



ATEVK-MXT1665TDAT-C Information Sheet

Documentation Zip Contents

Information Sheet
Configuration file (xcfg)
PCB Design file schematic
PCB Design file layout
Touchscreen Design File

Kit Contents

1x 12" Touchscreen Assembly (MISC1072)
1x ATMXT1665TDAT-SPI-PCB (10972)
1x ATUSB-HSBB-PCB (10945)
1x ATAUTO-SPI-CABLE (CAB1022)
1x Copper Backplate (MISC1075)
1x Ground Connection Wire (CAB1021)
6x Self Adhesive Feet (HW1009)
1x USB Cable (CAB0019)

Using the Evaluation Kit

This kit (ATEVK-MXT1665TDAT-C) is for the evaluation and development of Microchip maXTouch™ applications using the mXT1665TDAT Integrated Circuit (IC).

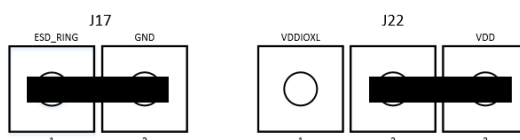
In this example, the device can be connected through a flexible printed circuit (FPC) to an Indium Tin Oxide (ITO) glass touchscreen. A set of self-adhesive feet have been supplied with the kit to allow for the touchscreen assembly to be used on the desk or bench. Alternatively, the touchscreen assembly may be mounted to a suitable display for evaluation of *on-screen* performance.



Caution: This unit contains a glass panel in front of the touchscreen. Whilst the glass is strengthened to reduce the risk of breakage, care should be taken not to subject the glass to excessive force in order to reduce the risk of glass breakage that may result in minor or moderate injury.

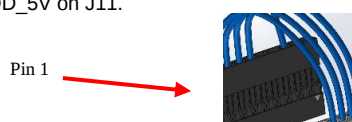
Jumper Settings

Note! If J17 is populated, please connect jumper link. Always fit J22.



Assembling the Evaluation Kit for SPI

Attach the small crimp-6pin contact on the cable to J7 on the ATUSB-HSBB-PCB. Then attach the other end of the cable with the crimp-10pin contact to J11 on the ATMXT1665TDAT-SPI-PCB, taking care to ensure that Pin1, indicated by the arrow at the far right of the 10pin header, is located to Pin1 VDD_5V on J11.





Copper Backplate

The supplied adhesive flex panel, which can be cut to size, can be used to simulate display load. Connect it to any available GND pin. Before adhering the panel, remember to remove any protective coating from the touchscreen. The supplied configuration is tuned for operation with the flex panel in place, for optimum performance please use the flex panel.

Evaluation Software

A PC application: maXTouch Studio LITE is required to facilitate evaluation of the product.

<https://www.microchip.com/maxtouch>

The LITE version of the tool allows viewing of messages and objects and loading of the configuration files. To tune and change objects, a full version of the tool is available for download also. Please contact your local Microchip representative for details.

- Install the software for maXTouch Studio.
- Connect the supplied USB cable to the ATMXT1665TDAT-SPI-PCB and to any available USB port.

NOTE: If this is the first time the tool has been run, then perform the following steps:

- In maXTouch Studio toolbar select the menu Server > Load Bridge Client
- Open the BridgeClients folder and select bridge_client_hsbb.exe
- Click the "Open" button – the Bridge Client will load.
- Select the menu Tools > Options
- In the COM Port Number section tick *Find Automatically*.
- In the maXTouch Communications section tick SPI. Then click the OK button.
- Select Server > Hide Bridge Client (do NOT use the 'red X' in the Bridge Client window to close the window).

Object Explorer

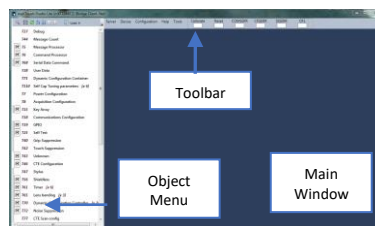
The maXTouch Studio application via the Object Explorer allows for various operating parameters to be configured. The Object Explorer is also the means by which different configurations, such as touch keys or touchscreen format can be loaded into the mXT1665TDAT device. The explorer only displays the objects present in the connected device.

Before making changes to individual parameters, it is advisable to save the current default settings.

- This can be done from the Save Config option in the Configuration menu in the maXTouch Studio toolbar. Save this default config onto your desktop or a USB key.
- To change a parameter, click on the object you wish to alter (e.g. Multiple Touch Touchscreen T100).
- After changing any parameters, click on the Write button of the active window to apply the new settings.

NOTE: Settings will revert to their defaults when you unplug and re-plug the USB cable unless you click on the Backup button in the Device menu on maXTouch Studio LITE toolbar.

- To view touches graphically use Touch Reporter in the Tools menu in the toolbar.



Restoring Factory Configuration

If required, the unit may be set back to factory default settings. This may be of use if settings have been changed, and the unit is no longer functioning as intended.

- Run the maXTouch Studio LITE application and select Configuration from the toolbar.
- Select Zero Config and then Load Config.
- From the Open dialog box, navigate to the Default Configuration File you previous saved and load the xcfg. file.
- Once the file is loaded, click on the Device menu on the maXTouch Studio.
- Select Backup then select Reset. The default factory settings are now set.

Additional Information

More information about this product is available in the data sheet and user guide.

The product documentation zip file and enc file can be found online, more information about maXTouch Studio is also available, please contact your Microchip representative.