



**8.0" PCAP Solution  
12027180**

Date: 14.02.2018

## Table of contents

<b>1</b>	<b>Scope .....</b>	<b>3</b>
<b>2</b>	<b>Touch Sensor and Cover Glass .....</b>	<b>3</b>
2.1	Technical Parameters.....	3
2.2	Reliability Tests.....	4
<b>3</b>	<b>Recommended Touch Controller.....</b>	<b>4</b>
<b>4</b>	<b>Optical Inspection Criteria and Handling Recommendations .....</b>	<b>4</b>
4.1	Optical Inspection Criteria.....	4
4.2	Handling Recommendations .....	4
<b>5</b>	<b>Appendix A: Technical Drawing .....</b>	<b>5</b>
<b>6</b>	<b>Revision History .....</b>	<b>6</b>

## 1 Scope

DATA MODUL's PCAP solution 12027180 consists of a 8.0" 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	8.0 inch /20.3 cm
Format	Wide
Composite	Glass / Film / Film
Outline dimensions	197.5 x 122.3 x 1.7 mm (WxHxT)
Active area	180.0 x 105.0 mm (WxH)
Bending radius of tail	R = 5 mm recommended
Transmissivity	85% (min.)
Haze	3% (max.)
Operating temperature and humidity	-20 to +70°C, 20 to 85 % RH
Storage temperature and humidity	-40 to +80°C, 20 to 90 % RH
Tail connector	OMRON XF2M-5515-1A

\* Note 1: When the ambient temperature is above 65°C, the humidity has to be below 50%RH

## 2.2 Reliability Tests

Low Temperature Storage Test	-30°C for 72h
High Temperature Storage Test	70°C for 72h
High Temperature / High Humidity Test	60°C, 85% RH for 250h
Cycle test	-20°C / 60°C, 2 h / cycle, 36 cycles

## 3 Recommended Touch Controller

The recommendation for this PCAP solution is a controller based on mXT640T .  
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.

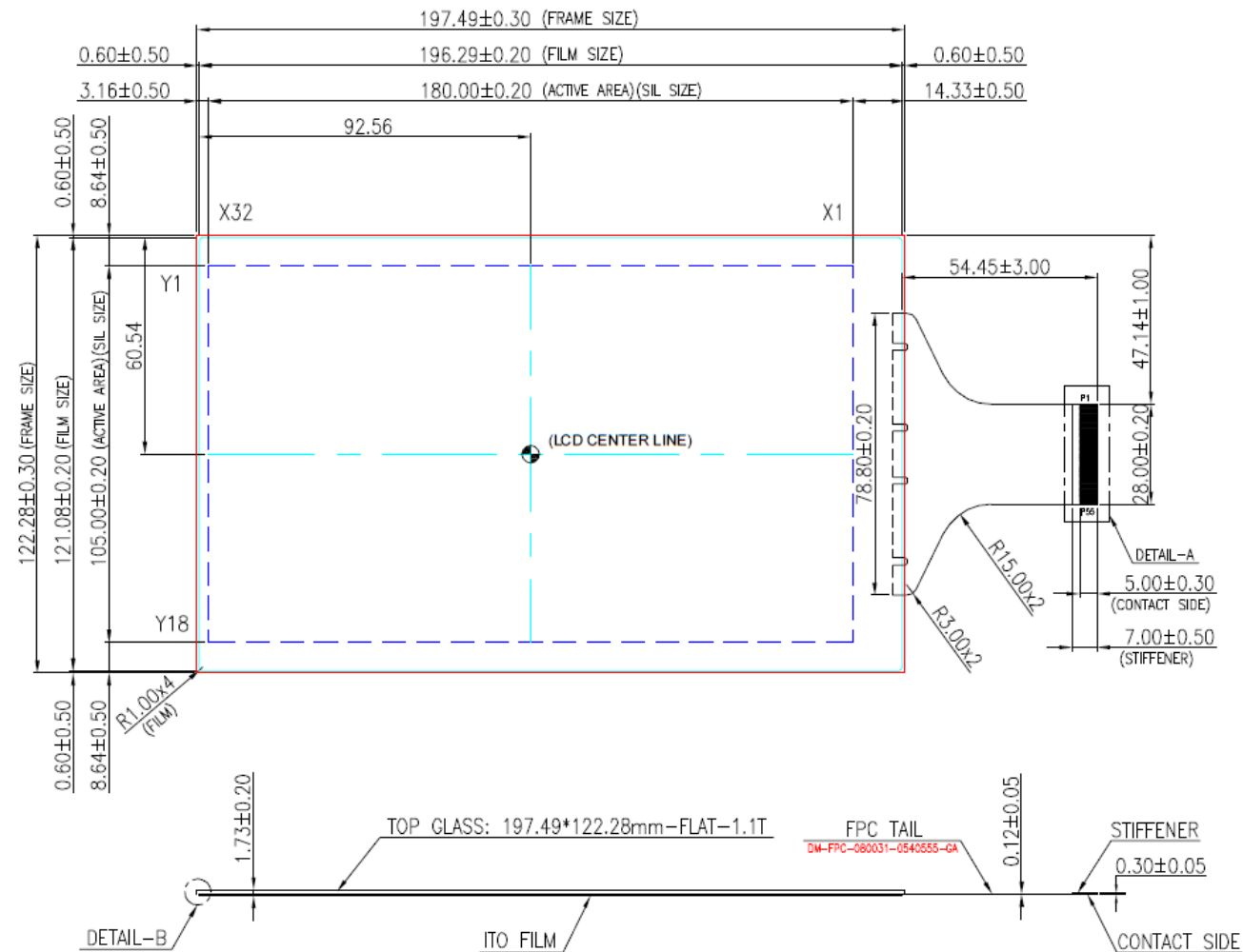
Precautions for mounting

- 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
21.11.2017	Graf	initial version
14.02.2018	Lübke	structure: drawing and appendix
12.02.2019	T. Golling	transfer to new template

DATA MODUL Aktiengesellschaft  
Landsberger Str. 322  
80687 Munich, Germany  
Tel. +49-89-5 60 17-0  
Fax +49-89-5 60 17-119  
[www.data-modul.com](http://www.data-modul.com)

**Logistics, Production & Services:**  
DATA MODUL Weikersheim GmbH  
Lindenstrasse 8  
DE-97990 Weikersheim - Germany  
Phone: +49-7934-101-0  
Fax: +49-7934-101-101

DATA MODUL's worldwide offices  
can be found on our website:  
[www.data-modul.com/eu/contact-worldwide.html](http://www.data-modul.com/eu/contact-worldwide.html)

