

Bill of Materials

TI DESIGNS

TIDM-NFC-I2C-MODULE

| Reference | Qty | Value | Part Description | Manufacturer Part Number | PCB Footprint |
|----------------------------|-----|--------|---------------------------------|-----------------------------|---------------|
| C1 | 1 | 10uF | CAP CER 10UF 6.3V 20% X5R 0603 | GRM188R60J106ME47 | 0603 |
| C2 | 1 | 220nF | CAP CER 220NF 10V 10% X7R 0402 | CC0402KRX7R6BB104 | 0402 |
| C3, C4, C24, C25, C26 | 5 | 27pF | CAP CER 27PF 16V 10% CH 0402 | C0402CH1C270K020BC | 0402 |
| C5, C7, C9, C11, C34 | 4 | 2.2uF | CAP CER 2.2UF 10V 10% X5R 0402 | C1005X5R1C225K050BC | 0402 |
| C6, C8, C10, C12, C13, C35 | 6 | 0.1uF | CAP CER 0.1UF 10V 10% X5R 0402 | LMK105BJ104KV-F | 0402 |
| C15, C16, | 2 | 1500pF | CAP CER 1500PF 16V 10% X7R 040 | CGJ2B2X7R1C152K050BA | 0402 |
| C17, C18 | 2 | 1200pF | CAP CER 1200PF 10V 10% X5R 0201 | 0201ZD122KAT2A | 0402 |
| C19 | 1 | 220pF | CAP CER 220PF 16V 10% X7R 0201 | GRM033R71C221KA01D | 0402 |
| C20, C22 | 2 | 680pF | CAP CER 680PF 16V 10% X7R 0201 | GRM033R71C681KA01D | 0402 |
| C21, C27 | 2 | 10pF | CAP CER 10PF 16V 10% NP0 0402 | C0402C100K4GACTU | 0402 |
| C23 | 1 | 100pF | CAP CER 100PF 16V 10% NP0 0402 | C0402C101K4GACTU | 0402 |
| L2 | 1 | 150nF | CAP CER 0.15UF 10V 10% X5R 0402 | GRM155R61A154KE19D | 0805 |
| L3 | 1 | 330nF | CAP CER 0.33UF 10V 10% X5R 0402 | GRM155R61A334KE15D | 0805 |
| R1, R7, R8, R12, | 4 | 1k | RES 1.00K OHM 1/16W 1% 0402 SMD | RC0402FR-071KL | 0402 |
| R2 | 1 | 47k | RES 10K OHM 1/16W 1% 0402 | RC1005F103CS | 0402 |
| R3 | 1 | 220k | RES 220K OHM 1/16W 1% 0402 SMD | RC0402FR-07220KL | 0402 |
| R4 | 1 | 10k | RES 10K OHM 1/16W 1% 0402 | RC1005F103CS | 0402 |
| R5, R6 | 2 | 4.7k | RES 4.7K OHM 1/10W 1% 0402 SMD | ERJ-2RKF4701X | 0402 |
| R9, R10 | 2 | 2.2k | RES 2.20K OHM 1/16W 1% 0402 SMD | RC0402FR-072K2L | 0402 |
| R11 | 1 | 1.2k | RES 1.2K OHM 1/16W 1% 0402 SMD | MCR01MRTF1201 | 0402 |

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|-----------|-----|----------------|----------------------------------|-----------------------------|---------------|
| U1 | 1 | TRF7970A | IC RFID/NFC AFE 13.56MHZ 32QFN | TRF7970ARHBR | QFN32 |
| U2 | 1 | MSP430G2553 | IC MCU 16BIT 16KB FLASH 20TSSOP | MSP430G2553IPW20R | RHB32 |
| U3 | 1 | I2C Translator | IC V-LEVL XLATR I2C/SMBUS 8X2SON | PCA9306DQER | PSOP-8 |
| UFL1 | 1 | UFL Connector | CONN UMC JACK STR 50 OHM SMD | U.FL-R-SMT(10) | U.FL |
| Y1 | 1 | Crystal | 13.56 MHz, (Load Cap = 12pF) | ECS-135.600-CD-0374 | SMD 5X3.2 |

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