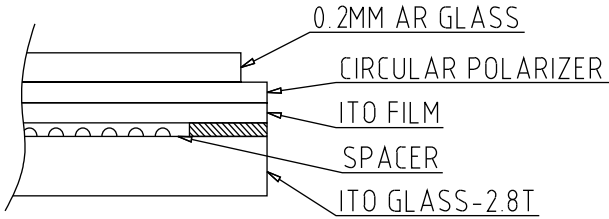
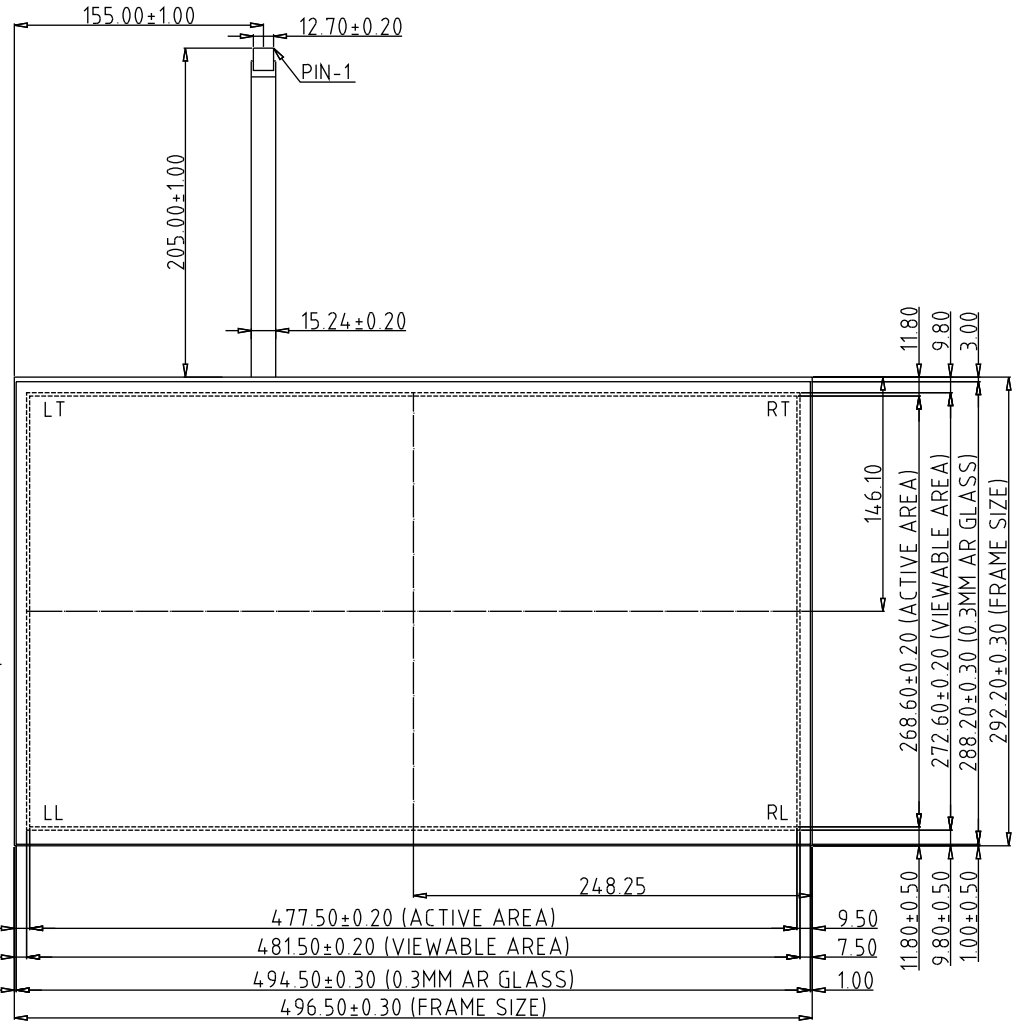
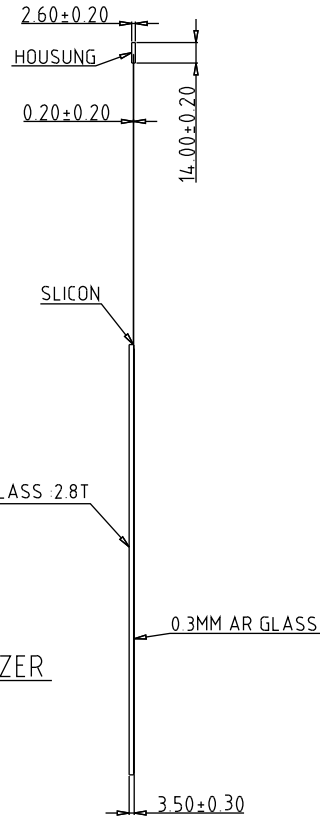
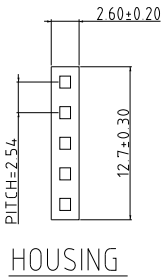


4		3		2		1		
UNITS: MM	C NO.: TBD	PROJECT NO:	DW#(PN): 7215P5A11N032X		FINAL THICKNESS: SEE THE SIDE VIEW	Rev.	DESCRIPTION	DATE
<input type="checkbox"/> NON-NRE	<input checked="" type="checkbox"/> NRE	<input type="checkbox"/> PARTIAL-NRE:			SCALE: NOT TO SCALE	A	INITIAL/PRELIMINARY DESIGN	07-20-2023
<p>NRE BINDING IS INVALID IF NO PRODUCTION ARE INITIATED IN 2 YEARS AFTER INITIAL SAMPLING. MATERIAL/PARTS PRE-PURCHASED BY CUSTOMER WILL BE SCRAPED AFTER 3 YEARS IF NOT USED.</p> <p>INFORMATION IN THIS DRAWING IS PROTECTED BY US PATENTS AND OWNED BY ADVANCED LINK PHOTONICS (ALP). IT IS NOT TO BE DISCLOSED, REPRODUCED, OR USED BY/TO ANY PARTY WITHOUT A WRITTEN CONSENT BY ALP. BY SIGNING, IT IS CONFIRMED THAT ALL THE DESIGN, NOTES, AND SPECIFIED INFORMATION ON THIS DOCUMENT ARE REVIEWED AND ACCEPTED. CHANGING DESIGN MAY RESULT NEW NRE CHARGE. IT IS RECOGNIZED AND ACCEPTED THAT ALP'S DOC#WI-E12, COMPLYING WITH INDUSTRIAL STANDARDS, IS FOLLOWED TO INSPECT ALL PARTS SHIPPED UNLESS OTHERWISE SPECIFIED. DOC#WI-E12 IS AVAILABLE UPON REQUEST.</p>					DRAWING	Sign:	Date:	
					APPROVAL			

TOUCH PANEL PIN ASSIGNMENT

PIN ASSIGNMENT	
PIN #	DESIGNATION
1	RT
2	RL
3	SG
4	LT
5	LL



SECTION VIEW

THE FOLLOWING INFORMATION AND SPECIFICATIONS ARE GENERALLY APPLICABLE TO UNITS WITH THE PARTS/UPGRADES AS MENTIONED UNLESS OTHERWISE SPECIFIED IN DRAWING

BACKLIGHT INFORMATION IF APPLICABLE

SYMBOL	Value (Typ)	Unit
DAY MODE	LED S1	LED S2
DAY MODE	-	-
STRINGS	-	-
Voltage, V	23.2	-
Current, I	0.1	-
Brightness	~ 1000	NITS
NVIS MODE	LED S1	LED S2
STRING	-	-
Voltage, V	22.5	-
Current, I	0.04	-
Brightness	15	NITS

BACKLIGHT CONNECTOR

DAY MODE	P1-1	VIN	Z8 AWG/PCINC
CON: JST-PHR-2.0	P1-2	GND	Z8 AWG/PCINC
OR COMPATIBLE			
NIGHT MODE	P2-1	VIN	Z8 AWG/PCINC
CON: JST-PHR-2.0	P2-2	GND	Z8 AWG/PCINC
OR COMPATIBLE			

TOUCH PANEL ELECTRICAL CHARACTERISTICS

TYPE	ANALOG RESISTIVE 4 OR 5 WIRE
LINEARITY	MAX 2%
X13.4 PIN RESISTANCE	-
V15.8 PIN RESISTANCE	-
INSULATION RESISTANCE	20 MO (DC 25V)

PROPERTIES/CHARACTERISTICS OF TOUCH PANEL

DRY OPERATION TEMPERATURE	-30~70 °C
DRY STORAGE TEMPERATURE	-40~80 °C
NO HEATING OPERATING HUMIDITY	20-90 %RH
NO HEATING STORAGE HUMIDITY	20-90 %RH
SURFACE HARDNESS	7H
INSPECTION ACCEPTANCE CRITERIA, APPLICABLE IN DISPLAY AREA	
1. SPOT/DENT/DUST: D: 0.25 mm - OK; 0.25 < D ≤ 0.5 mm - N ≤ 3; D > 0.5 mm - N = 0	
2. SCRATCHES: W ≤ 0.05mm, OK; 0.05 < W ≤ 0.10mm, L ≤ 5mm, N ≤ 3	
3. LINEAR OBJECT: W ≤ 0.025mm, OK; 0.025 < W ≤ 0.05mm, L ≤ 12, N ≤ 5; 0.05 < W ≤ 0.1mm, L ≤ 6mm, N ≤ 5, W > 0.1mm, N=0	

NOTES APPLICABLE (UNLESS OTHERWISE SPECIFIED IN THE DRAWING)

- SURFACE CLEAR AR COATING, 450-650nm, < 0.6% ON GLASS, < 1.2% ON PLASTIC.
- DEPENDING ON FINAL STACKUP, TRANSMISSION OF TOUCH PANEL IS 62-85%.
- HEATER GLASS 5 - 50 ohm/sq; THICKNESS OF GLASS, 0.7 OR 1.1mm, HEATING 25-50W.
- OVERLAP LAYERS ON TOP OF TOUCH ITO GLASS MAY NOT BE FLASHED TO THE EDGES USUALLY ABOUT 1mm OFF EDGE; 3-5 mm OFF THE TAIL SIDE.
- ACTIVATION FORCE OF GFG TOUCH PANEL IS 20-80g AND OVER 100g AT THE EDGES.
- SUBSTRATE OF BOTTOM ITO COATED GLASS IS NORMALLY A SODA LIME GLASS UNLESS OTHERWISE SPECIFIED.
- ITO EMI COATING: 10+/-5 ohm/sq; MESH EMI < 1 ohm/sq, 70-90 oPI, ANGLE, 36 OR 54 DEGREE.
- HIGH TEMPERATURE AND HUMIDITY COMPLIANCES ARE TO BE DETERMINED BY CUSTOMER.
- IF UNIT IS INTEGRATED WITH LCD, ALL ORIGINAL ELECTRONIC AND OPTICAL SPECIFICATIONS OF LCD ARE APPLICABLE TO THE DHA.
- MANUFACTURER'S LCD WARRANTY IS VOID UPON UPGRADE. ADDITIONAL WARRANTY ON LCD MAY BE PURCHASED.

Advanced Link Photonics, Inc.
TUSTIN, CALIFORNIA U.S.A.

TOLERANCES: ANGULAR: +/- 5 DEGREE XXX: +/- 0.30 XXXX: +/- 0.10 UNLESS OTHERWISE SPECIFIED	TITLE 21.5" POLARIZED TOUCH PANEL WITH 0.2 MM CHEMICALLY STRENGTHENED GLASS
DRAWN: MSW	DWG. NO.: 7215P5A11N032X
CHECKED:	C. PN. M. NO.
APPROVED:	R. NO. R508 SHEET: 1 OF 1