



KYOCERA International, Inc.

46723 Five Mile Rd.
Plymouth, MI 48170
Tel: 248-921-0410
<http://americas.kyocera.com>

Product Change Notification

Date: December 5, 2019

Dear Valued Customer,

Thank you for choosing Kyocera as your LCD solution provider. We appreciate the opportunity to support your business. This letter is to inform you of this change to the following parts with resistive touch screens applied.

1. **Product**

TCG070WVLPAAFA-AA00	7.0" WVGA, TN, LED, CMOS, 4-Wire Res Touch
TCG070WVLPAAFA-AA50	7.0" WVGA, TN, LED, CMOS, 4-Wire Res Touch
TCG070WVLPAAFA-AA30	7.0" WVGA, TN, LED, LVDS, 4-Wire Res Touch
TCG070WVLQAPFA-AA00	7.0" WVGA, AWV, LED, CMOS, 4-Wire Res Touch

2. **Background**

Due to market pressure for improved reliability of resistive touch screens, the demand of non-crystalline ITO films currently being used in the manufacture of resistive touch screens has been steadily decreasing. As a result, resistive touch screen manufacturers have been transitioning to the use of the highly reliable crystalline ITO film. This will be a running change with no change to our part number.

3. **Product Changes**

Element	Current product	New product
ITO film	Amorphous ITO film	Crystalline ITO film
Other Components	No change	No change



With the film change, the resistance between the terminals will change.

Item	Current product (Ω)	New product (Ω)
Terminal resistance (X)	274-640	500-1300
Terminal resistance (Y)	183-428	183-428

4. Reliability Test Results

The touch panel maker has conducted the below reliability evaluation and the result was as follows.

Item	Test condition	Quantity	Result
Low temp. atmosphere	-40°C / 240h	3	Passed
High temp. atmosphere	80°C / 240h	3	Passed
High temp. humidity atmosphere	60°C / 90%RH / 240h	3	Passed
Temp. cycle	-30°C \Leftrightarrow R.T \Leftrightarrow 70°C / 5 cycles	3	Passed
Point Activation life	3N / ten million times	1	Passed

5. Schedule

Based on the supply of the current touch screen, we anticipate the change to be in effect with shipments occurring in February 2020. However, the changeover may occur prior to or after February 2020 depending on demand.

We apologize for the inconvenience this notice may cause. Thank you for your understanding and your cooperation. If you have any questions, please contact your KYOCERA sales representative.

Sincerely yours,

KYOCERA International, Inc

Display Division