

UTFT

Arduino and chipKit Universal TFT display library

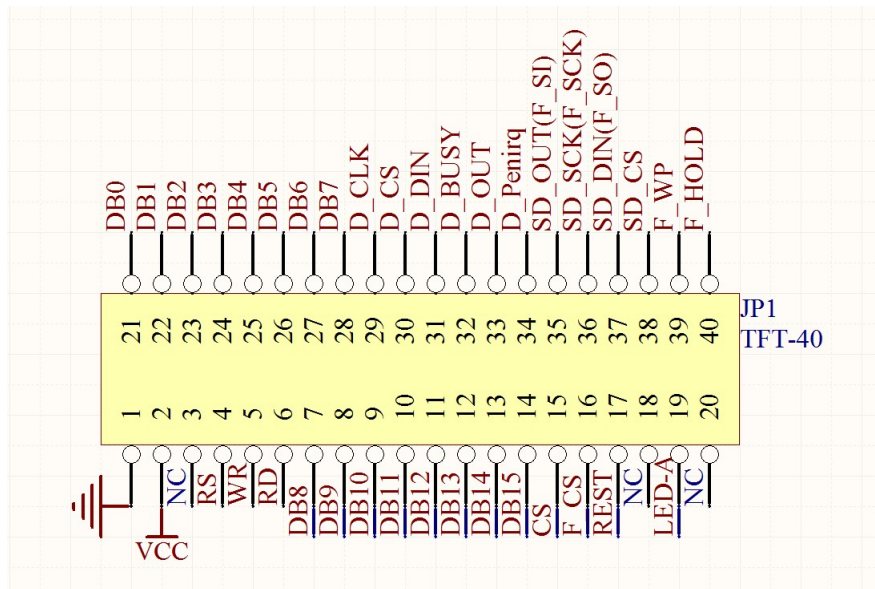
Requirements



The library require the following connections for 8 bit and 16 bit¹ display modules (the serial display modules does not have any required pins):

| Signal | TFT Module pin | Arduino | | Bobuino | Teensy 3.x ² | chipKit | |
|------------------|----------------|----------------------------|-----------------------|----------|-------------------------|-------------------------|--------------------|
| | | 2009/Uno/Leonardo | Mega/Due ³ | | | Uno32/uC32 ⁴ | Max32 ⁵ |
| DB0 ⁶ | 21 | D8 | D37 | D8 | D16 | D3 | D3 |
| DB1 ⁶ | 22 | D9 | D36 | D9 | D17 | D5 | D5 |
| DB2 ⁶ | 23 | D10 | D35 | D10 | D19 | D6 | D6 |
| DB3 ⁶ | 24 | D11 | D34 | D11 | D18 | D9 | D9 |
| DB4 ⁶ | 25 | D12 | D33 | D12 | D0 | D10 | D10 |
| DB5 ⁶ | 26 | D13 | D32 | D13 | D1 | D34 | D39 |
| DB6 ⁶ | 27 | A0 (D14) | D31 | A0 (D14) | D32 | D36 | D47 |
| DB7 ⁶ | 28 | A1 (D15) | D30 | A1 (D15) | D25 | D37 | D77 |
| DB8 | 7 | D0 | D22 | D0 | D2 | D26 | D37 |
| DB9 | 8 | D1 | D23 | D1 | D14 | D27 | D36 |
| DB10 | 9 | D2 | D24 | D2 | D7 | D28 | D35 |
| DB11 | 10 | D3 | D25 | D3 | D8 | D29 | D34 |
| DB12 | 11 | D4 | D26 | D4 | D6 | D30 | D33 |
| DB13 | 12 | D5 | D27 | D5 | D20 | D31 | D32 |
| DB14 | 13 | D6 | D28 | D6 | D21 | D32 | D31 |
| DB15 | 14 | D7 | D29 | D7 | D5 | D33 | D30 |
| RS | 4 | Any free pin | | | | | |
| WR | 5 | Any free pin | | | | | |
| RD | 6 | Must be pulled high (3.3v) | | | | | |
| CS | 15 | Any free pin | | | | | |
| REST | 17 | Any free pin | | | | | |

Please note that these requirements are for the default shields. If you are using a shield that require a certain #define to be activated the required pinout will change.



Common TFT module pinout

¹ 16 bit Latched has its own requirements. See the next page.

² The library has only been tested with Teensy 3.1

³ Pin-out is slightly different when using the CTE TFT LCD/SD Shield for Arduino Due. Please see the "hardware/arm/HW_ARM_defines.h" file.

⁴ To use a 16 bit display module with a chipKit Uno32/uC32 you **MUST** place the JP4 jumper in the PWM/RD4 position (jumper over the two pins closest to the USB connector)

⁵ Pin-out is slightly different when using the AquaLEDSources shield. Please see the "hardware/pic32/HW_PIC32_defines.h" file.

⁶ Connect DB0-DB7 to GND for 8bit display modules

The 16 bit latched display shield has its own requirements:

| Signal | Shield pin | Arduino | | Bobuino | Teensy 3.1 | chipKit |
|--------|------------|------------------------|-------------|--------------|-------------|-------------|
| | | 2009/Uno/Leonardo/Mega | Due | | | All types |
| DB0 | D0 | D0 | Unsupported | D0 | Unsupported | Unsupported |
| DB1 | D1 | D1 | Unsupported | D1 | Unsupported | Unsupported |
| DB2 | D2 | D2 | Unsupported | D2 | Unsupported | Unsupported |
| DB3 | D3 | D3 | Unsupported | D3 | Unsupported | Unsupported |
| DB4 | D4 | D4 | Unsupported | D4 | Unsupported | Unsupported |
| DB5 | D5 | D5 | Unsupported | D5 | Unsupported | Unsupported |
| DB6 | D6 | D6 | Unsupported | D6 | Unsupported | Unsupported |
| DB7 | D7 | D7 | Unsupported | D7 | Unsupported | Unsupported |
| CS | A0 | Any free pin | Unsupported | Any free pin | Unsupported | Unsupported |
| RS | A1 | Any free pin | Unsupported | Any free pin | Unsupported | Unsupported |
| WR | A2 | Any free pin | Unsupported | Any free pin | Unsupported | Unsupported |
| RST | A3 | Any free pin | Unsupported | Any free pin | Unsupported | Unsupported |
| ALE | A5 | Any free pin | Unsupported | Any free pin | Unsupported | Unsupported |

