



Bill of Materials for the NCP51820GAN2GEVB Evaluation Board

| Designator | Quantity | Description | Value | Tolerance | Footprint | Manufacturer | Manufacturer Part Number | Substitution Allowed | Lead Free |
|------------|----------|-----------------------------------|-------|-----------|-------------|------------------|--------------------------|----------------------|-----------|
| C4 | 1 | CAP, SMD, CERAMIC, 25V, X7R | 100nF | | 603 | Samsung | CL10B104KA8NNNC | Yes | Yes |
| C5 | 1 | CAP, SMD, CERAMIC, 25V, X7R | 470nF | | 603 | Samsung | CL10B474KA8NFNC | Yes | Yes |
| C7 | 1 | CAP, SMD, CERAMIC, 50V, NPO | 10pF | | 402 | Yageo | CC0402JRNPO9BN100 | Yes | Yes |
| C10 | 1 | CAP, SMD, CERAMIC, 25V, X7R | 0.1uF | | 402 | Murata | GRM155R71E104KE14D | Yes | Yes |
| C1,C3 | 2 | CAP, SMD, CERAMIC, 50V, NPO | 3.9nF | | 603 | Murata | GCM1885C1H392JA16D | Yes | Yes |
| C2,C6,C11 | 3 | CAP, SMD, CERAMIC, 25V, X7R | 1uF | | 603 | Samsung | CL10B105KA8NNNC | Yes | Yes |
| C8-9 | 2 | CAP, SMD, CERAMIC, 630V, X7R | 0.1 | | 1812 | TDK | C4532X7R2J104K230KA | Yes | Yes |
| D1 | 1 | DIODE FAST REC 1A 600V | | | SMA | ON Semiconductor | ES1J | No | Yes |
| J1 | 1 | Connector, Header, 100Mil spacing | | | Thru-Hole | Würth | 61300611121 | Yes | Yes |
| J5, J6 | 5 | Testpin, Gold, 40mil, | | | Thru-Hole | Mill-Max | 1352-1 | Yes | Yes |
| J2-4 | 3 | Testpin, Gold, 40mil, | DNI | | Thru-Hole | Mill-Max | 1352-1 | Yes | Yes |
| Q1-2 | 2 | GaN FET, 650V, 26A, 56mOhm | | | QFN-8x8 | Panasonic | PGA26E07BA | No | Yes |
| R6 | 1 | RES, SMD, 1/10W | 60.4k | | 603 | Yageo | RC0603FR-0760K4L | Yes | Yes |
| R12 | 1 | RES, SMD, 1/10W | 0 | | 603 | Yageo | RC0603JR-070RL | Yes | Yes |
| R1,R2,R7 | 3 | RES, SMD, 1/10W | 10k | | 603 | Yageo | RC0603FR-0710KL | Yes | Yes |
| R3-4 | 2 | RES, SMD, 1/10W | 121 | | 603 | Yageo | RC0603FR-07121RL | Yes | Yes |
| R8,R10 | 2 | RES, SMD, 1/10W | 3.01 | | 603 | Yageo | RC0603FR-073R01L | Yes | Yes |
| R5,R9,R11 | 3 | RES, SMD, 1/10W | 2 | | 603 | Yageo | RC0603FR-072RL | Yes | Yes |
| U1 | 1 | High Speed Half Bridge GaN Driver | | | MLP 4 x4-15 | ON Semiconductor | NCP51820 | No | Yes |