



Bill of Materials for the STR-LOGIC-GATES-EVK Evaluation Board

| Designator                               | Quantity | Description  | Value              | Tolerance | Footprint                 | Manufacturer     | Manufacturer Part Number      | Substitution Allowed | Lead Free |
|--|----------|--|--------------------|-----------|---------------------------|------------------|-------------------------------|----------------------|-----------|
| C1 C2                                    | 2        | CAP CER 1UF 25V X7R 0603   | 1uF                |           | 0603                      | Murata           | GCM188R71E105KA64             | Yes                  | Yes       |
| C3 C9 C13 C15                            | 4        | Generic 0402 SMD Capacitor   | 1uF                |           | 0402                      | Murata           | GRM155R61A105ME15             | Yes                  | Yes       |
| C4 C10 C11 C12 C14 C17                   | 6        | Generic 0402 SMD Capacitor   | 4.7uF              |           | 0402                      | Murata           | GRM155R60J475ME47             | Yes                  | Yes       |
| C5 C6                                    | 2        | Generic 0402 SMD Capacitor   | 7.5pF              |           | 0402                      | Murata           | GRM1555C1E7R5DA01             | Yes                  | Yes       |
| C7 C8                                    | 2        | Generic 0402 SMD Capacitor   | 12.5pF             |           | 0402                      | Murata           | GRM1555C1E12QJA01             | Yes                  | Yes       |
| C16                                      | 1        | Generic 0402 SMD Capacitor   | 100nF              |           | 0402                      | Murata           | GRM155R60J104MA01             | Yes                  | Yes       |
| D1 D2 D5 D6 D7 D8 D12                    | 7        | Blue LED   | 150060BS75000      |           | 0603                      | Würth Elektronik | 150060BS75000                 | Yes                  | Yes       |
| D3 D4 D11                                | 3        | Green LED  | 150060GS75000      |           | 0603                      | Würth Elektronik | 150060GS75000                 | Yes                  | Yes       |
| D9                                       | 1        | Auto ESD Protection Diodes   | SESD7L             |           | SOT-723                   | ON Semiconductor | SESD7L5.0                     | No                   | Yes       |
| D10                                      | 1        | Red LED  | 150060RS75000      |           | 0603                      | Würth Elektronik | 150060RS75000                 | Yes                  | Yes       |
| D13                                      | 1        | Yellow LED   | 150060YS75000      |           | 0603                      | Würth Elektronik | 150060YS75000                 | Yes                  | Yes       |
| FB1                                      | 1        | Ferrite bead/Impedance type filter                                 | 220@100M           |           | 0805                      | Murata           | BLM21AG221SN1                 | Yes                  | Yes       |
| J1 J2                                    | 2        | Standard 1x2pin 100mil Pitch Header                                | 613 002 111 21     |           | 1x2pin 100mil             | Würth Elektronik | 613 002 111 21                | Yes                  | Yes       |
| J3 J4 J7 J8                              | 4        | PLASTIC SPACER STUD METRIC THREAD M3 10MM                          | 971100365          |           | M3 10MM                   | Würth            | 971100365                     | Yes                  | Yes       |
| J5                                       | 1        | Mini USB1/2 Type-B Connector                                       | 65100516121        |           | Mini USB1/2 B             | Würth Elektronik | 65100516121                   | Yes                  | Yes       |
| J6                                       | 1        | Standard Arm Cortex Debug Connector                                | FTSH-105-01-F-DV-K |           | 2x5pin 50mil Cortex Debug | Samtec           | FTSH-105-01-F-DV-K            | Yes                  | Yes       |
| R1 R2 R3 R4 R5 R6                        | 6        | RES SMD 3.32K OHM 1% 1/10W 0603                                    | 3.32K              |           | 0603                      | Vishay           | CRCW0603K32FK                 | Yes                  | Yes       |
| R7 R8                                    | 2        | RES SMD 8.87K OHM 1% 1/10W 0603                                    | 8.87K              |           | 0603                      | Vishay           | CRCW0603K87FK                 | Yes                  | Yes       |
| R9 R12                                   | 2        | Generic 0402 SMD Resistor  | 10k                |           | 0402                      | Yageo            | RC0402FR-0710KL               | Yes                  | Yes       |
| R10                                      | 1        | Generic 0402 SMD Resistor  | 12.1k              |           | 0402                      | Yageo            | RC0402FR-0712K1L              | Yes                  | Yes       |
| R11                                      | 1        | Generic 0402 SMD Resistor  | 21.5k              |           | 0402                      | Yageo            | RC0402FR-0721K5L              | Yes                  | Yes       |
| R13                                      | 1        | Generic 0402 SMD Resistor  | 1.43k              |           | 0402                      | Yageo            | RC0402FR-071K43L              | Yes                  | Yes       |
| R14                                      | 1        | Generic 0402 SMD Resistor  | 100                |           | 0402                      | Yageo            | RC0402FR-07100RL              | Yes                  | Yes       |
| SW1                                      | 1        | SWITCH TACTILE SPST-NO 0.05A 12V                                   | 434153017835       |           | MOM1 SMD                  | Würth Elektronik | 434153017835                  | Yes                  | Yes       |
| TP1 TP2 TP3 TP4 TP5 TP6 TP7 TP8 TP9 TP10 | 10       | Passive Probe Tip Tektronix P5050 (Tan) Tip                        | TP                 |           | 0.75mm                    | DNI              | DNI                           | Yes                  | Yes       |
| TP11 TP12 TP13 TP14                      | 4        | Surface Mount 1mm Circle Test Point                                | TP                 |           | 1mm Circle                | DNI              | DNI                           | Yes                  | Yes       |
| U1                                       | 1        | Flexible Choice Logic (9 Configurable Functions)                   | NL7SZ97            |           | SOT-363                   | ON Semiconductor | NL7SZ97                       | No                   | Yes       |
| U2                                       | 1        | Flexible Choice Logic (9 Configurable Functions)                   | NL7SZ58            |           | SOT-363                   | ON Semiconductor | NL7SZ58                       | No                   | Yes       |
| U3                                       | 1        | 3.3V Voltage Regulator, LDO, Ultra Low Noise, Ultra Low Iq, 500 mA | NCP705             |           | WDFN6                     | ON Semiconductor | NCP705MT33TCG                 | No                   | Yes       |
| U4                                       | 1        | USB to BASIC UART IC   | FT230X             |           | QFN16 4x4                 | FTDI             | FT230X                        | Yes                  | Yes       |
| U5                                       | 1        | EFM32 Giant Gecko 32-bit Microcontroller                           | EFM32GG380F1024    |           | QFP100 14x14              | Silicon Labs     | EFM32GG380F1024-QFP100        | Yes                  | Yes       |
| Y1                                       | 1        | CRYSTAL 48.0000MHZ 8PF SMD   | 48MHz              |           | 5x3.2mm                   | NDK              | NX5032GA-48.000000MHZ-LN-CD-1 | Yes                  | Yes       |

|    |   |  |            |  |                |               |  |     |     |
|----|---|--|------------|--|----------------|---------------|--|-----|-----|
| Y2 | 1 | Crystals 32.768 kHz 12.5 pF +/-20 PPM -40/+85C | 32.768 kHz |  | 2 pin w/ shell | Micro Crystal | MS3V-T1R-32.768kHz-12.5pF-20PPM-TA-QC-Au | Yes | Yes |
|----|---|--|------------|--|----------------|---------------|--|-----|-----|