

| Quantity                    | Component                                      |  |                       | Part Number                 | Notes   |
|-----------------------------|--|--|-----------------------|-----------------------------|---|
| 1                           | BFA-555 MK1 Circuit Board                      |  |                       |                             |   |
| 2 Pair                      | Q101, Q102, Q201, Q202                         | TO-92 Transistor                                   | On Semi               | KSC1845FTA                  | Matched Pairs   |
| 2                           |  | Copper foil tape, approx 2"                        |                       |                             |   |
| 1                           |  | Shrink tube, Clear, 1/4" x 3"                      |                       |                             |   |
| 4                           | Q110, Q210, Q103, Q203                         | TO-92 Transistor                                   | On Semi               | KSC1845FTA                  | Unmatched for non-current-mirror functions  |
| 6                           | Q108, Q208, Q105, Q205, 109, Q209              | TO-92 Transistor                                   | On Semi               | KSA992FBU                   |   |
| 4                           | Q107, Q207, Q106, Q206                         | TO-126 Transistor                                  | On Semi               | KSA1381ESTU                 |   |
| 2                           | Q104, Q204                                     | TO-126 Transistor                                  | On Semi               | KSC3503DS                   |   |
| 2                           | Q12  | TO-220 Driver Transistor, NPN                      | On Semi               | MJE15032G                   | Drivers with improved breakdown voltage headroom. Install on output modules.  |
| 2                           | Q11  | TO-220 Driver Transistor, PNP                      | On Semi               | MJE15033G                   |   |
| 4                           |  | TO-126 Heatsinks                                   | Assmann (Yes, really) | V7237B                      | For Q104, Q107, Q204 and Q207. No heatsink needed on Q106 and Q206  |
| 4                           |  | Machine screw with integrated lock washer, M3, 8mm |                       |                             |   |
| 4                           |  | Nut, M3 with integrated lock washer, M3            |                       |                             |   |
| 2                           | C102, C202                                     | Mica Capacitor 20pF                                | Cornell Dubilier      | CD15ED200JO3                |   |
| 2                           | C104, C204                                     | Mica Capacitor 39pF                                | Cornell Dubilier      | CD15ED390JO3                |   |
| 2                           | C101, C201                                     | Mica Capacitor 300pF                               | Cornell Dubilier      | CDV16FF301JO3F              |   |
| 2                           | C107, C207                                     | Polypropylene Capacitor 1uF                        | Kemet                 | F461BK105K160C              | Original silver-mica capacitor is awesome, so you might want to consider re-using it.   |
| 2                           | C105, C205                                     | Polyester Capacitor 4.7uF                          | WIMA                  | MKS2B044701K00KSC9          | Original cap is electrolytic. Wima MKS2 is an ordinary polyester cap, but of a useably compact size, and far superior to any electrolytic.  |
| 2                           | C103, C203                                     | Electrolytic Capacitor 47uF                        | Nichicon              | UKZ2A470MHM                 | Audio type for feedback to ground. Some people have their own preference, such as Elna Silmic II.   |
| 4                           | C153, C154, C253, C254                         | Electrolytic Capacitor 47uF                        | Panasonic             | EEU-EE2C470                 | Power supply bypass   |
| 6                           | C151, C251, C152, C252, C106, C206             | Polypropylene Capacitor 0.1uF                      | Kemet                 | R71MF31004030K              |   |
| 8                           | D103, D104, D105, D106, D203, D204, D205, D206 | Diode  | Vishay/Dale           | 1N4148TR                    |   |
| 2                           | P101, P201                                     | Trim Potentiometer                                 | Bourns                | 3362P-1-202LF               |   |
| 2                           | R122, R222                                     | Resistor, Metal Oxide 5R1                          | KOA Speer             | MOSX3CT521R5R1J             |   |
| 4                           | R101, R201, R105, R205                         | Resistor, Metal Film, 0.1% 1K                      | Vishay/Dale           | RN55E1001BB14               | 0.1% precision resistors on the input stage so that gain is precisely matched between channels.   |
| 5                           | R102, R202, R106, R206, R223                   | Resistor, Metal Film, 0.1% 22K1                    | Vishay/Dale           | RN55C2212BRE6 or YR1B22K1CC | Same  |
| 4                           | R103, R203, R108, R208                         | Resistor, Metal Film, 1% 33R2                      | Vishay/Dale           | RN55D33R2FB14               |   |
| 4                           | R117, R118, R217, R218                         | Resistor, Metal Film, 1% 68R1                      | Vishay/Dale           | RN55D68R1FRE6               | Original value is 68.2R which is not available.   |
| 2                           | R121, R221                                     | Resistor, Metal Film, 1% 100R                      | Vishay/Dale           | RN55D1000FRE6               |   |
| 2                           | R116, R216                                     | Resistor, Metal Film, 1% 130R                      | Vishay/Dale           | RN55D1300FB14               |   |
| 2                           | R114, R214                                     | Resistor, Metal Film, 1% 332R                      | Vishay/Dale           | RN55D3320FRE6               |   |
| 4                           | R109, R209, R115, R215                         | Resistor, Metal Film, 1% 475R                      | Vishay/Dale           | RN55D4750FRE6               |   |
| 2                           | R111, R211                                     | Resistor, Metal Film, 1% 681R                      | Vishay/Dale           | RN55D6810FRE6               | Original value is 68.2R which is not available.   |
| 2                           | R107, R207                                     | Resistor, Metal Film, 1% 825R                      | Vishay/Dale           | RN55D8250FB14               |   |
| 2                           | R124, R224                                     | Resistor, Metal Film, 1% 1K                        | Vishay/Dale           | RN55D1001FRE6               |   |
| 2                           | R112, R212                                     | Resistor, Metal Film, 1% 2K74                      | Vishay/Dale           | RN55D2741FB14               |   |
| 4                           | R119, R120, R219, R220                         | Resistor, Metal Film, 1% 4K75                      | Vishay/Dale           | RN55D4751FRE6               |   |
| 2                           | R113, R213                                     | Resistor, Metal Film, 1% 22K1                      | Vishay/Dale           | CMF5522K100FHFB             |   |
| 2                           | R110, R210                                     | Resistor, Metal Film, 1% 47K5                      | Vishay/Dale           | RN55D4752FB14               |   |
| 1                           | S1   | Toggle Switch                                      | NKK                   | B22AV or A22AV              |   |
| 1                           | Power Switch                                   |  | Carling               |                             |   |
| 2                           | -V supply wire                                 | 2 pieces, 6 inches, 20ga, brown                    |                       |                             | Needed because I relocated the -V supply connections inboard, close to the bypass capacitors. This was a necessary compromise in the board layout to avoid running sensitive signal traces near power supply lines. |
| <b>VERTICAL board stuff</b> |  |  |                       |                             |   |
| 4                           | C615, C616, C617, C618                         | 68pF NPO miller caps                               |                       |                             | Replace original 22pF   |
| 4                           |  | Standoffs, Male-Female                             |                       |                             |   |
| 4                           |  | Standoffs, Female-Female                           |                       |                             |   |
| 8                           |  | M3 5mm Screws with lock washers                    |                       |                             |   |