

Bill of materials
Table 1. X-NUCLEO-DO41A1 bill of materials

| Item | Q.ty | Ref. | Part/Value | Description | Manufacturer | Order code |
|------|------|-----------------------------|--|--|------------------------|----------------------------|
| 1 | 4 | C1 C2 C3 C4 | 10nF, 0603 (1608 Metric), 50V, +/-10% | CAPACITOR CERAMIC SMD 0603 | Würth Electronics Inc. | 885012206089 |
| 2 | 8 | C5 C6 C7 C8 C14 C15 C16 C17 | 100nF, 0603 (1608 Metric), 16V, +/-10% | CAPACITOR CERAMIC SMD 0603 | Würth Electronics Inc. | 885012206046 |
| 3 | 0 | C9 | 47uF (N.M.), Radial, Can, 100V, +/-20% | CAP 47 UF 20% 100 V (not mounted) | Würth Electronics Inc. | 860040875002 |
| 4 | 3 | C10 C18 C19 | 2.2uF, 1210 (3225 Metric), 100V, +/-10% | CAP CER 2.2UF 100V X7R 1210 | Würth Electronics Inc. | 885012209071 |
| 5 | 0 | C11 C12 | 4700pF, 1825 (4564 Metric), 3000V (3kV), +/-10% | CAP CER 4700PF 3KV X7R 1825 (not mounted) | Vishay Vitramon | HV1825Y472KXHATHV |
| 6 | 1 | C13 | 0.1uF, 0805 (2012 Metric), 100V, +/-10% | CAP CER 0.1UF 100V X7R 0805 | Würth Electronics Inc. | 885012207128 |
| 7 | 3 | CN1 CN2 CN3 | 691214110002, 7.4X7 pitch 3.5 | TERM BLK 2POS SIDE ENT 3.5MM PCB | Würth Electronics Inc. | 691214110002 |
| 8 | 0 | CN4 | 691214110002, 7.4X7 pitch 3.5 | TERM BLK 2POS SIDE ENT 3.5MM PCB (not mounted) | Würth Electronics Inc. | 691214110002 |
| 9 | 1 | CN5 | SSQ-110-04-F-S | CONN RCPT 10POS 0.1 GOLD PCB | Samtec Inc. | SSQ-110-04-F-S |
| 10 | 2 | CN6 CN9 | SSQ-108-04-F-S | CONN RCPT 8POS 0.1 GOLD PCB | Samtec Inc. | SSQ-108-04-F-S |
| 11 | 0 | CN7 CN10 | SSQ-119-04-L-D | CONN RCPT 38POS 0.1 GOLD PCB (not mounted) | Samtec Inc. | SSQ-119-04-L-D |
| 12 | 1 | CN8 | SSQ-106-04-F-S | CONN RCPT 6POS 0.1 GOLD PCB | Samtec Inc. | SSQ-106-04-F-S |
| 13 | 1 | D5 | STPS1H100A, DO-214AC, SMA, 1A | DIODE SCHOTTKY 100V 1A SMA | ST | STPS1H100A |
| 14 | 0 | D6 | BAT48JFILM, SC-76, SOD-323, 750mV @ 200mA 350mA (DC) | DIODE SCHOTTKY 40V 350MA SOD323 (not mounted) | ST | BAT48JFILM |
| 15 | 4 | D1 D2 D3 D4 | 150060VS75000, 0603 (1608 Metric), 20mA | LED GREEN CLEAR 0603 SMD | Würth Electronics Inc. | 150060VS75000 |

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| 16 | 4 | D7 D8 D9 D10 | 150060RS75000, 0603 (1608 Metric), 20mA | LED RED CLEAR 0603 SMD | Würth Electronics Inc. | 150060RS75000 |
| 17 | 4 | J1 J2 J5 J46 | JUMPER-con2-strip-male | JUMPER-CONN HEADER .100 STR 2POS | Würth Electronics Inc. | 61300211121 |
| 18 | 0 | J3 | JUMPER-con2-strip-male | JUMPER-CONN HEADER .100 STR 2POS | Würth Electronics Inc. | 61300211121 |
| 19 | 1 | J4 | con8-2x4-strip-male | CONN HEADER .100 DUAL STR 8POS | Würth Electronics Inc. | 61300821121 |
| 20 | 6 | R1 R2 R3 R4 R5 R6 | 220k 0603 (1608 Metric) 0.1W, 1/10W 1% | CHIP RESISTOR SMD 1% 1/10W 0603 | ANY | ANY |
| 21 | 8 | R7 R8 R9 R10 R11 R12 R13 R14 | 15k 0603 (1608 Metric) 0.1W, 1/10W 1% | CHIP RESISTOR SMD 1% 1/10W 0603 | ANY | ANY |
| 22 | 12 | R101 R102 R103 R104 R107 R108 R110 R113 R114 R115 R116 R120 | 100, 0603 (1608 Metric), 0.1W, 1/10W, +/-1% | RES SMD 100 OHM 1% 1/10W 0603 | ANY | ANY |
| 23 | 0 | R105 R106 R109 R111 R112 R117 R118 R119 | 100, 0603 (1608 Metric), 0.1W, 1/10W, +/-1% | RES SMD 100 OHM 1% 1/10W 0603 | ANY | ANY |
| 24 | 5 | SW1 SW2 SW3 SW4 SW5 | con3-strip-male | CONN HEADER VERT 3POS 2.54MM MALE | Würth Elektronik | 61300311121 |
| 25 | 1 | TP1 | 5001 0.100" Dia x 0.180" L (2.54mm x 4.57mm) | TEST POINT PC MINI .040"D BLACK | Keystone Electronics | 5001 |
| 26 | 1 | U1 | IPS4140HQ-1 QFN48L (8x6 mm) | QUAD HIGH-SIDE INTELLIGENT POWER | ST | IPS4140HQ-1 |
| 27 | 1 | U2 | SMC30J30CA, SMC, 3kW | TVS DIODE 33.3V 48.4V SMC | ST | SMC30J30CA |
| 28 | 4 | U3 U4 U5 U6 | STISO621, 8-SOIC (0.268", 6.81mm Width) | Dual Channel Digital Isolator | ST | STISO621 |
| 29 | 0 | U7 | ESDA15P60-1U1 M, 2-UDFN | TVS DIODE 13.2V 22.7V 1610 (not mounted) | ST | ESDA15P60-1U1M |
| 30 | 1 | U8 | LDO40LPU33 | 400 mA, 38 V low-dropout regulator | ST | LDO40L |
| 31 | 13 | N/A | Shunt, 2.54mm | Close jumper | Würth Electronics Inc. | 60900213421 |

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