

## DC1668B-B Parts List

| Item   | Qty | Ref - Des       | Desc                          | Manufacturer's Part Number  |
|--|-----|-----------------|-------------------------------|-----------------------------|
|  |     |                 |                               |                             |
|  |     |                 |                               |                             |
| <b>REQUIRED CIRCUIT COMPONENTS:</b>              |     |                 |                               |                             |
| 1  | 1   | CIN1            | CAP, 150uF 20% 35V ALUM       | SANYO 35ME150WXV=TS         |
| 3  | 2   | CIN13,CIN18     | CAP, 1210 22uF 20% 25V X5R    | AVX 12103D226MAT2A          |
| 5  | 2   | COUT1,COUT5     | CAP, 1812 100uF 20% 6.3V X5R  | TDK C4532X5R0J107MZ         |
| 10   | 2   | COUT20,COUT21   | CAP, 470uF 20% 4V POSCAP      | SANYO POSCAP 4TPF470ML      |
| 29   | 2   | R8              | RES, 0603 0 OHM JUMPER        | VISHAY CRCW06030000Z0EA     |
| 33   | 2   | R18,R19         | RES, 0603 10 OHMS 5% 1/10W    | VISHAY CRCW060310R0JNEA     |
| 35   | 4   | R30,R31,R32,R33 | RES, 0603 100 OHMS 5% 1/10W   | VISHAY CRCW0603100RJNEA     |
| 36   | 1   | R34             | RES, 0603 100K OHMS 5% 1/10W  | VISHAY CRCW0603100KJNEA     |
| 37   | 1   | R35             | RES, 0805 0 OHM JUMPER        | VISHAY CRCW08050000Z0EA     |
| 39   | 1   | U5              | IC, LTC6902CMS                | LINEAR TECH LTC6902CMS      |
| 1  | 1   | CIN20           | CAP, 1210 22uF 20% 25V X5R    | AVX 12103D226MAT2A          |
| 3  | 1   | COUT9           | CAP, 1812 100uF 20% 6.3V X5R  | TDK C4532X5R0J107MZ         |
| 5  | 1   | COUT22          | CAP, 470uF 20% 4V POSCAP      | SANYO POSCAP 4TPF470ML      |
| 7  | 1   | C12             | CAP, 0603 100pF 10% 50V NPO   | AVX 06035A101KAT2A          |
| 9  | 1   | C61             | CAP, 0603 68pF 10% 50V NPO    | AVX 06035A680KAT            |
| 10   | 1   | C65             | CAP, 0603 1000pF 10% 50V NPO  | AVX 06035A102KAT2A          |
| 11   | 1   | R1              | RES, 0603 10k OHMS 1% 1/10W   | VISHAY CRCW060310K0FKEA     |
| 12   | 1   | R2              | RES, 0603 13.3k OHMS 1% 1/10W | VISHAY CRCW060313K3FKEA     |
| 13   | 1   | R3              | RES, 0603 6.34k OHMS 1% 1/10W | VISHAY CRCW06036K34FKEA     |
| 14   | 1   | R4              | RES, 0603 4.42k OHMS 1% 1/10W | VISHAY CRCW06034K42FKEA     |
| 15   | 1   | R12             | RES, 0603 30.1k OHMS 1% 1/10W | VISHAY CRCW060330K1FKEA     |
| 16   | 1   | R14             | RES, 0603 20k OHMS 1% 1/10W   | VISHAY CRCW060320K0FKEA     |
| 17   | 1   | R29             | RES, 0603 133K OHMS 1% 1/10W  | VISHAY CRCW0603133KFKEA     |
| 18   | 3   | U1,U2,U3        | IC, MICRO MODULE              | LINEAR TECH LTM4627EV       |
| <b>ADDITIONAL DEMO BOARD CIRCUIT COMPONENTS:</b> |     |                 |                               |                             |
| 13   | 2   | C14,C38         | CAP, 0603 0.1uF 20% 16V X7R   | AVX 0603YC104MAT2A          |
| 15   | 1   | C16             | CAP, 0603 1uF 20% 10V X5R     | TAIYO YUDEN LMK107BJ105MA-T |

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|                 |   |                                     |                                     |                                    |
|-----------------|---|-------------------------------------|-------------------------------------|------------------------------------|
| 18              | 1 | C60                                 | CAP, 0603 1000pF 10% 50V NPO        | AVX 06035A102KAT2A                 |
| 22              | 1 | D1                                  | DIODE, ZENER 350mW                  | DIODES INC. MMBZ5227B              |
| 28              | 1 | R7                                  | RES, 0805 2K OHMS 5% 1/10W          | VISHAY CRCW08052K00JNEA            |
| 27              | 1 | Q14                                 | XSTR, SUD50N03-09CP MOSFET          | SILICONIX SUD50N03-09CP-E3         |
| 31              | 1 | R10                                 | RES, 0603 10K OHMS 5% 1/10W         | VISHAY CRCW060310K0JNEA            |
| 29              | 2 | R20                                 | RES, 0603 0 OHM JUMPER              | VISHAY CRCW06030000Z0EA            |
| 32              | 3 | R11,R16,R17                         | RES, 2512 0.015 OHM 1% 1W           | VISHAY WSL2512R0150FEA             |
| 2               | 0 | CIN2,CIN3                           | CAP, 1206 10uF 20% 35V X5R OPTION   | TAIYO YUDEN GMK316BJ106ML-T OPTION |
| 4               | 0 | CIN14,CIN19,CIN21,CIN23             | CAP, 1210 22uF 20% 25V X5R OPTION   | AVX 12103D226MAT2A OPTION          |
| 6               | 0 | COUT2,COUT3,COUT6                   | CAP, 1812 100uF 20% 6.3V X5R OPTION | TDK C4532X5R0J107MZ OPTION         |
| 7               | 0 | COUT4,COUT7,COUT11,<br>COUT15       | CAP, 1812 OPTION                    | TAIYO YUDEN JMK432BJ107MU-T OPTION |
| 8               | 0 | COUT10,COUT14                       | CAP, 1812 100uF 20% 6.3V X5R OPTION | TDK C4532X5R0J107MZ OPTION         |
| 9               | 0 | COUT19                              | CAP, 1206 OPTION                    | TAIYO YUDEN EMK316BJ475ML-T OPTION |
| 11              | 0 | COUT23,COUT26,COUT27                | CAP, 470uF 20% 4V POSCAP OPTION     | SANYO POSCAP 4TPF470ML OPTION      |
| 12              | 0 | COUT24                              | CAP, 1812 OPTION                    | TAIYO YUDEN JMK316BJ226ML-T        |
| 14              | 0 | C15                                 | CAP, 0603 1uF 20% 10V X5R OPTION    | TAIYO YUDEN LMK107BJ105MA-T OPTION |
| 16              | 0 | C18,C55,C56,C57,C58,C62,<br>C74-C77 | CAP, 0603 OPTION                    | OPTION                             |
| 17              | 0 | C59,C63,C66,C68                     | CAP, 0805 OPTION                    | OPTION                             |
| 19              | 0 | C64                                 | CAP, 0603 1000pF 10% 50V NP0 OPTION | AVX 06035A102KAT2A OPTION          |
| 20              | 0 | C69,C71,C72,C73                     | CAP, 150uF 20% 35V ALUM OPTION      | SANYO 35MV150WXV OPTION            |
| 21              | 0 | C70                                 | CAP, 0603 0.22uf 20% 10V X5R OPTION | TAIYO YUDEN LMK107BJ224MA-T OPTION |
| 30              | 0 | R9,R13,R15,R23,R24                  | RES, 0603 51K OHMS 5% 1/10W OPTION  | AAC CR16-513JM OPTION              |
| 34              | 0 | R21,R22,R36                         | RES, 0603 OPTION                    | OPTION                             |
| 2               | 0 | CIN22,                              | CAP, 1210 22uF 20% 25V X5R OPTION   | AVX 12103D226MAT2A OPTION          |
| 4               | 0 | COUT13                              | CAP, 1812 100uF 20% 6.3V X5R OPTION | TDK C4532X5R0J107MZ OPTION         |
| 6               | 0 | COUT25                              | CAP, 470uF 20% 4V POSCAP OPTION     | SANYO POSCAP 4TPF470ML OPTION      |
| 8               | 0 | R26,R27,C54,C67                     | CAP, 0603 OPTION                    | OPTION                             |
| <b>HARDWARE</b> |   |                                     |                                     |                                    |
| 23              | 6 | JP1,JP2,JP3,JP4,JP5,JP8             | HEADER,2PIN, 2mm                    | SAMTEC TMM 102-02-L-S              |
| 24              | 2 | JP6,JP7                             | HEADER,3PIN, 2mm                    | SAMTEC TMM-103-02-L-S              |
| 25              | 4 | J1,J2,J3,J4                         | STUD, PRESS-FIT                     | PEM KFH-032-10                     |

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|    |    |                   |                   |                                  |
|----|----|-------------------|-------------------|----------------------------------|
| 26 | 2  | J5,J6             | CONN,BNC,5 PINS   | CONNEX 112404                    |
| 38 | 10 | TP1-TP8,TP13,TP14 | TURRET            | MILL MAX 2501-2-00-80-00-00-07-0 |
| 40 | 3  | JP1,JP6,JP7       | SHUNT, 2mm        | SAMTEC 2SN-BK-G                  |
| 41 | 4  |                   | STANDOFF, SNAP ON | KEYSTONE_8834                    |
| 42 | 8  | J1,J2,J3,J4       | NUT, BRASS #10-32 | ANY                              |
| 43 | 4  | J1,J2,J3,J4       | WASHER, BRASS #10 | ANY                              |
| 44 | 4  | J1,J2,J3,J4       | LUG, RING         | KEYSTONE 310 PbF                 |