

| BILL OF MATERIAL | | | | | |
|---------------------------------|---|-----------------|--------------|----------------------|--|
| TC4 Shield, Version 4.00 | | | | | |
| Part | Value | Device | Package | DigiKey Cat. | Description |
| SURFACE MOUNT COMPONENTS | | | | | |
| ADC1 | MCP3424SL | MCP3424SL | SO14 | MCP3424-E/SL-ND | 18-bit multi-channel delta-sigma AD converter with I2C interface. Microchip. |
| C1 | 10uF | C-EUC1206 | C1206 | 495-2237-1-ND | CAPACITOR, Tantalum (SM) |
| C4 | 0.1uF | C-EUC1206 | C1206 | 445-4007-1-ND | CAPACITOR, CERAMIC (SM) |
| D1 | S1AB-13-F | DIODE-DO214AA | DO214AA | S1AB-FDICT-ND | DIODE (SM) |
| IC1 | 24LC512 | 24LC512-I/SM | SO-08M | 24LC512-I/SM-ND | Serial EEPROM |
| R3 | 2K | R-US_R1206 | R1206 | P2.0KECT-ND | RESISTOR (SM) |
| R4 | 2K | R-US_R1206 | R1206 | P2.0KECT-ND | RESISTOR (SM) |
| U1 | MCP9800 | MCP9800 | SOT23-5L | MCP9800A0T-M/OTCT-ND | Temperature sensor I2C output, Microchip. |
| THRU-HOLE COMPONENTS | | | | | |
| ANLG1 | | PINHD-1X3 | 1X03 | A26514-40-ND | PIN HEADER |
| ANLG2 | | PINHD-1X3 | 1X03 | (note 1) | PIN HEADER |
| C2 | 0.1uF | C-EU025-025X050 | C025-025X050 | BC1160CT-ND | CAPACITOR, CERAMIC (THRU) |
| C3 | 0.1uF | C-EU025-025X050 | C025-025X050 | BC1160CT-ND | CAPACITOR, CERAMIC (THRU) |
| I/O3 | | PINHD-1X2 | 1X02 | A32705-40-ND | PIN HEADER, 90 DEG |
| I2C | | PINHD-1X4 | 1X04 | (note 1) | PIN HEADER |
| J1_DIGITAL | | M08 | 1X08 | (note 4) | Header 8 |
| J2_ANALOG | | M06SIP | 1X06 | (note 4) | Header 6 |
| J3_DIGITAL | | M08 | 1X08 | (note 4) | Header 8 |
| POWER | | M06SIP | 1X06 | (note 4) | Header 6 |
| JEE3 | | PINHD-1X6 | 1X06 | (notes 1, 2) | PIN HEADER |
| GNDPT | | JP1E | JP1 | (notes 1, 2) | PIN HEADER |
| LCD | | PINHD-1X8 | 1X08 | (note 3) | PIN HEADER, 90 DEG |
| OT1 | | PINHD-1X2 | 1X02 | (note 3) | PIN HEADER, 90 DEG |
| OT2 | | PINHD-1X2 | 1X02 | (note 3) | PIN HEADER, 90 DEG |
| Q1 | 2N3904 | 2N3904 | TO92D | 2N3904FS-ND | NPN TRANSISTOR |
| Q2 | 2N3904 | 2N3904 | TO92D | 2N3904FS-ND | NPN TRANSISTOR |
| R1 | 4.7K | R-US_0204/7 | 0204/7 | P4.7KBACT-ND | RESISTOR (THRU) |
| R2 | 4.7K | R-US_0204/7 | 0204/7 | P4.7KBACT-ND | RESISTOR (THRU) |
| TC1 | | MPT 0.5/2-2.54 | 2POL254 | 277-1273-ND | PHOENIX CONTACT NO. 1725656 |
| TC2 | | MPT 0.5/2-2.54 | 2POL254 | 277-1273-ND | PHOENIX CONTACT NO. 1725656 |
| TC3 | | MPT 0.5/2-2.54 | 2POL254 | 277-1273-ND | PHOENIX CONTACT NO. 1725656 |
| TC4 | | MPT 0.5/2-2.54 | 2POL254 | 277-1273-ND | PHOENIX CONTACT NO. 1725656 |
| RST | | B3F-1020 | | SW402-ND | Omron SWITCH TACT 6MM MOM 100GF |
| Notes | | | | | JGG |
| | 1. Buy one 40-pin vertical breakaway header strip and use it for all. | | | | 3/12/2011 |
| | 2. This item is optional. | | | | Rev. 5/19/2011 |
| | 3. Buy one 40-pin 90 degree breakaway header strip and use it for all. | | | | |
| | 4. Sets of stackable headers are available from Adafruit.com | | | | |
| | http://www.adafruit.com/index.php?main_page=product_info&products_id=85 | | | | |