

CY3295-MTK PSoC™ Automotive Multitouch manufacturing test kit v1.9.55 release notes

About this document

Scope and purpose

Thank you for your interest in the CY3295-MTK PSoC™ Automotive Multitouch manufacturing test kit. This document lists the installation requirements, software and hardware updates, limitations, and known issues in the kit. This kit includes the release of Infineon Touchscreen Test Executive v1.9.55.

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1 Release contents

1.1 System requirements and recommendations

Table 1 System requirements and recommendations

Hardware/Operating system requirements	Minimum	Recommended
Processor speed	1 GHz	2 GHz
RAM	1 GB (32-bit) 2 GB (64-bit)	2 GB (32-bit) 2 GB (64-bit)
Free hard drive space	800 MB	1 GB
Screen resolution	1024 x 768	1280 x 1024
USB	Full speed	2.0 Hi-speed
Operation system: Windows 7 (32-bit, 64-bit), Windows 8 (32-bit, 64-bit), Windows 8.1 (32-bit, 64-bit) or Windows 10 (32-bit, 64-bit)	✓	✓

Table 2 System requirements and recommendations

Software prerequisites	Minimum	Recommended
Microsoft Internet Explorer	11	11+
Adobe Reader (for PDF documentation)	9.4.6	9.4.6+
Windows installer	3.1	3.1+
.NET framework	3.5	3.5+
PSoC™ Programmer	3.28.6	3.28.6+

Tool information

2 Tool information

2.1 Installation

To install MTK, run *CY3295Setup.exe* and follow the installation instructions.

Notes:

- For the latest version of PSoC™ Programmer, go to [PSoC™ Programming](#). Uninstall any previous versions of PSoC™ programmer. To uninstall the software, go to **Start > Control Panel > Add or Remove Programs**. Click **Remove** adjacent to the software.
- To install and run the Infineon Touchscreen Test Executive, additional software has to be installed through Infineon installer. Uninstall any previous version of the Touchscreen Test Executive software from the Windows Control Panel.
- Do not plug the kit hardware (Touch Tuning Bridge) into the USB port in the PC until the software installations are complete.

2.2 New in MTK v1.9.55

- Added support for new firmware solutions for CYAT837X/CYAT847X and CYAT817X (ALPHA) device families.
- Added new features in MTK tool:
 - Added a new test “Check Error Register” for CYAT837X/CYAT847X device family.
 - Added “Split TX” option for CYAT837X/CYAT847X device family.
 - Added new tests for CYAT817X device family:
 - Open Pin Sense.
 - Line Draw - Panel 2.
 - Line Draw (Extended) - Panel 2.
 - Glove Line Draw - Panel 2.
 - Free Draw - Panel 2.
 - Glove Free Draw - Panel 2.
 - Calculate and Check Config CRC.
 - Added a new test “Calculate and Check Config CRC” for CYAT816X device family.
 - Added a new option “Reset Result After Delay” in “Options->Settings->Continuous Run” menu.
 - Added a new option “Logging data into the folder with cfg file” in “Options->Settings->Log Output” menu.
 - Added new options for “Free Draw” test: TIMEOUT_TEST_EXECUTION and TOUCH_REPORT_NUMBER.
 - Added new options for “Line Draw (Extended)” test:
 - SHOW_TRACKING_PATH_RESULT.
 - PATH_TYPE->Custom Path.
 - NUMBER_CUSTOM_DIALOGS.
 - DESIGN_CUSTOM_PATH.
 - “Disable/Enable All Cavity” options improved to support parallel usage of manufacturing test kit along with the Bridge Control Panel tool.
 - Added a new option CM_PERIOD_MC_REG_DEVIATION_ALGORITHM_LIMITS_PERCENT that validates double routed touch panels.

Tool information

2.3 Device family and the supported firmware versions in MTK v1.9.55

The following table lists the devices and the supported firmware versions in MTK v1.9.55.

Table 3 Device family and the supported firmware versions in MTK v1.9.55

S. No.	Part number/device family	Supported firmware versions
1	CY8CTMA616AA/884AA CY8CTMA616AE/884AE	2.2.798772
		2.1.662250
		2.0.409014
		2.0.381917
2	CY8CTMA460AA/AS CY8CTMA768AA/AS CY8CTMA1036AA/AS	2.4.898065
		2.3.866954
		2.2.830541
		2.1.802429
3	CY8CTMA461AA/AS/LWA/LWS	2.0.672495
		1.2.911463
		1.1.883949
		1.0.853813
4	CYAT816X	1.0.841549
		1.4.1084642
		1.3.1036671
		1.2.935791
5	CYAT6XL_LPWB	1.1.921302
		1.0.886795
		1.0.843908
		1.4.1084642
6	CYAT8165X/6165X	1.5.1093522
		1.4.1053878
		1.3.1046111
		1.2.1004589
7	CYAT817X	1.1.966753
		1.0.951457
		1.3.1119021 (ALPHA)
		1.2.1087468
8	CYAT837X CYAT847X	1.1.1070689
		1.0.1053084
		1.0.1116972

Tool information

2.4 Known issues and solutions

The following issues are known to exist in the v1.9.55 release of the MTK software.

Table 4 Known issues and solutions

S. No.	Defect description	Impact / workaround
1	For TMA46x devices, the 'Update DUT Configuration' test passes even when configuration files from other device families are used for this test.	If an incorrect configuration file is used, this defect generates a false pass. Use the correct configuration file as a workaround for this issue.
2	Values entered in the X Signal Type field in the DUT Configuration tab are not validated by the MTK software.	Tests are not executed correctly if the exact word: Rows or Columns , is not used in the X Signal Type field. Use either Rows or Columns for proper execution.
3	For TMA44x/TMA46x/TMA768 and TMA1036 devices, opening configuration files built with MTK v1.4.5 and earlier does not permit configuration of limits for both sensors and buttons in Global IDAC test.	The configuration file for MTK v1.7.1 has to be manually created instead of importing from v1.4.5.
4	Changes to the Device ID Required to Start Tests option in the Engineering mode is not saved when switching to Normal mode.	Click Save to manually save the configuration file, every time a change to the Device ID Required to Start Tests option is made in the Engineering mode.
5	The MTK software does not provide an option to switch between 'decimal' and 'hexadecimal' representation of data.	The data type for the field is displayed as a tooltip when mouse is hovered. The option to select decimal/hexadecimal representations will be provided in the future release.
6	The MTK software can detect and connect to more than four DUTs for testing.	The MTK software reliably supports up to four DUT connections. Connecting more than four DUTs is not recommended and test results are not guaranteed.
7	Per-element Limits tab contains redundant field limits for mutual buttons in all self-cap tests. Also, non-self-cap tests contains self-cap buttons limits.	The workaround is to setup limits for the redundant fields to a wide range of values. It causes software to pass the unnecessary subtest related to validation of self-cap or mutual buttons in the current test.

2.5 Platform-specific guidance

For all platforms if a device reports an external or pin-to-pin short, it will be disabled from further testing during the current test session.

Tool information

2.6 Documentation

Kit documents are in the \Documentation folder in the root directory of MTK installation.

After installing the Test Executive software, see the required documentation from the Windows Start menu:

- Infineon → Touch Screen Test Executive 1.9.55 → Release notes
- Infineon → Touch Screen Test Executive 1.9.55 → CY3295-MTK user guide

After installing the Test Executive software, you can access the *CY3295-MTK user's guide* from the **Help** menu.

2.7 Feedback on manufacturing test kit (MTK) v1.9.55

The Infineon MTK team encourages you to give valuable feedback on the MTK software and the manufacturing steps in your projects. Your feedback will help us to refine our MTK strategy, so that we can provide best results in return. Please email your responses to mtk_feedback@infineon.com.

The MTK usage questionnaire is an MS Excel spreadsheet that is in the \Documentation folder of the software installation.

Please provide all the needed details in the questionnaire, including steps from the bare sensor to shipping the end-product (mobile phone, tablet, and so on).

For each step, you will find the following fields in the questionnaire:

1. **Location/factory:** Indicates the place where the manufacturing is performed.
2. **Build stage:** Indicates the integration level of the touch sensor (that is, bare sensor, LCD + module, and so on).
3. **Step objective:** Indicates the objective of the PSoC™ Automotive Multitouch MTK, or what should be the objective if MTK does not support this step currently.
4. **MTK OK “as is”:** Specify whether the current MTK system (software, hardware, documentation) meets your requirements.
5. **Effort required:** If your response to question #4 is NO, then mention the manual effort needed to meet the step requirements.
6. **Commonly encountered problems:** Select the most frequent problem encountered with this manufacturing step.
7. **Notes:** Include all the necessary information that will help us to refine the strategy.

See the **Example** tab in the questionnaire if these instructions are not clear.

2.8 Technical support

For assistance, go to www.infineon.com.

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