

Bill of Materials for the NCV78825R1DAGEVB Evaluation Board



| Designator | Quantity | Description | Value | Tolerance | Footprint | Manufacturer | Manufacturer Part Number | Substitution Allowed | Lead Free |
|------------|----------|-----------------------|----------------------------|-----------|-----------------|------------------|--------------------------|----------------------|-----------|
| C1,C7,C8 | 3 | Ceramic Capacitor SMD | 470nF, 16V, X7R | 10% | CAP0603 | TDK | C1608X7R1C474K080AC | YES | YES |
| C2,C9 | 2 | Ceramic Capacitor SMD | 100nF, 100V, X7R | 10% | CAP0805 | AVX | 08051C104KAZ2A | YES | YES |
| C6,C13 | 1 | Ceramic Capacitor SMD | 22nF, 100V, X7R | 10% | CAP0603 | KEMET | C0603C223K1RACTU | YES | YES |
| C12 | 1 | Ceramic Capacitor SMD | 100nF, 50V, X7R | 10% | CAP0603 | KEMET | C0603C104K5RACTU | YES | YES |
| C3,C5,C10 | 3 | Ceramic Capacitor SMD | 2.2µF, 100V, X7R | 10% | CAP1210 | KEMET | C1210C225K1RACTU | YES | YES |
| R1,R4,R5 | 3 | Resistor SMD | 0R0, 0.5W | 1% | R1210 | VISHAY | CRCW12100000ZSTA | YES | YES |
| R2,R6 | 3 | Resistor SMD | 100k, 0.125W | 1% | R0805 | VISHAY | CRCW0805100KFKEA | YES | YES |
| R3,R7 | 2 | Resistor SMD | 2.0K, 0.1W | 1% | R0603 | VISHAY | CRCW06032K00FKEA | YES | YES |
| R8,R9 | 3 | Resistor SMD | 10k, 0.1W | 5% | R0603 | YAGEO | RC0603JR-0710KL | YES | YES |
| L1,L2 | 2 | Inductor SMD | 47µH | 20% | 12mm x 12mm | WURTH ELEKTRONIK | 7447709470 | YES | YES |
| J_BCKx_R | 2 | STRAIGHT HEADER TH | Dual Row 2x6 Pin | | 2x6 Pin, 2.54mm | WURTH | 61301221121 | YES | YES |
| J_BCKx_L | 2 | STRAIGHT HEADER TH | Dual Row 2x8 Pin | | 2x8 Pin, 2.54mm | WURTH | 61301621121 | YES | YES |
| Q1,Q2 | 1 | Power MOSFET SMD | N channel, 50A, 60V, 9.8mΩ | | WDFN8 | ON SEMICONDUCTOR | NVTF55C673NLWFTAG | YES | YES |
| U1 | 1 | NCV78825 LED Driver | 2x3A Buck | | SSOP36-EP | ON SEMICONDUCTOR | NCV78825DQ0R2G | No | YES |
| U2 | 1 | EEPROM Serial-SPI | 32K-Bit 4K X 8 | | TSSOP8 | ON SEMICONDUCTOR | CAV25320YE-GT3 | YES | YES |