Power MOSFET, N-channel                | D2PAK       |
| Q14 | 512-FDB3682       |       | Power MOSFET, N-channel                | D2PAK       |
| Q15 | FDV301NCT-ND      |       | FDV301N, Digital FET, N-channel, SOT23 | SO-G3/C2.25 |
| Q16 | 512-FDB3652       |       | Power MOSFET, N-channel                | D2PAK       |
| Q17 | 512-FDB3652       |       | Power MOSFET, N-channel                | D2PAK       |
| Q18 | BC856ALT1GOSCT-ND |       | PNP Switching Transistor               | SOT23       |
| R1  | RR12P2.0KBCT-ND   | 2K    | Resistor, surface mount                | CR2012-0805 |
| R2  | RR12Q15DCT-ND     | 15    | Resistor, surface mount                | CR2012-0805 |
| R3  | RR12P30.0KBCT-ND  | 30.0K | Resistor, surface mount                | CR2012-0805 |
| R4  | RR12P21.5KBCT-ND  | 21.5K | Resistor, surface mount                | CR2012-0805 |
| R5  | RR12P10.0KBCT-ND  | 10K   | Resistor, surface mount                | CR2012-0805 |
| R6  | RR12P10.0KBCT-ND  | 10K   | Resistor, surface mount                | CR2012-0805 |
| R7  | RR12Q10DCT-ND     | 10    | Resistor, surface mount                | CR2012-0805 |
| R8  | RR12P549BCT-ND    | 549   | Resistor, surface mount                | CR2012-0805 |
| R9  | RR12P10.0KBCT-ND  | 10K   | Resistor, surface mount                | CR2012-0805 |
| R10 | RR12P1.0KBCT-ND   | 1K    | Resistor                               | CR2012-0805 |
| R11 | RR12P4.99KBCT-ND  | 4.99K | Resistor, surface mount                | CR2012-0805 |
| R12 | RR12Q10DCT-ND     | 10    | Resistor, surface mount                | CR2012-0805 |
| R13 | RR12Q10DCT-ND     | 10    | Resistor, surface mount                | CR2012-0805 |
| R14 | RR12P1.0KBCT-ND   | 1K    | Resistor                               | CR2012-0805 |
| R15 | RR12P100KBCT-ND   | 100K  | Resistor, surface mount                | CR2012-0805 |
| R16 | RR12P4.99KBCT-ND  | 4.99K | Resistor, surface mount                | CR2012-0805 |
| R17 | RR12P20.0KBCT-ND  | 20K   | Resistor, surface mount                | CR2012-0805 |
| R18 | RR12P3.32KBCT-ND  | 3.32K | Resistor, surface mount                | CR2012-0805 |
| R19 | RR12P20.0KBCT-ND  | 20K   | Resistor, surface mount                | CR2012-0805 |
| R20 | RR12P100KBCT-ND   | 100K  | Resistor, surface mount                | CR2012-0805 |
| R21 | RR12P33.0KBCT-ND  | 33.0K | Resistor                               | CR2012-0805 |
| R22 | RR12P15.0KBCT-ND  | 15K   | Resistor, surface mount                | CR2012-0805 |
| R23 | RR12P20.0KBCT-ND  | 20K   | Resistor, surface mount                | CR2012-0805 |
| R24 | RR12P33.0KBCT-ND  | 33.0K | Resistor                               | CR2012-0805 |
| R25 | RR12P200KBCT-ND   | 200K  | Resistor, surface mount                | CR2012-0805 |
| R26 | RR12P20.0KBCT-ND  | 20K   | Resistor, surface mount                | CR2012-0805 |
| R27 | RR12P1.0KBCT-ND   | 1K    | Resistor                               | CR2012-0805 |
| R28 | RR12P2.0KBCT-ND   | 2K    | Resistor, surface mount                | CR2012-0805 |
| R29 | RR12Q15DCT-ND     | 15    | Resistor, surface mount                | CR2012-0805 |
| R30 | RR12P30.0KBCT-ND  | 30.0K | Resistor, surface mount                | CR2012-0805 |
| R31 | RR12P3.16KBCT-ND  | 3.16K | Resistor, surface mount                | CR2012-0805 |
| R32 | RR12P100KBCT-ND   | 100K  | Resistor, surface mount                | CR2012-0805 |
| R33 | RR12P1.0KBCT-ND   | 1K    | Resistor                               | CR2012-0805 |
| R34 | RR12P12.0KBCT-ND  | 12K   | Resistor, surface mount                | CR2012-0805 |
| R35 | RR12P10.0KBCT-ND  | 10K   | Resistor, surface mount                | CR2012-0805 |
| R36 | RR12Q10DCT-ND     | 10    | Resistor, surface mount                | CR2012-0805 |
| R37 | RR12P82.5KBCT-ND  | 82.5K | Resistor, surface mount                | CR2012-0805 |
| R38 |                   | NL    | Resistor, surface mount                | CR2012-0805 |
| R39 | RR12Q10DCT-ND     | 10    | Resistor, surface mount                | CR2012-0805 |
| R40 | RR12P549BCT-ND    | 549   | Resistor, surface mount                | CR2012-0805 |
| R41 | RR12P10.0KBCT-ND  | 10K   | Resistor, surface mount                | CR2012-0805 |
| R42 | RR12P31.6KBCT-ND  | 31.6K | Resistor, surface mount                | CR2012-0805 |
| R43 | RR12P10.0KBCT-ND  | 10K   | Resistor, surface mount                | CR2012-0805 |
| R44 | RR12P4.99KBCT-ND  | 4.99K | Resistor, surface mount                | CR2012-0805 |
| R45 | RR12P10.0KBCT-ND  | 10K   | Resistor, surface mount                | CR2012-0805 |
| R46 | RR12Q10DCT-ND     | 10    | Resistor, surface mount                | CR2012-0805 |
| R47 | RR12Q10DCT-ND     | 10    | Resistor, surface mount                | CR2012-0805 |

|     |                     |       |   |              |
|-----|---------------------|-------|---|--------------|
| R48 | RR12P24.9KBCT-ND    | 24.9K | Resistor, surface mount                                       | CR2012-0805  |
| R49 | RR12P1.24KBCT-ND    | 1.24K | Resistor, surface mount                                       | CR2012-0805  |
| R50 | RR12P1.24KBCT-ND    | 1.24K | Resistor, surface mount                                       | CR2012-0805  |
| R51 | RR12P10.5KBCT-ND    | 10.5K | Resistor, surface mount                                       | CR2012-0805  |
| R52 | RR12P4.99KBCT-ND    | 4.99K | Resistor, surface mount                                       | CR2012-0805  |
| R53 | RR12P110KBCT-ND     | 110K  | Resistor, surface mount                                       | CR2012-0805  |
| RL1 | 311-1.50KFRCT-ND    | 1.50K | Resistor, surface mount                                       | CR3216-1206  |
| RL2 | 311-1.50KFRCT-ND    | 1.50K | Resistor, surface mount                                       | CR3216-1206  |
| RL3 | 311-3.00KFRCT-ND    | 3K    | Resistor, surface mount                                       | CR3216-1206  |
| RL4 | 311-3.00KFRCT-ND    | 3K    | Resistor, surface mount                                       | CR3216-1206  |
| RO1 | RR12P5.62KBCT-ND    | 5.62K | Resistor, surface mount                                       | CR2012-0805  |
| RO2 | RR12P5.76KBCT-ND    | 5.76K | Resistor, surface mount                                       | CR2012-0805  |
| RX1 | RR12P510BCT-ND      | 510   | Resistor, surface mount                                       | CR2012-0805  |
| RY1 | RR12P510BCT-ND      | 510   | Resistor, surface mount                                       | CR2012-0805  |
| S1  | 317-1063-ND         |       | Thermal switch, N/O   | F11-E06H     |
| TP1 | 5005K-ND            |       | Testpoint, red  | TP1          |
| TP2 | 5006K-ND            |       | Testpoint, black  | TP1          |
| TP3 | 5006K-ND            |       | Testpoint, black  | TP1          |
| TP4 | 5006K-ND            |       | Testpoint, black  | TP1          |
| TP5 | 5007K-ND            |       | Testpoint, white  | TP1          |
| TP6 | 5006K-ND            |       | Testpoint, black  | TP1          |
| TP7 | 5006K-ND            |       | Testpoint, black  | TP1          |
| TP8 | 5009K-ND            |       | Testpoint, yellow   | TP1          |
| U1  | LTC3703EG#PBF       |       | Synchronous buck regulator controller, 100V                   | SSO-G28/C6.8 |
| U2  | OP184ESZ-ND         |       | Precision Rail-to-Rail Input and Output Operational Amplifier | SO-G8        |
| U3  | LTC1696ES6#TRMCT-ND |       | Overvoltage protection controller                             | SO-G6/E2.4   |
| U4  | LTC3703EG#PBF       |       | Synchronous buck regulator controller, 100V                   | SSO-G28/C6.8 |
| U5  | OP184ESZ-ND         |       | Precision Rail-to-Rail Input and Output Operational Amplifier | SO-G8        |
| U6  | OP184ESZ-ND         |       | Precision Rail-to-Rail Input and Output Operational Amplifier | SO-G8        |
| U7  | 296-17623-1-ND      |       | Programmable Precision Reference                              | SO-G3/C2.25  |
| U8  | LM317D2TR4GOSCT-ND  |       | Three-Terminal Adjustable Output Positive Voltage Regulator   | 936-03       |
| U9  | LM317D2TR4GOSCT-ND  |       | Three-Terminal Adjustable Output Positive Voltage Regulator   | 936-03       |