



Product Change Notification

PCN Number: QC151701

Notification Date*: May 21, 2015

Title: ATMXT1066T2 Firmware Revision Change from v1.2.AA to v1.3.AA

Product Identification:

ATMXT1066T2-C2U/-C2UR / ATMXT1066T2-NHU/-NHUR

Reason for Change:

- | | |
|---|---|
| ☐ Material / Composition | ☐ Manufacturing Location |
| ☐ Processing / Manufacturing | ☐ Quality / Reliability |
| ☒ Design / Firmware | ☐ Logistics |
| ☐ Datasheet | ☐ Other: |

Change Description:

As part of the continuous improvement of the mXT1066T2 touchscreen driver IC the following updates have been implemented in firmware V1.3.AA.

- Latest Single-Ended Self-Cap improvements for moisture and retransmission improvements
- Passive stylus linearity improvements
- T92 symbol gesture processor has been replaced T115/T116 objects
- T99 key gesture processor added
- Product Data Storage (PDS) feature added (using T68 object)

In order to fit all the new functionality, it has been necessary to remove the Windows/HID support (T43 object).

These improvements and enhancements have been implemented in releasing firmware V1.3.AA to production.

The changes in v1.3.AA are not all backwards compatible with v1.2.AA. See Table in [Attachment 1](#) for details.

Identification Method to Distinguish Change:

Orderable part numbers have new QS reference numbers:

Current Order Code (Firmware v1.2.AA)	New Order Code (Firmware v1.3.AA)
MXT1066T2-C2U/-C2UR; QS886	MXT1066T2-C2U/-C2UR; QS994
MXT1066T2-NHU/-NHUR; QS886	MXT1066T2-NHU/-NHUR; QS994

Marking of device:

No changes to marking from v1.2.AA to v1.3.AA. Text remains as shown below:

Current marking MXT1066T2-C2U/-C2UR
ATMEL
MXT1066T2
-C2U
YYWW# ZZ (YYWW = Date Code) (# = Die Revision) (ZZ = Assembly Location)
LOT CODE

ATMEL 1560 Parkway, Solent Business Park, Whiteley, Fareham, Hampshire, PO15 7AG · United Kingdom

Current marking MXT1066T2-NHUI-NHUR
ATMEL
MXT1066T2
-NHU
YYWW # ZZ (YYWW = Date Code) (# = Die Revision) (ZZ = Assembly Location)
LOT CODE

Qualification Data:	☐ Available	☐ Will be available (mm/dd/yr):	☒ Not Applicable
Samples:	☐ Available	☒ Will be available (mm/dd/yr): 06/10/15	☐ Not Applicable

Quantifiable Impact on Quality & Reliability:

No detrimental effect on product quality or reliability.

Details of product functional performance as in Attachment 1

Proposed First Ship Date*: August 21, 2015

**All orders placed after the notification date are non-cancellable and non-returnable (NCNR).*

Atmel Contact: Please contact your Atmel Sales Representative or Distributor for additional information (when replying via e-mail please include the PCN number in subject line).

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CUSTOMER ACKNOWLEDGEMENT OF RECEIPT: Atmel requests you acknowledge receipt of this PCN / EOL. Please complete and email to pcnadm@atmel.com and the Atmel Contact listed above. In your acknowledgement, you can grant approval or request additional information. **Atmel will deem this change accepted unless specific conditions of acceptance are provided in writing within 30 days from the date of this notice.**

To be completed by customer:

☐ Approved

☐ Rejected (Please state reason for rejection):

Company: Name: Title: Date: Email Address: Location: Comments:	
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Attachment 1**Overview**

This table provides a summary of the changes related to MXT1066T2 firmware release v1.3.AA from v1.2.AA

NEW FEATURES	Summary	Backward Compatible?
	T15 – added TSCONTSUP feature to prevent keys being reported if a touch moves from touchscreen to key array	Y
	Added independent edge correction controls for all four edges in T100 (touch), T47 (passive stylus)	Y
	Added T99 Key Gesture Processor	Y
	Added T115/T116 Symbol Gesture Processor (replaces T92)	N Needs config. data change to ensure same functionality via T115/116
	Added Product Data Store capability	Y
	Implement independent inrush resistor selection controls for Self-Cap Single Ended.	N Needs config. data change to ensure same functionality
REMOVED FEATURES	Summary	Backward Compatible?
	Removed Windows HID capability (including T43 Digitizer Object)	N
	Replaced T92 Symbol Gesture Object with T115/T116 Symbol Gesture Processor	N Needs config. data change to ensure same functionality via T115/116
BEHAVIOURAL CHANGES	Summary	Backward Compatible?
	Passive stylus linearity improvements (optional spatial filter and separate movement filter for passive stylus touches)	Y
	Hysteresis for T100 (Touch and internal), T104 thresholds limit increased from 25% to 75%	Y
	T8/T111/T113 – improved calibration configuration for SCT; added ability to select best axis for SCP measurement; significant performance and noise immunity improvements	N Needs config. data change to ensure same functionality

	T37 - Corrected T37 diagnostic output for PTC signals to Match documentation	Y
BUG FIXES	Summary	Backward Compatible?
	Added filtering mechanism (and related control) to T80, to address issue with passive stylus when moisture is detected.	Y
	Corrected alignment of mutual scan with SCT in DualX mode.	Y
	Fixed a bug to make jumplimit with SCT as default measurement comparable to jumplimit with MCT as default measurement	Y Check jumplimit setting – may need reducing if using SCT as the default measurement
	Changes to DC level algorithms and controls to help with multiple reported bugs/issues. Added DC debug support	N Needs config. data change to ensure same functionality
	Fixed problem preventing T100 and T15 sharing X lines in mutual measurements	Y
	Corrected thresholds used by T80 to include SCT hysteresis.	Y
	SESC drift suspend time corrected to use t111.dcdriftst rather than t111.driftst	Y