

**BILL OF MATERIALS (NCV7680 Demonstration Board)**

| Designator     | Qty | Description                            | Value             | Tolerance        | Footprint      | Manufacturer                  | Manufacturer Part Number | Substitution Allowed | Pb-Free |
|----------------|-----|--|-------------------|------------------|----------------|-------------------------------|--------------------------|----------------------|---------|
| U1             | 1   | NCV7680 (SOW-16 epad)                  | -                 | -                | 751R_02_B      | ON Semiconductor              | NCV7680PDWG              | No                   | Yes     |
| U2             | 1   | NTD2955                                | -                 | -                | DPAK3_SMD      | ON Semiconductor              | NTD2955T4G               | No                   | Yes     |
| U3, (D25, D26) | 2   | MRA4003                                | -                 | -                | SMA_DIODE      | ON Semiconductor              | MRA4003T3G               | No                   | Yes     |
| D1-D24         | 24  | Superflux LED (Lumileds)               | Amber             | N/A              | LED_SUPERFLUX  | Philips                       | HPWN-BL00-0002           | No                   | Yes     |
| C1,C2          | 2   | Input / Output Capacitor               | 1 $\mu$ F, 50V    | ( $\pm$ 10%) X7R | 1210           | KEMET                         | C1210C105K3RACTU         | Yes                  | Yes     |
| C3             | 1   | Debounce Capacitor                     | 10nF, 50V         | ( $\pm$ 10%) X7R | 0805           | AVX                           | 0805C103KAT              | Yes                  | Yes     |
| C4             | 1   | Loop Stabization Capacitor             | 0.22 $\mu$ F, 50V | ( $\pm$ 10%) X7R | 0805           | Murata                        | GCM21BR71H224KA37L       | Yes                  | Yes     |
| R1, R2         | 2   | Logic I/O Resistor                     | 10k               | 1%               | 0805           | Yageo America                 | RC0805FR-0710KL          | Yes                  | Yes     |
| R3             | 1   | Stop Current Program Resistor          | 3.09k             | 1%               | 0805           | Yageo America                 | RC0805FR-073K09L         | Yes                  | Yes     |
| R4             | 1   | Tail Current Program Resistor          | 2.21k             | 1%               | 0805           | Yageo America                 | RC0805FR-072K21L         | Yes                  | Yes     |
| R7             | 1   | VP Program Resistor                    | 8.87k             | 1%               | 0805           | Yageo America                 | RC0805FR-078K87L         | Yes                  | Yes     |
| R5, R6, R8     | 3   | VP Support Resistor                    | 1k                | 1%               | 0805           | Yageo America                 | RC0805FR-071KL           | Yes                  | Yes     |
| J16            | 1   | Jumper Posts (SIP 10), 100mill spacing | -                 | -                | SIP10          | Molex-Waldom Electronics Corp | 22-28-4103               | Yes                  | Yes     |
| J1-J15         | 30  | Jumper Posts 100 mil spacing           | -                 | -                | JMP            | Molex-Waldom Electronics Corp | 22-28-4023               | Yes                  | Yes     |
| J1-J15         | 15  | Jumper                                 | -                 | -                | -              | Sullins Electronic Corp       | SSC02SYAN                | Yes                  | Yes     |
| TP1-TP10       | 10  | Connector Posts                        | -                 | -                | TURRET         | Vector Electronics            | K24C/M                   | Yes                  | Yes     |
| SW1            | 1   | Ballast FET enable switch (3PDT)       | -                 | -                | NKK_3PDT_M2032 | NKK of America                | M2032SS1W03-RO           | Yes                  | Yes     |
| SW2, SW3       | 2   | STOP / Tail control switch (SPDT)      | -                 | -                | C&K_7101       | C&K                           | 7101SYCQE                | Yes                  | Yes     |

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