



**21.5" PCAP Solution
12014893**

Date: 2/11/2019

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1 Scope

DATA MODUL's PCAP solution 12014893 consists of a 21.5" capacitive touch screen. Please note that this is only a sub-assembly of the final product. The specification of the final end product might differ from this specification.

2 Touch Sensor and Cover Glass

2.1 Technical Parameters

Screen size	21.5 inch /54.6 cm
Format	Wide
Composite	SITO with Tail
Outline dimensions	490.54 x 283.1 x 1.1 mm (WxHxT)
Active area	480 x 271.5 mm (WxH)
Bending radius of tail	R = 2 mm recommended
Transmissivity	90% (min.)
Operating temperature and humidity	-30 to +85°C, < 90% RH
Storage temperature and humidity	-40 to +95°C, < 80 % RH
Tail connector	Hirose FH28H-80S-0.5SH, Hirose FH28H-50S-0.5SH

2.2 Reliability Tests

Low Temperature Storage Test	-40°C for 480h
High Temperature Storage Test	95°C for 480h
High Temperature / High Humidity Test	85°C, 85% RH for 480h
Cycle test	-40°C(30min), 85°C(30min), 500cycles

3 Recommended Touch Controller

The recommendation for this PCAP solution is a controller based on mXT2952T2. Please ask your local DATA MODUL sales representative for further details.

4 Optical Inspection Criteria and Handling Recommendations

4.1 Optical Inspection Criteria

For details on the optical inspection criteria, please refer to DATA MODULs Outgoing Spec or ask your local DATA MODUL sales representative.

4.2 Handling Recommendations

Precautions for operation

- Do not put a heavy, hard or sharp object on the product
- Do not bend the product in order to assure the reliability
- Do not put one product on the other. Otherwise, it may cause the product to be scratched
- Don't use any organic solvent acid or alkali solution.

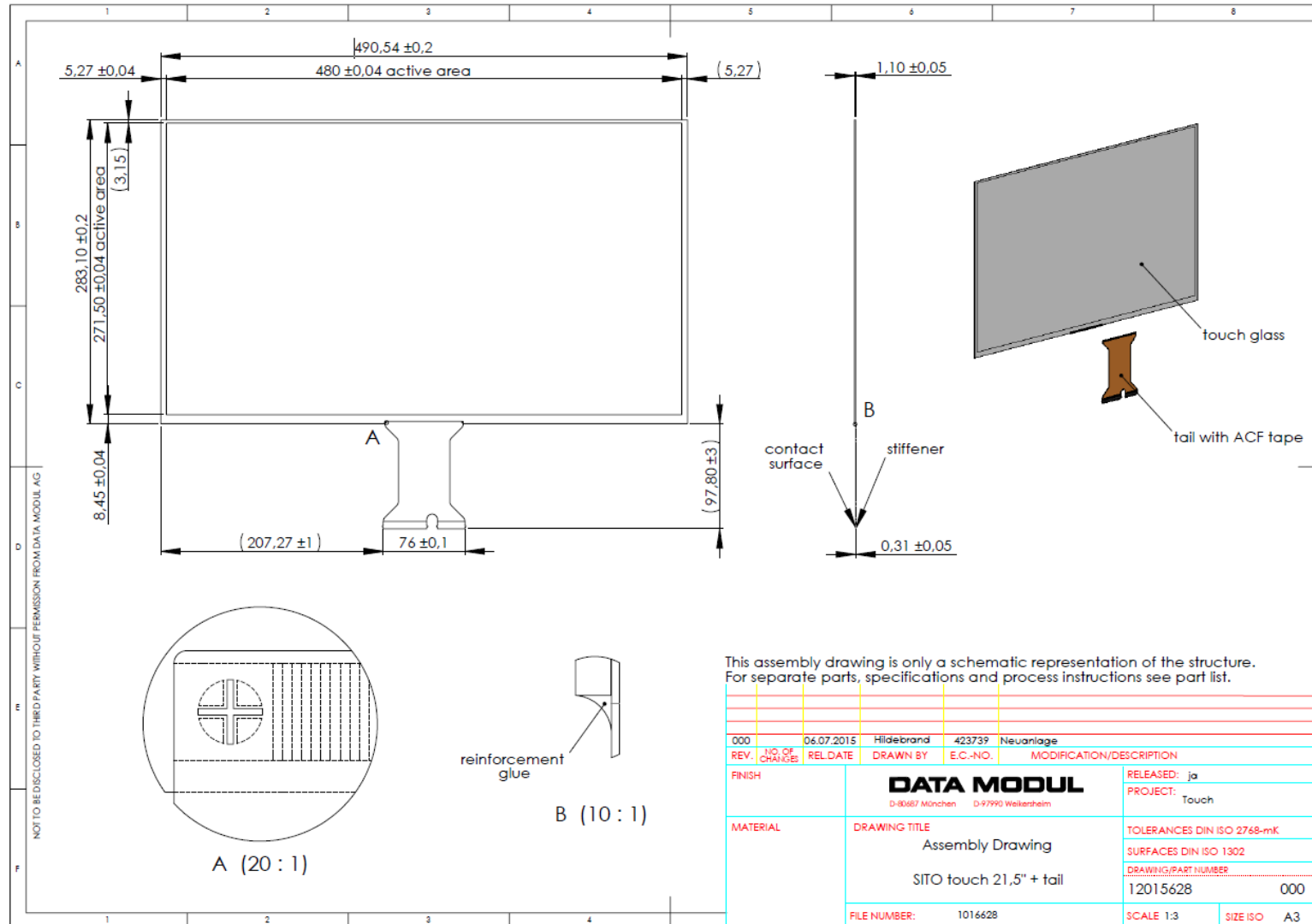
Precautions for mounting

- The panel should be mounted using a configuration that either holds the panel by all four corners or by all four sides
- The bezel edge must be positioned outside the active area. The bezel may cause false activation if the edge overlaps the active area
- Any mounting configuration should ensure that there is no twisting force applied to the panel
- 1mm distance between TFT screen and touch panel is recommended

Precautions for tail

- The flex tail in general can be bent with a min. radius of about 1mm
- In order to avoid damaging and malfunction of the sensor, please don't bend the FPC area next to the panel
- Excess or repeated bending of the FPC connector should also be avoided

5 Appendix A: Technical Drawing



6 Revision History

Date	Author	Changes
2/11/2019	T. Golling	initial version

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