

Doc. Number:

- ☒ Tentative Specification
☐ Preliminary Specification
☐ Approval Specification

MODEL NO.: DJ101IA-07A cell (A120)

Customer :

APPROVED BY

SIGNATURE

Name / Title

Note

Please return 1 copy for your confirmation with your signature and comments.

Approved By	Checked By	Prepared By

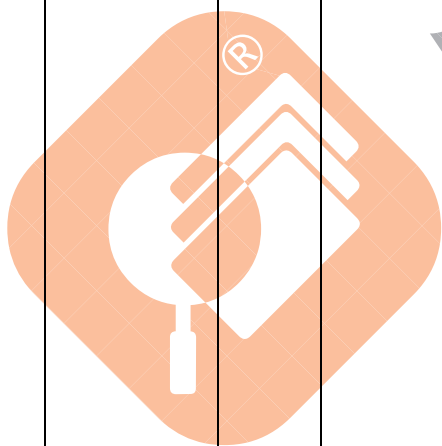
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REVISION HISTORY

Version	Date	Page (New)	Section	Description
Ver. 0.0 Ver.0.1	2015/07/27 2016/7/1	All	All	Product spec was first issued for LCD cell.



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1.PURPOSE

The specification DJ101IA-07A Cell is a 10.1" a-Si TFT Liquid Crystal Display ODF cell .The cell has been designed by Innolux and manufactured by Innolux under the agreement of customer. The a-Si TFT-LCD cell will be applied to a high transmittance operating in the normally black mode a-Si TFT-LCD product.

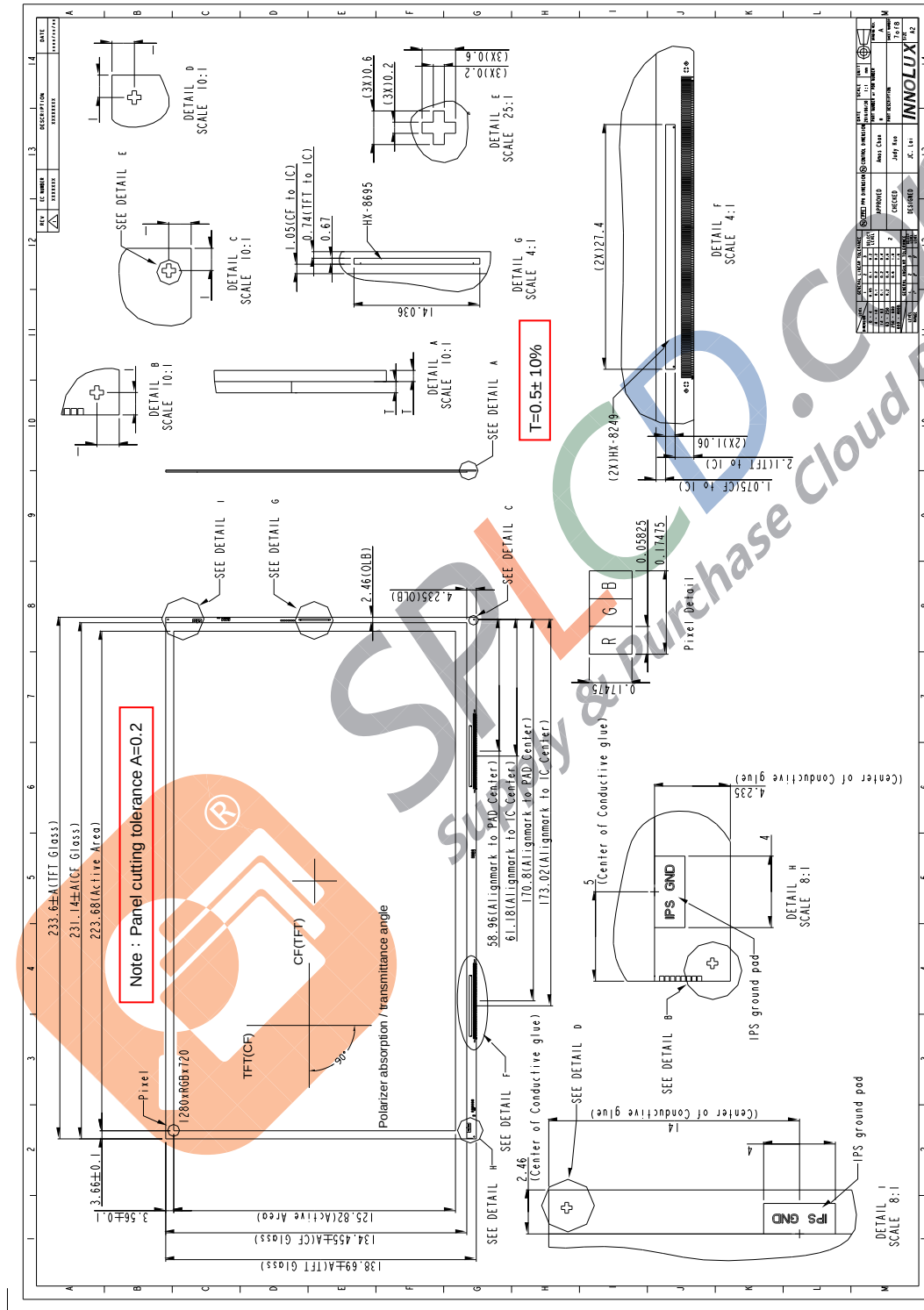
2.GENERAL RULES OF SINGLE PANEL

2.1 GENERAL SPECIFICATION

No.	Item		Specification	unit
1	Glass thickness	TFT	0.5	mm
		CF	0.5	
2	Shipping mode		Panel	-
3	Shipping size		233.6(H) x 138.69 (V) x 1.0 (D)	mm
4	Panel outline dimension		233.6(H) x 138.69 (V) x 1.0 (D)	mm
5	Active screen size		10.1 " diagonal	-
6	Resolution		1280RGB x 720	pixel
7	Pixel driving element		a-Si TFT	-
8	Sub pixel size		58.25x174.75	um
9	Pixel arrangement		RGB-stripe	-
10	View direction (Gray inversion)		Free	-
11	Cell gap		3.25 ±0.3	um
12	Scan driver IC *1pcs		HX8695-E-LT	-
13	Data driver IC *2pcs		HX8249-A-LT	
14	Weight with POL		81± 10%	g

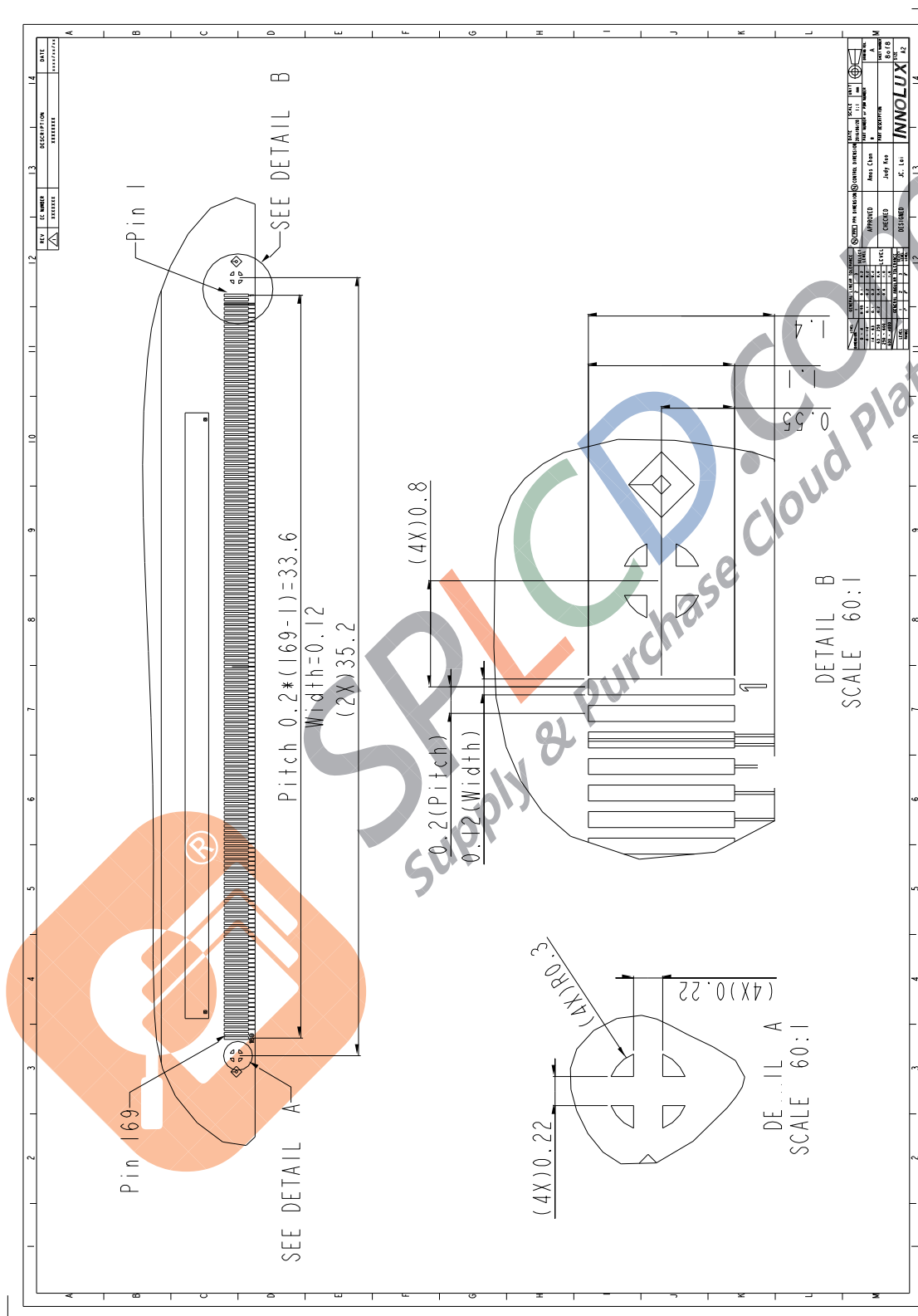
2.2 DIMENSION

2.2.1 OUTLINE DIMENSION

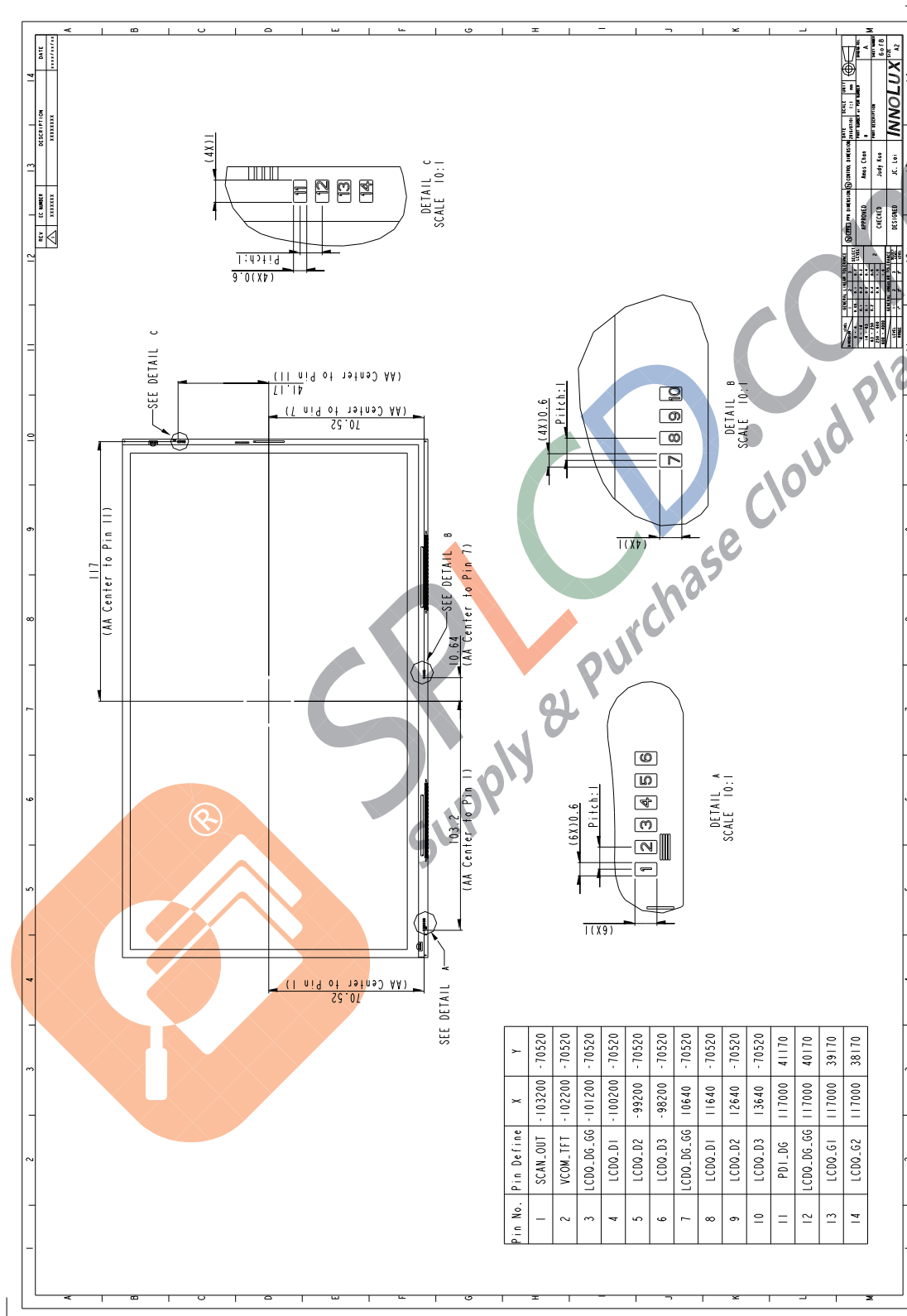


Note: (1) Panel outline dimension tolerance ± 0.2 mm.

2.2.2 FPC DETAIL



2.2.3 TEST PAD



3. PIN ASSIGNMENT

3.1 FPC/IC PIN ASSIGNMENT TABLE

HX8249-A-LT (Source) U1			U1(Master) to FPC1	Pin No.	U1(Master) to U2(Slave)
IC Pad No.	IC Pad Name	Connect to	FPC PinOut Name		PinOut Name
X	X	X	DUMMY	1	X
X	X	X	DUMMY	2	X
X	X	X	T1	3	X
X	X	X	T2	4	X
X	X	X	DUMMY	5	X
X	X	FPC	GND	6	X
X	X	FPC	GND	7	X
X	X	FPC	GND	8	X
X	X	FPC	GND	9	X
X	X	X	DUMMY	10	X
X	X	X	DUMMY	11	X
X	X	X	DUMMY	12	X
X	X	X	DUMMY	13	X
X	X	X	DUMMY	14	X
X	X	X	DUMMY	15	X
X	X	X	DUMMY	16	X
X	X	X	DUMMY	17	X
X	X	X	DUMMY	18	X
X	X	X	DUMMY	19	X
1	DUMMY	X	DUMMY	20	X
2	DUMMY	X	DUMMY	21	X
3	DUMMY	X	DUMMY	22	X
4	DUMMY	X	DUMMY	23	X
5	DUMMY	X	DUMMY	24	X
6	DUMMY	X	DUMMY	25	X
7	DUMMY	X	DUMMY	26	X
8	DUMMY	X	DUMMY	27	X
9	DUMMY	X	DUMMY	28	X
10	VCOM_R	FPC	VCOM_R	29	X
11	VCOM_R	FPC	VCOM_R	30	X
12	VCOM_R				X
13	THROUGH_1	FPC	THROUGH_1	31	X
14	THROUGH_1	FPC	THROUGH_1	32	X
15	CL2N	FPC	CL2N	33	X
16	CL2N				X
17	CL2N				X

18	CL2P	FPC	CL2P	34	X
19	CL2P				X
20	CL2P				X
21	CL1P	FPC	CL1P	35	X
22	CL1P				X
23	CL1P				X
24	CL1N	FPC	CL1N	36	X
25	CL1N				X
26	CL1N				X
27	VGL	FPC	VGL	37	X
28	VGL				X
29	VGL				X
30	VGL				X
X	X	X	DUMMY	38	X
31	DUMMY	X	X		X
32	VGH	FPC	VGH	39	X
33	VGH				X
34	VGH				X
X	X	X	DUMMY	40	X
35	CH3P	FPC	CH3P	41	X
36	CH3P				X
37	CH3P				X
38	CH3N	FPC	CH3N	42	X
39	CH3N				X
40	CH3N				X
41	CH2P	FPC	CH2P	43	X
42	CH2P				X
43	CH2P				X
44	CH2N	FPC	CH2N	44	X
45	CH2N				X
46	CH2N				X
47	CH1P	FPC	CH1P	45	X
48	CH1P				X
49	CH1P				X
50	CH1N	FPC	CH1N	46	X
51	CH1N				X
52	CH1N				X
53	VSS1P	FPC	VSS1P	47	X
54	VSS1P				X
55	VSS1P				X
56	VSS1P				X
57	VCL	FPC	VCL	48	X

58	VCL				X
59	VCL				X
60	VCL				X
61	AVDDN	FPC	AVDDN	49	X
62	AVDDN				X
63	AVDDN				X
64	AVDDN				X
65	AVDDN	FPC	AVDDN	50	X
66	AVDDN				X
67	AVDDN				X
X	X	X	DUMMY	51	X
68	DRVN	FPC	DRVN	52	X
69	DRVN				X
70	VDD1P	FPC	VDD1P	53	X
71	VDD1P				X
72	VDD1P				X
73	VDD1P				X
74	VSDN	FPC	VSDN	54	X
75	VSDN				X
76	VSDN				X
77	VSDN	FPC	VSDN	55	X
78	VSDN				X
79	VSDN				X
80	VSSA	FPC	VSSA	56	X
81	VSSA				X
82	VSSA				X
83	VSSA	FPC	VSSA	57	X
84	VSSA				X
85	VSSA				X
86	VSDP	FPC	VSDP	58	X
87	VSDP				X
88	VSDP				X
89	VSDP	FPC	VSDP	59	X
90	VSDP				X
91	VSDP				X
X	X	X	DUMMY	60	X
92	DRVP	FPC	DRVP	61	X
93	DRVP				X
94	AVDDP	FPC	AVDDP	62	X
95	AVDDP				X
96	AVDDP				X
97	AVDDP	FPC	AVDDP	63	X

98	AVDDP				X
99	AVDDP				X
100	AVDDP				X
101	VSS1	FPC	VSS1	64	X
102	VSS1		VSS1	65	X
103	TEST0	X	X		X
104	TEST0	X	X		X
105	TEST1	X	X		X
106	TEST1	X	X		X
107	TEST2	X	X		X
108	TEST2	X	X		X
109	TEST3	X	X		X
110	TEST3	X	X		X
111	VDD1	FPC	VDD1	66	X
112	VDD1		VDD1	67	X
113	TEST4	X	X		X
114	TEST4	X	X		X
115	TEST5	X	X		X
116	TEST5	X	X		X
117	TEST6	X	X		X
118	TEST6	X	X		X
119	TEST7	X	X		X
120	TEST7	X	X		X
121	VSS1	FPC	VSS1	68	X
			VSS1	69	
122	CSB	FPC	CSB	70	X
123	SCL	FPC	SCL	71	X
124	SDA	FPC	SDA	72	X
125	SDA				X
126	SDA				X
127	VSS1	FPC	VSS1	73	X
128	VSS1				X
129	VSS1				X
130	VSS1				X
131	TPSYNC	FPC	TPSYNC	74	X
132	TPSYNC				X
133	ATREN	FPC	ATREN	75	X
134	INTL	FPC	INTL	76	X
135	INV1	FPC	INV1	77	X
136	INV0	FPC	INV0	78	X
137	DUMMY	X	X		X
138	DUMMY	X	X		X

139	DUMMY	X	X		X
140	DUMMY	X	X		X
141	VSS1	FPC	VSS1	79	X
142	VSS1				X
143	TB	FPC	TB	80	X
144	RL	FPC	RL	81	X
145	NB	X	X		X
146	MODE	FPC	MODE	82	X
147	DINT	FPC	DINT	83	X
148	FCS	FPC	FCS	84	X
149	GSQ	X	X		X
150	TR	FPC	TR	85	X
151	SIDEN	FPC	SIDEN	86	X
152	SID	X	X		X
153	BISTEN	FPC	BISTEN	87	X
154	VSS1	FPC	VSS1	88	X
155	STBYB	FPC	STBYB	89	X
156	RESETB	FPC	RESETB	90	X
157	VSS1	FPC	VSS1	91	X
158	LVD0N	FPC	LVD0N	92	X
159	LVD0NR	X	X		X
160	LVD0P	FPC	LVD0P	93	X
161	LVD0PR	X	X		X
162	LVD1N	FPC	LVD1N	94	X
163	LVD1NR	X	X		X
164	LVD1P	FPC	LVD1P	95	X
165	LVD1PR	X	X		X
166	LVCLKN	FPC	LVCLKN	96	X
167	LVCLKNR	X	X		X
168	LVCLKP	FPC	LVCLKP	97	X
169	LVCLKPR	X	X		X
170	LVD2N	FPC	LVD2N	98	X
171	LVD2NR	X	X		X
172	LVD2P	FPC	LVD2P	99	X
173	LVD2PR	X	X		X
174	LVD3N	FPC	LVD3N	100	X
175	LVD3NR	X	X		X
176	LVD3P	FPC	LVD3P	101	X
177	LVD3PR	X	X		X
		X	DUMMY	102	
178	VSS1	FPC	VSS1	103	X
179	VSS1			104	X

180	DE	X	X		X
181	VS	X	X		X
182	HS	X	X		X
183	DCLK	X	X		X
184	VSS1	FPC	VSS1	105	X
185	DR7	X	X		X
186	DR6	X	X		X
187	DR5	X	X		X
188	DR4	X	X		X
189	DR3	X	X		X
190	DR2	X	X		X
191	DR1	X	X		X
192	DR0	X	X		X
193	VSS1	FPC	VSS1	106	X
194	DG7	X	X		X
195	DG6	X	X		X
196	DG5	X	X		X
197	DG4	X	X		X
198	DG3	X	X		X
199	DG2	X	X		X
200	DG1	X	X		X
201	DG0	X	X		X
202	VSS1	FPC	VSS1	107	X
203	DB7	X	X		X
204	DB6	X	X		X
205	DB5	X	X		X
206	DB4	X	X		X
207	DB3	X	X		X
208	DB2	X	X		X
209	DB1	X	X		X
210	DB0	X	X		X
211	VSS1	FPC	VSS1	108	X
		X	DUMMY	109	
212	VGMPHI	FPC	VGMPHI	110	X
213	VGMPHI				X
214	VGMPHI				X
215	VGMPHI				X
216	VGMPMI	FPC	VGMPMI	111	X
217	VGMPMI				X
218	VGMPMI				X
219	VGMPMI				X
220	VGMPLI	FPC	VGMPLI	112	X

221	VGMPLI				X
222	VGMPLI				X
223	VGMPLI				X
224	VGMNHI	FPC	VGMNHI	113	X
225	VGMNHI				X
226	VGMNHI				X
227	VGMNHI				X
228	VGMNMI	FPC	VGMNMI	114	X
229	VGMNMI				X
230	VGMNMI				X
231	VGMNMI				X
232	VGMNLI	FPC	VGMNLI	115	X
233	VGMNLI				X
234	VGMNLI				X
235	VGMNLI				X
236	DVDD	FPC	DVDD	116	X
237	DVDD				X
238	DVDD	FPC	DVDD	117	X
239	DVDD				X
240	VDDL	FPC	VDDL	118	X
241	VDDL				X
242	VDDL	FPC	VDDL	119	X
243	VDDL				X
244	VDDL				X
245	VSS1	FPC	VSS1	120	X
246	VSS1	FPC	VSS1	121	X
247	VSS1				X
248	RTERMEN	FPC	RTERMEN	122	X
249	GPOS1	X	X		X
250	GPOS0	X	X		X
251	RS3	X	X		X
252	RS2	X	X		X
253	RS1	X	X		X
254	RS0	X	X		X
		X	DUMMY	123	
255	VSS1	FPC	VSS1	124	X
256	VSS1			125	X
		X	DUMMY	126	
257	VGMPHO	FPC	VGMPHO	127	X
258	VGMPHO				X
259	VGMPHO				X
260	VGMPHO				X

261	VGMPMO	FPC	VGMPMO	128	X
262	VGMPMO				X
263	VGMPMO				X
264	VGMPMO				X
265	VGMPLO	FPC	VGMPLO	129	X
266	VGMPLO				X
267	VGMPLO				X
268	VGMPLO				X
269	VGMNHO	FPC	VGMNHO	130	X
270	VGMNHO				X
271	VGMNHO				X
272	VGMNHO				X
273	VGMNMO	FPC	VGMNMO	131	X
274	VGMNMO				X
275	VGMNMO				X
276	VGMNMO				X
277	VGMNLO	FPC	VGMNLO	132	X
278	VGMNLO				X
279	VGMNLO				X
280	VGMNLO				X
X	X	X	DUMMY	133	
281	VSDN	FPC	VSDN	134	X
282	VSDN				X
283	VSDN				X
284	VSDN	FPC	VSDN	135	X
285	VSDN				X
286	VSDN				X
X	X	X	DUMMY	136	
287	VSSA	FPC	VSSA	137	X
288	VSSA				X
289	VSSA				X
290	VSSA	FPC	VSSA	138	X
291	VSSA				X
292	VSSA				X
X	X	X	DUMMY	139	X
293	VSDP	FPC	VSDP	140	X
294	VSDP				X
295	VSDP				X
296	VSDP	FPC	VSDP	141	X
297	VSDP				X
298	VSDP				X
X	X	X	DUMMY	142	X

299	VDD1	FPC	VDD1	143	X
300	VDD1				X
301	VDD1				X
302	VDD1				X
303	VDD2	FPC	VDD2	144	X
304	VDD2				X
305	VDD2				X
306	VDD2				X
307	VSS1	FPC	VSS1	145	X
308	VSS1				X
309	VSS1				X
310	VSS1				X
311	VSS2	FPC	VSS2	146	X
312	VSS2				X
313	VSS2				X
314	VSS2				X
X	X	X	DUMMY	147	X
315	TO0	X	X		X
316	TO0	X	X		X
317	TO1	X	X		X
318	TO1	X	X		X
319	TO2	X	X		X
320	TO2	X	X		X
321	TO3	X	X		X
322	TO3	X	X		X
		X	DUMMY	148	
323	VSS1	FPC	VSS1	149	X
324	VSS1				X
325	VSS1				X
326	VSS1				X
327	VSS1				X
328	VSS1				X
329	VSS1	FPC	VSS1	150	X
330	VSS1				X
331	VSS1				X
332	VSS1				X
333	VSS1				X
X	X	X	DUMMY	151	X
334	VDDOTP	FPC	VDDOTP	152	X
335	VDDOTP				X
336	VDDOTP				X
337	VDDOTP				X

338	THROUGH_2	FPC	THROUGH_2	153	X
339	THROUGH_2	FPC	THROUGH_2	154	X
X	X	X	DUMMY	155	X
340	VCOM	FPC	VCOM	156	X
341	VCOM				X
342	VCOM	FPC	VCOM	157	X
X	X	X	DUMMY	158	X
343	VCOM_L	FPC	VCOM_L	159	X
344	VCOM_L				X
345	VCOM_L	FPC	VCOM_L	160	X
346	DUMMY	X	X		X
347	DUMMY	X	X		X
348	DUMMY	X	X		X
349	DUMMY	X	X		X
350	DUMMY	X	X		X
351	DUMMY	X	X		X
352	DUMMY	X	X		X
353	DUMMY	X	X		X
354	DUMMY	X	X		X
355	DUMMY	X	X		X
X	X	FPC	GND	161	X
X	X	FPC	GND	162	X
X	X	FPC	GND	163	X
X	X	FPC	GND	164	X
X	X	FPC	GND	165	X
X	X	FPC	T3	166	X
X	X	FPC	T4	167	X
X	X	X	DUMMY	168	X
X	X	X	DUMMY	169	X
X	X	X	DUMMY	169	X
X	X	FPC	GND	161	X
X	X	FPC	GND	162	X
X	X	FPC	GND	163	X
X	X	FPC	GND	164	X
X	X	FPC	GND	165	X
X	X	FPC	T3	166	X
X	X	FPC	T4	167	X
X	X	X	DUMMY	168	X
X	X	X	DUMMY	169	X
356	GIO_L4	X	X		X
357	DUMMY	X	X		X
358	GIO_L3	X	X		X

359	CA_3	X	X		X
360	DUMMY	X	X		X
361	GIO_L2	X	X		X
362	CA_L2	X	X		X
363	DUMMY	X	X		X
364	GIO_L1	X	X		X
365	CA_L1	X	X		X
366	DUMMY	X	X		X
367	GIO_L0	X	X		X
368	CA_L0	X	X		X
369	VSSA	X	X		X
370	VSSA	X	X		X
371	VSSA	X	X		X
372	VCOM_L	X	X		X
373	VCOM_L	X	X		X
374	VCOM_L	X	X		X
375	VCOM_L	X	X		X
376	VCOM_L	X	X		X
377	VCOM_L	X	X		X
378	VSSA	X	X		X
379	VSSA	X	X		X
380	VSSA	X	X		X
381	S1	X	X		X
~2813	~S2400	~X	~X		~X
2814	VSSA	X	X		X
2815	VSSA	X	X		X
2816	VSSA	X	X		X
2817	VCOM_R		X		X
2818	VCOM_R		X		X
2819	VCOM_R		X		X
2820	VCOM_R		X		X
2821	VCOM_R		X		X
2822	VCOM_R		X		X
2823	VSSA	U2	X		VSSA_369
2824	VSSA	U2	X		VSSA_370
2825	VSSA	U2	X		VSSA_371
2826	CA_R0	U2	X		CA_L0_368
2827	GIO_R0	U2	X		GIO_L0_367
2828	DUMMY	X	X		X
2829	CA_R1	U2	X		CA_L1_365
2830	GIO_R1	U2	X		GIO_L1_364
2831	DUMMY	X	X		X
2832	CA_R2	U2	X		CA_L2_362

2833	GIO_R2	U2	X		GIO_L2_361
2834	DUMMY	X	X		X
2835	CA_3	U2	X		CA_3_359
2836	GIO_R3	U2	X		GIO_L3_358
2837	DUMMY	X	X		X
2838	GIO_R4	U2	X		GIO_L4_356
X	DUMMY	X	X		X
X	DUMMY	X	X		X
X	DUMMY	X	X		X
X	DUMMY	X	X		X
X	DUMMY	X	X		X

HX8249-A-LT (Source) U2			U2(Slave) to FPC2	pin no	U2(Slave) to U3(Gate)
IC Pad No.	IC Pad Name	Connect to	FPC PinOut Name		PinOut Name
X	X	X	DUMMY	1	X
X	X	X	DUMMY	2	X
X	X	X	T5	3	X
X	X	X	T6	4	X
X	X	X	GND_TEST	5	X
X	X	X	GND	6	X
X	X	X	GND	7	X
X	X	X	GND	8	X
X	X	X	GND	9	X
X	X	X	DUMMY	10	X
X	X	X	SGOFF2	11	SGOFF2
X	X	X	SGOFF1	12	SGOFF1
X	X	X	VGN	13	VGN
X	X	X	GND	14	VSS
X	X	X	GND	15	VSS
X	X	X	VCC	16	VDD
X	X	X	VCC	17	VDD
X	X	X	DUMMY	18	X
X	X	X	VGL	19	VGL
X	X	X	VGL	20	VGL
X	X	X	DUMMY	21	X
X	X	X	VGH	22	VGH
X	X	X	VGH	23	X
X	X	X	DUMMY	24	VGH
X	X	X	CA	25	X
X	X	X	DUMMY	26	X

X	X	X	VGL	27	X
X	X	X	DUMMY	28	X
1	DUMMY	X	X	X	X
2	DUMMY	X	X	X	X
3	DUMMY	X	X	X	X
4	DUMMY	X	X	X	X
5	DUMMY	X	X	X	X
6	DUMMY	X	X	X	X
7	DUMMY	X	X	X	X
8	DUMMY	X	X	X	X
9	DUMMY	X	X	X	X
10	VCOM_R	FPC	VCOM_R	29	X
11	VCOM_R	FPC	VCOM_R	30	X
12	VCOM_R				X
13	THROUGH_1	FPC	THROUGH_1	31	X
14	THROUGH_1	FPC	THROUGH_1	32	X
15	CL2N	FPC	CL2N	33	X
16	CL2N				X
17	CL2N				X
18	CL2P	FPC	CL2P	34	X
19	CL2P				X
20	CL2P				X
21	CL1P	FPC	CL1P	35	X
22	CL1P				X
23	CL1P				X
24	CL1N	FPC	CL1N	36	X
25	CL1N				X
26	CL1N				X
27	VGL	FPC	VGL	37	X
28	VGL				X
29	VGL				X
30	VGL				X
X	X	X	DUMMY	38	X
31	DUMMY	X	X		X
32	VGH	FPC	VGH	39	X
33	VGH				X
34	VGH				X
X	X	X	DUMMY	40	X
35	CH3P	FPC	CH3P	41	X
36	CH3P				X
37	CH3P				X
38	CH3N	FPC	CH3N	42	X
39	CH3N				X
40	CH3N				X

41	CH2P	FPC	CH2P	43	X
42	CH2P				X
43	CH2P				X
44	CH2N	FPC	CH2N	44	X
45	CH2N				X
46	CH2N				X
47	CH1P	FPC	CH1P	45	X
48	CH1P				X
49	CH1P				X
50	CH1N	FPC	CH1N	46	X
51	CH1N				X
52	CH1N				X
53	VSS1P	FPC	VSS1P	47	X
54	VSS1P				X
55	VSS1P				X
56	VSS1P				X
57	VCL	FPC	VCL	48	X
58	VCL				X
59	VCL				X
60	VCL				X
61	AVDDN	FPC	AVDDN	49	X
62	AVDDN				X
63	AVDDN				X
64	AVDDN				X
65	AVDDN	FPC	AVDDN	50	X
66	AVDDN				X
67	AVDDN				X
X	X	X	DUMMY	51	
68	DRVN	FPC	DRVN	52	X
69	DRVN				X
70	VDD1P	FPC	VDD1P	53	X
71	VDD1P				X
72	VDD1P				X
73	VDD1P				X
74	VSDN	FPC	VSDN	54	X
75	VSDN				X
76	VSDN				X
77	VSDN	FPC	VSDN	55	X
78	VSDN				X
79	VSDN				X
80	VSSA	FPC	VSSA	56	X
81	VSSA				X
82	VSSA				X
83	VSSA	FPC	VSSA	57	X

84	VSSA				X
85	VSSA				X
86	VSDP	FPC	VSDP	58	X
87	VSDP				X
88	VSDP				X
89	VSDP	FPC	VSDP	59	X
90	VSDP				X
91	VSDP				X
X	X	X	DUMMY	60	X
92	DRVP	FPC	DRVP	61	X
93	DRVP				X
94	AVDDP	FPC	AVDDP	62	X
95	AVDDP				X
96	AVDDP				X
97	AVDDP	FPC	AVDDP	63	X
98	AVDDP				X
99	AVDDP				X
100	AVDDP				X
101	VSS1	FPC	VSS1	64	X
102	VSS1		VSS1	65	X
103	TEST0	X	X		X
104	TEST0	X	X		X
105	TEST1	X	X		X
106	TEST1	X	X		X
107	TEST2	X	X		X
108	TEST2	X	X		X
109	TEST3	X	X		X
110	TEST3	X	X		X
111	VDD1	FPC	VDD1	66	X
112	VDD1		VDD1	67	X
113	TEST4	X	X		X
114	TEST4	X	X		X
115	TEST5	X	X		X
116	TEST5	X	X		X
117	TEST6	X	X		X
118	TEST6	X	X		X
119	TEST7	X	X		X
120	TEST7	X	X		X
121	VSS1	FPC	VSS1	68	X
			VSS1	69	
122	CSB	FPC	CSB	70	X
123	SCL	FPC	SCL	71	X
124	SDA	FPC	SDA	72	X
125	SDA				X

126	SDA				X
127	VSS1	FPC	VSS1	73	X
128	VSS1				X
129	VSS1				X
130	VSS1				X
131	TPSYNC	FPC	TPSYNC	74	X
132	TPSYNC				X
133	ATREN	FPC	ATREN	75	X
134	INTL	FPC	INTL	76	X
135	INV1	FPC	INV1	77	X
136	INV0	FPC	INV0	78	X
137	DUMMY	X	X		X
138	DUMMY	X	X		X
139	DUMMY	X	X		X
140	DUMMY	X	X		X
141	VSS1	FPC	VSS1	79	X
142	VSS1				X
143	TB	FPC	TB	80	X
144	RL	FPC	RL	81	X
145	NB	X	X		X
146	MODE	FPC	MODE	82	X
147	DINT	FPC	DINT	83	X
148	FCS	FPC	FCS	84	X
149	GSQ	X	X		X
150	TR	FPC	TR	85	X
151	SIDEN	FPC	SIDEN	86	X
152	SID	X	X		X
153	BISTEN	FPC	BISTEN	87	X
154	VSS1	FPC	VSS1	88	X
155	STBYB	FPC	STBYB	89	X
156	RESETB	FPC	RESETB	90	X
157	VSS1	FPC	VSS1	91	X
158	LVD0N	FPC	LVD0N	92	X
159	LVD0NR	X	X		X
160	LVD0P	FPC	LVD0P	93	X
161	LVD0PR	X	X		X
162	LVD1N	FPC	LVD1N	94	X
163	LVD1NR	X	X		X
164	LVD1P	FPC	LVD1P	95	X
165	LVD1PR	X	X		X
166	LVCLKN	FPC	LVCLKN	96	X
167	LVCLKNR	X	X		X
168	LVCLKP	FPC	LVCLKP	97	X
169	LVCLKPR	X	X		X

170	LVD2N	FPC	LVD2N	98	X
171	LVD2NR	X	X		X
172	LVD2P	FPC	LVD2P	99	X
173	LVD2PR	X	X		X
174	LVD3N	FPC	LVD3N	100	X
175	LVD3NR	X	X		X
176	LVD3P	FPC	LVD3P	101	X
177	LVD3PR	X	X		X
		X	DUMMY	102	
178	VSS1	FPC	VSS1	103	X
179	VSS1			104	X
180	DE	X	X		X
181	VS	X	X		X
182	HS	X	X		X
183	DCLK	X	X		X
184	VSS1	FPC	VSS1	105	X
185	DR7	X	X		X
186	DR6	X	X		X
187	DR5	X	X		X
188	DR4	X	X		X
189	DR3	X	X		X
190	DR2	X	X		X
191	DR1	X	X		X
192	DR0	X	X		X
193	VSS1	FPC	VSS1	106	X
194	DG7	X	X		X
195	DG6	X	X		X
196	DG5	X	X		X
197	DG4	X	X		X
198	DG3	X	X		X
199	DG2	X	X		X
200	DG1	X	X		X
201	DG0	X	X		X
202	VSS1	FPC	VSS1	107	X
203	DB7	X	X		X
204	DB6	X	X		X
205	DB5	X	X		X
206	DB4	X	X		X
207	DB3	X	X		X
208	DB2	X	X		X
209	DB1	X	X		X
210	DB0	X	X		X
211	VSS1	FPC	VSS1	108	X
		X	DUMMY	109	

212	VGMPHI	FPC	VGMPHI	110	X
213	VGMPHI				X
214	VGMPHI				X
215	VGMPHI				X
216	VGMPMI	FPC	VGMPMI	111	X
217	VGMPMI				X
218	VGMPMI				X
219	VGMPMI				X
220	VGMPLI	FPC	VGMPLI	112	X
221	VGMPLI				X
222	VGMPLI				X
223	VGMPLI				X
224	VGMNHI	FPC	VGMNHI	113	X
225	VGMNHI				X
226	VGMNHI				X
227	VGMNHI				X
228	VGMNMI	FPC	VGMNMI	114	X
229	VGMNMI				X
230	VGMNMI				X
231	VGMNMI				X
232	VGMNLI	FPC	VGMNLI	115	X
233	VGMNLI				X
234	VGMNLI				X
235	VGMNLI				X
236	DVDD	FPC	DVDD	116	X
237	DVDD				X
238	DVDD	FPC	DVDD	117	X
239	DVDD				X
240	VDDL	FPC	VDDL	118	X
241	VDDL				X
242	VDDL	FPC	VDDL	119	X
243	VDDL				X
244	VDDL				X
245	VSS1	FPC	VSS1	120	X
246	VSS1	FPC	VSS1	121	X
247	VSS1				X
248	RTERMEN	FPC	RTERMEN	122	X
249	GPOS1	X	X		X
250	GPOS0	X	X		X
251	RS3	X	X		X
252	RS2	X	X		X
253	RS1	X	X		X
254	RS0	X	X		X
		X	DUMMY	123	

255	VSS1	FPC	VSS1	124	X
256	VSS1			125	X
		X	DUMMY	126	
257	VGMPHO	FPC	VGMPHO	127	X
258	VGMPHO				X
259	VGMPHO				X
260	VGMPHO				X
261	VGMPMO	FPC	VGMPMO	128	X
262	VGMPMO				X
263	VGMPMO				X
264	VGMPMO				X
265	VGMPLO	FPC	VGMPLO	129	X
266	VGMPLO				X
267	VGMPLO				X
268	VGMPLO				X
269	VGMNHO	FPC	VGMNHO	130	X
270	VGMNHO				X
271	VGMNHO				X
272	VGMNHO				X
273	VGMNMO	FPC	VGMNMO	131	X
274	VGMNMO				X
275	VGMNMO				X
276	VGMNMO				X
277	VGMNLO	FPC	VGMNLO	132	X
278	VGMNLO				X
279	VGMNLO				X
280	VGMNLO				X
X	X	X	DUMMY	133	
281	VSDN	FPC	VSDN	134	X
282	VSDN				X
283	VSDN				X
284	VSDN	FPC	VSDN	135	X
285	VSDN				X
286	VSDN				X
X	X	X	DUMMY	136	
287	VSSA	FPC	VSSA	137	X
288	VSSA				X
289	VSSA				X
290	VSSA	FPC	VSSA	138	X
291	VSSA				X
292	VSSA				X
X	X	X	DUMMY	139	X
293	VSDP	FPC	VSDP	140	X
294	VSDP				X

295	VSDP				X
296	VSDP	FPC	VSDP	141	X
297	VSDP				X
298	VSDP				X
X	X	X	DUMMY	142	X
299	VDD1	FPC	VDD1	143	X
300	VDD1				X
301	VDD1				X
302	VDD1				X
303	VDD2	FPC	VDD2	144	X
304	VDD2				X
305	VDD2				X
306	VDD2				X
307	VSS1	FPC	VSS1	145	X
308	VSS1				X
309	VSS1				X
310	VSS1				X
311	VSS2	FPC	VSS2	146	X
312	VSS2				X
313	VSS2				X
314	VSS2				X
X	X	X	DUMMY	147	X
315	TO0	X	X		X
316	TO0	X	X		X
317	TO1	X	X		X
318	TO1	X	X		X
319	TO2	X	X		X
320	TO2	X	X		X
321	TO3	X	X		X
322	TO3	X	X		X
		X	DUMMY	148	
323	VSS1	FPC	VSS1	149	X
324	VSS1				X
325	VSS1				X
326	VSS1				X
327	VSS1				X
328	VSS1				X
329	VSS1	FPC	VSS1	150	X
330	VSS1				X
331	VSS1				X
332	VSS1				X
333	VSS1				X
X	X	X	DUMMY	151	X
334	VDDOTP	FPC	VDDOTP	152	X

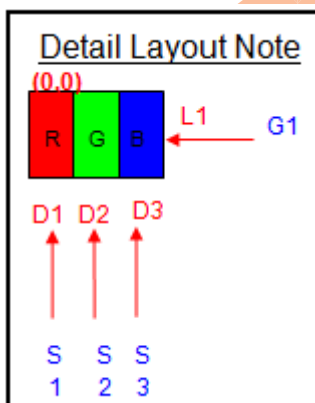
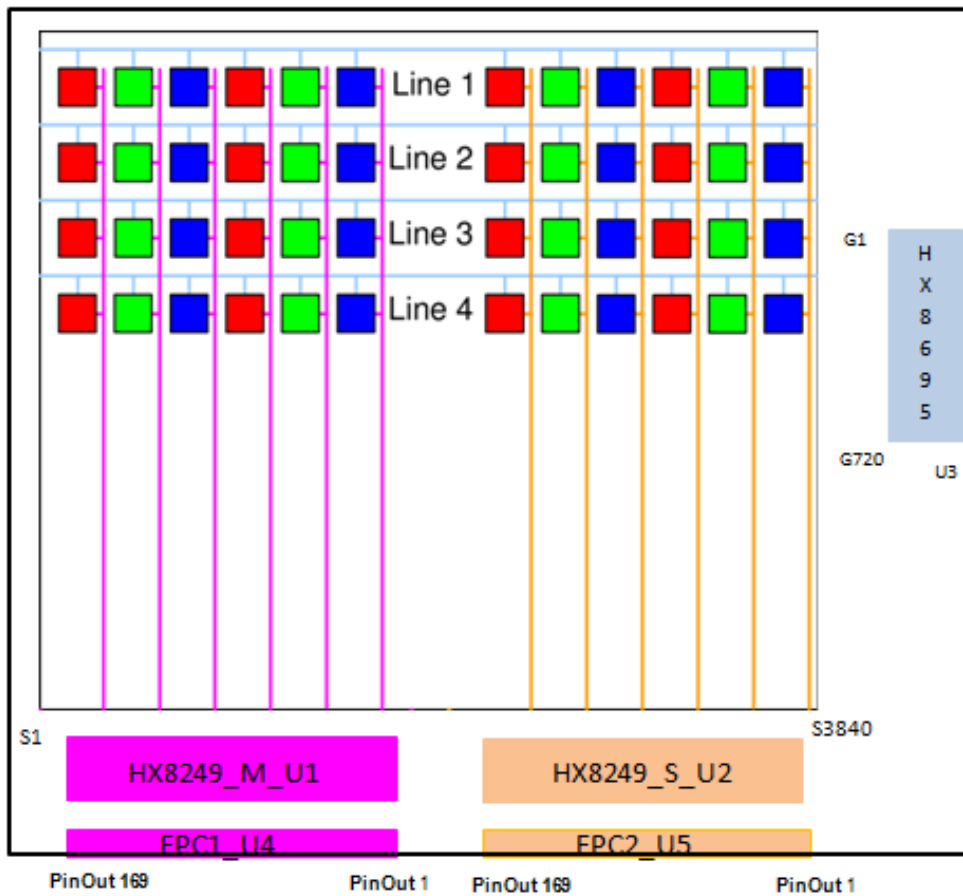
335	VDDOTP				X
336	VDDOTP				X
337	VDDOTP				X
338	THROUGH_2	FPC	THROUGH_2	153	X
339	THROUGH_2	FPC	THROUGH_2	154	X
X	X	X	DUMMY	155	X
340	VCOM	FPC	VCOM	156	X
341	VCOM				X
342	VCOM	FPC	VCOM	157	X
X	X	X	DUMMY	158	X
343	VCOM_L	FPC	VCOM_L	159	X
344	VCOM_L				X
345	VCOM_L	FPC	VCOM_L	160	X
346	DUMMY	X	X		X
347	DUMMY	X	X		X
348	DUMMY	X	X		X
349	DUMMY	X	X		X
350	DUMMY	X	X		X
351	DUMMY	X	X		X
352	DUMMY	X	X		X
353	DUMMY	X	X		X
354	DUMMY	X	X		X
355	DUMMY	X	X		X
X	X	FPC	GND	161	X
X	X	FPC	GND	162	X
X	X	FPC	GND	163	X
X	X	FPC	GND	164	X
X	X	FPC	GND	165	X
X	X	FPC	T7	166	X
X	X	FPC	T8	167	X
X	X	X	DUMMY	168	X
X	X	X	DUMMY	169	X
356	GIO_L4	U1	X		X
357	DUMMY	X	X		X
358	GIO_L3	U1	X		X
359	CA_3	U1	X		X
360	DUMMY	X	X		X
361	GIO_L2	U1	X		X
362	CA_L2	U1	X		X
363	DUMMY	X	X		X
364	GIO_L1	U1	X		X
365	CA_L1	U1	X		X
366	DUMMY	X	X		X
367	GIO_L0	U1	X		X

368	CA_L0	U1	X		X
369	VSSA	X	X		X
370	VSSA	X	X		X
371	VSSA	X	X		X
372	VCOM_L	X	X		X
373	VCOM_L	X	X		X
374	VCOM_L	X	X		X
375	VCOM_L	X	X		X
376	VCOM_L	X	X		X
377	VCOM_L	X	X		X
378	VSSA	X	X		X
379	VSSA	X	X		X
380	VSSA	X	X		X
381	S1	X	X		X
~2813	~S2400	~X	~X		~X
2814	VSSA	X	X		X
2815	VSSA	X	X		X
2816	VSSA	X	X		X
2817	VCOM_R	X	X		X
2818	VCOM_R	X	X		X
2819	VCOM_R	X	X		X
2820	VCOM_R	X	X		X
2821	VCOM_R	X	X		X
2822	VCOM_R	X	X		X
2823	VSSA	X	X		X
2824	VSSA	X	X		X
2825	VSSA	X	X		X
2826	CA_R0	X	X		X
2827	GIO_R0	U3	X		XAO_184
2828	DUMMY	X	X		X
2829	CA_R1	X	X		X
2830	GIO_R1	U3	X		OE_180
2831	DUMMY	X	X		X
2832	CA_R2	X	X		LR_176
2833	GIO_R2	U3	X		CPV_174
2834	DUMMY	X	X		X
2835	CA_3	FPC	CA_3_24		X
2836	GIO_R3	U3	X		PATH2_172
2837	DUMMY	X	X		X
2838	GIO_R4	U3	X		STV1_170
X	DUMMY	X	X		X
X	DUMMY	X	X		X
X	DUMMY	X	X		X
X	DUMMY	X	X		X
X	DUMMY	X	X		X

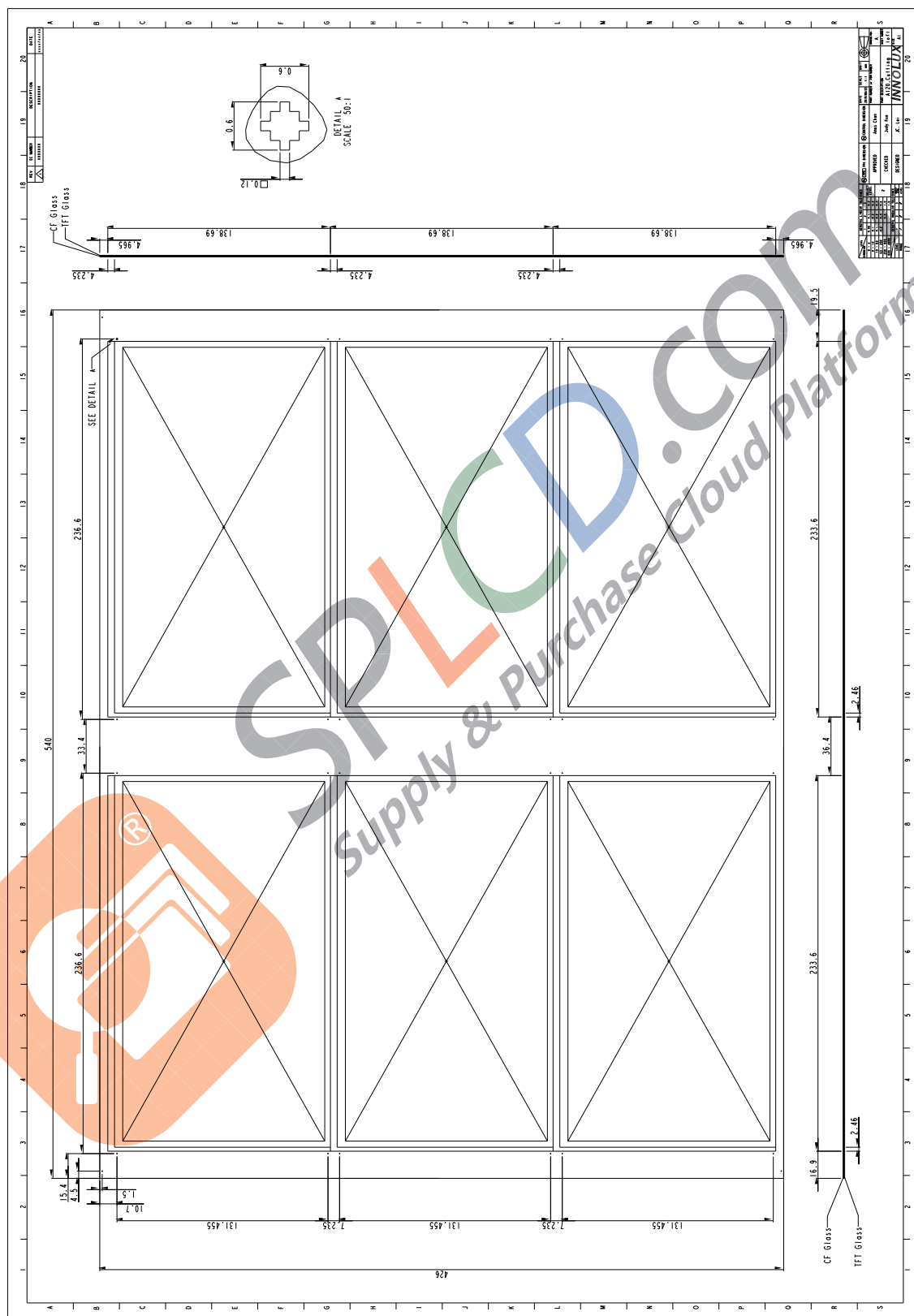
HX8695-E-LT (Gate) U5			U5(Gate) to FPC2	U5(Gate) to U2(Slave)	U5(Gate) to U5(Gate)
IC Pad No.	IC Pad Name	Connect to	FPC PinOut Name	PinOut Name	
1	XAO	Test Pad	X	X	
2	XAO		X	X	
3	EVEN	U5	X	X	VSS_162 VSS_161 VSS_160 VSS_159
4	EVEN	U5	X	X	
5	OE	Test Pad	X	X	
6	OE		X	X	
7	OE		X	X	
8	OE		X	X	
9	LR	Test Pad	X	X	
10	LR		X	X	
11	CPV	Test Pad	X	X	
12	CPV		X	X	
13	PATH2	Test Pad	X	X	
14	PATH2		X	X	
15	STV2		X	X	
16	STV2		X	X	
17	VGH	Test Pad	X	X	
18	VGH		X	X	
19	VGL	Test Pad	X	X	
20	VGL		X	X	
21	VDD	Test Pad	X	X	
22	VDD		X	X	
23	VSS	U5	X	X	VSS_162 VSS_161 VSS_160 VSS_159
24	VSS	U5	X	X	
25	VSS	U5	X	X	
26	VSS	U5	X	X	
27	MODE3	U5	X	X	VDD_21 VDD_22
28	MODE3	U5	X	X	
29	VGN		X	X	
30	SGOFF1		X	X	
31	SGOFF2		X	X	
32	OEPSN		X	X	
33	VSS	U5	X	X	VSS_162 VSS_161 VSS_160 VSS_159
34	VSS	U5	X	X	
151	VSS	U5	X	X	
152	VSS	U5	X	X	

153	OEPSN	U5	X	X	VSS_159
154	SGOFF2	FPC	SGOFF2_15	X	
155	SGOFF1	FPC	SGOFF1_16	X	
156	VGN	FPC	VGN_17	X	
157	MODE2	U5	X	X	
158	MODE1	U5	X	X	VSS_162 VSS_161 VSS_160 VSS_159
159	VSS	FPC	GND_18	X	
160	VSS	FPC		X	
161	VSS	FPC	GND_19	X	
162	VSS	FPC		X	
163	VDD	FPC	VDD_20	X	
164	VDD	FPC	VDD_21	X	
165	VGL	FPC	VGL_23	X	
166	VGL	FPC	VGL_24	X	
167	VGH	FPC	VGH_26	X	
168	VGH	FPC	VGH_27	X	
169	STV1	U2	X	GIO_R4_2838	
170	STV1		X		
171	PATH2	U2	X	GIO_R3_2836	
172	PATH2		X		
173	CPV	U2	X	GIO_R2_2833	
174	CPV		X		
175	LR	U2	X	CA_R2_2832	
176	LR		X		
177	OE	U2	X	GIO_R1_2830	
178	OE		X		
179	OE		X		
180	OE		X		
181	EVEN	U5	X		VSS_162 VSS_161 VSS_160 VSS_159
182	EVEN	U5	X		
183	XAO	U2	X	GIO_R0_2827	
184	XAO		X		
185	PATH1		X	X	
988	PATH1		X	X	

3.2 SCHEMATIC PANEL LAYOUT



4. CELL SCRIBE



5. ELECTRICAL SPECIFICATION

Parameter	Symbol	Specification			Unit
		Min.	Typ	Max.	
TFT gate on voltage	VGH	12	15	19	V
TFT gate off voltage	VGL	-12	-11	-7	V
TFT common electrode voltage	Vcom	-0.192	-0.174	-3.0	V

Note: (1) Vcom must be adjusted to optimize display quality :cross-talk, contrast ratio and etc.

(2) VGH is TFT gate operating voltage

(3) VGL is TFT gate operating voltage

(4) Environmental condition: 25±5℃

(5) Reference waveform for panel light on is as below:



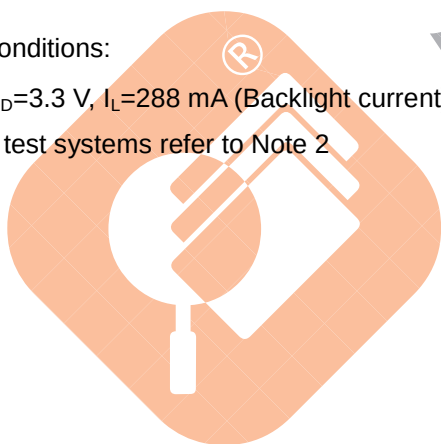
SPLCD.com
Supply & Purchase cloud Platform

6. OPTICAL SPECIFICATION

Item		Symbol	Conditions	Specifications			Unit	Note
				Min.	Typ.	Max.		
Transmittance		T%	Viewing normal angle $\theta_x = \theta_y = 0^\circ$	4.1%	4.7%	-	%	Without DBEF
Contrast Ratio		CR		600	1000	-	-	All left side data are based on INX's following condition – 1.LC : AAS LC 2.Light Source : AOT LED BLU (Diffuser + BEF + DBEF) 3.Film : CF : NPF-SWQ1423CU-AG380 TFT : NPF-SWQ1423CU 4.Machine : DMS 803 5.VLC dark < 0.2 V VLC white > 5.8 V
Response Time (by Quick)		T _{on}		-	15	20	ms	
		T _{off}		-	10	15		
		T _{total}		-	25	35		
Viewing Angle	Hor.	θ_{x+}	Center CR>10	80	85	-	deg.	
		θ_{x-}		80	85	-		
	Ver.	θ_{y+}		80	85	-		
		θ_{y-}		80	85	-		
Module Chromaticity (CIE 1931)	Red	R _x	Viewing normal angle $\theta_x = \theta_y = 0^\circ$	0.626	0.646	0.666	-	1. Under AOT LED BLU Spectrum(Table 1) 2.NTSC 70%
		R _y		0.316	0.336	0.356	-	
	Green	G _x		0.300	0.320	0.340	-	
		G _y		0.579	0.599	0.619	-	
	Blue	B _x		0.133	0.153	0.173	-	
		B _y		0.046	0.066	0.086	-	
	White	W _x		0.295	0.315	0.335	-	
		W _y		0.335	0.355	0.375	-	

Test Conditions:

1. DV_{DD}=3.3 V, I_L=288 mA (Backlight current), the ambient temperature is 25 °C.
2. The test systems refer to Note 2



Note 1: Definition of viewing angle range.

The view angel for $\Theta=85^\circ$ is measured by BM-5A.

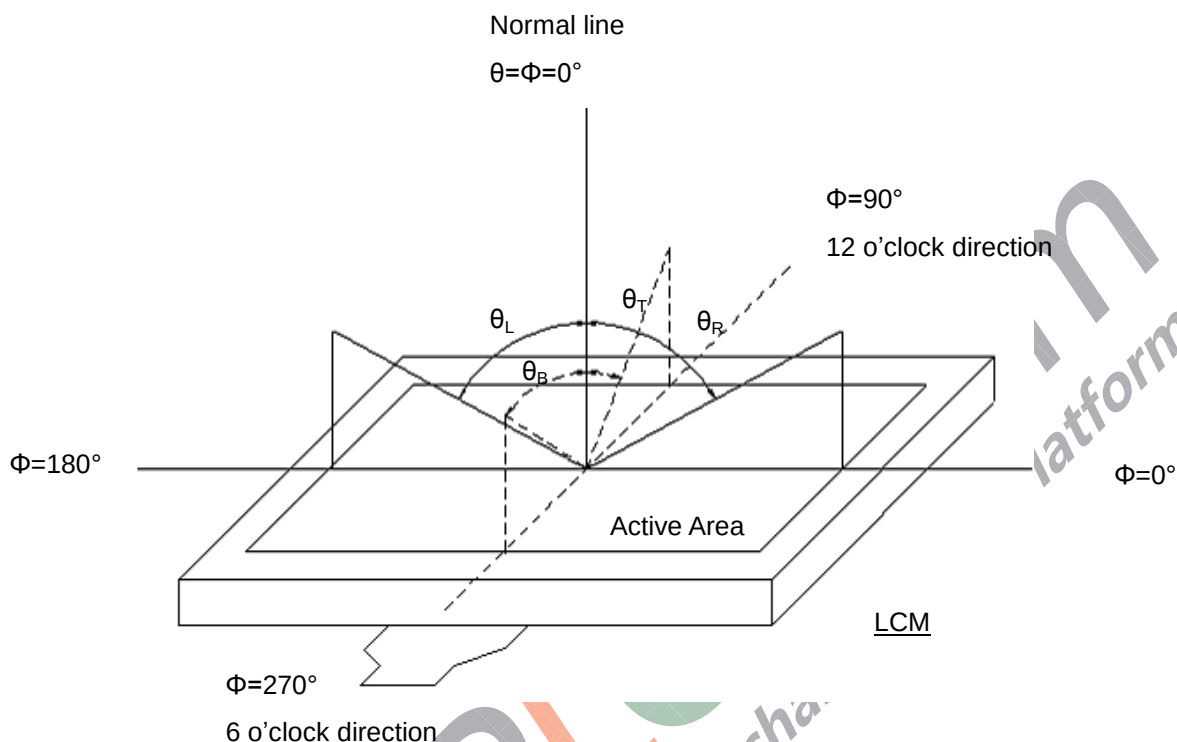


Fig. 4-1 Definition of viewing angle

Note 2: Definition of optical measurement system.

The backlight has been light on for 30 minutes then measured the optical properties at the center point of the LCD screen in dark room. The color chromaticity, contrast ratio are measured by DMS 803.

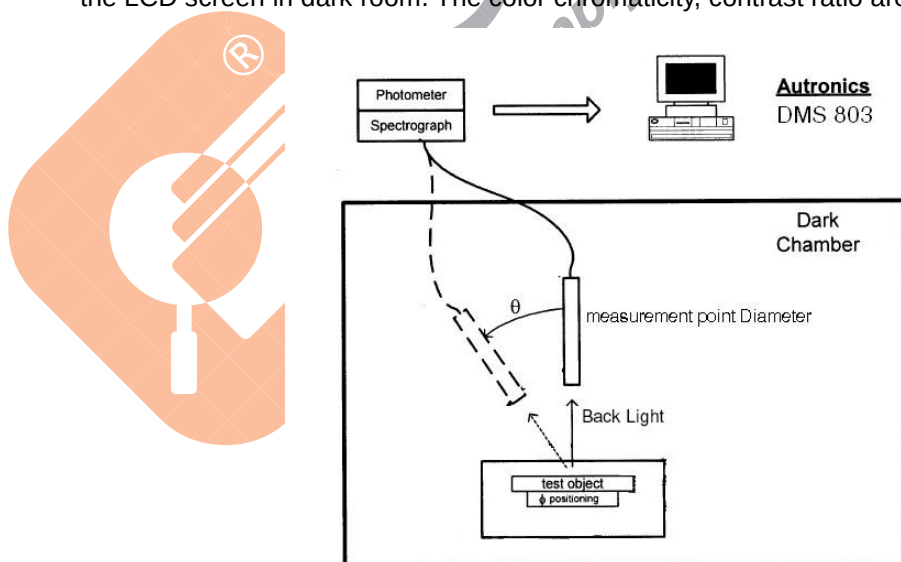


Fig. 4-2 Optical measurement system setup

Note 3: Definition of Response time.

The response time is measured by photo detector of oscilloscope.

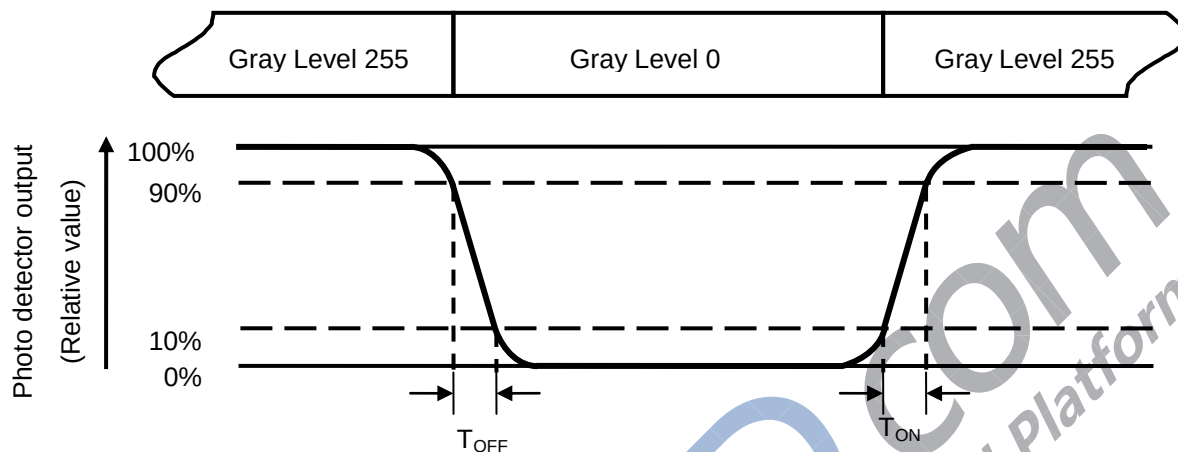


Fig. 4-3 Definition of response time

Note 4: Definition of contrast ratio

$$\text{Contrast ratio (CR)} = \frac{\text{Luminance measured when LCD on the "White" state}}{\text{Luminance measured when LCD on the "Black" state}}$$

Note 5: Color chromaticity is defined by CIE1931.

Note 6: All input terminals LCD panel must be ground while measuring the center area of the panel. The LED driving condition is $I_L = (288 \text{ mA})$.



*Table (1)_LED BLU spectrum

Wavelength (nm)	Rel. Int.				
380	0.002	525	0.152	675	0.036
385	0.002	530	0.160	680	0.031
390	0.002	535	0.168	685	0.028
395	0.002	540	0.175	690	0.024
400	0.002	545	0.176	695	0.020
405	0.002	550	0.175	700	0.018
410	0.004	555	0.173	705	0.016
415	0.008	560	0.172	710	0.014
420	0.017	565	0.168	715	0.012
425	0.038	570	0.165	720	0.012
430	0.079	575	0.161	725	0.010
435	0.143	580	0.156	730	0.008
440	0.229	585	0.151	735	0.008
445	0.351	590	0.149	740	0.006
450	0.537	595	0.143	745	0.006
455	0.462	600	0.135	750	0.005
460	0.313	605	0.128	755	0.005
465	0.191	610	0.118	760	0.004
470	0.132	615	0.107	765	0.004
475	0.085	620	0.098	770	0.003
480	0.058	625	0.089	775	0.003
485	0.048	630	0.082	780	0.003
490	0.045	635	0.075		
495	0.050	640	0.071		
500	0.062	645	0.066		
505	0.081	650	0.061		
510	0.100	655	0.055		
515	0.120	660	0.049		
520	0.136	665	0.044		
		670	0.039		

7. RELIABILITY SPECIFICATION

No.	Test Item	Test Condition	Check Time
1	High Temp Storage	90°C	240 hrs
2	Low Temp Storage	-40°C	240 hrs
3	High Temp Operation	85°C	240 hrs
4	Low Temp Operation	-30°C	240 hrs
5	High Temp & High Humidity Operation	60°C/90%	240 hrs

Note: (1) Ta : Ambient temperature

(2) All judgments of display are performed after temp of panel returns to room temperature

(3) Display function should be no change under normal operating condition.

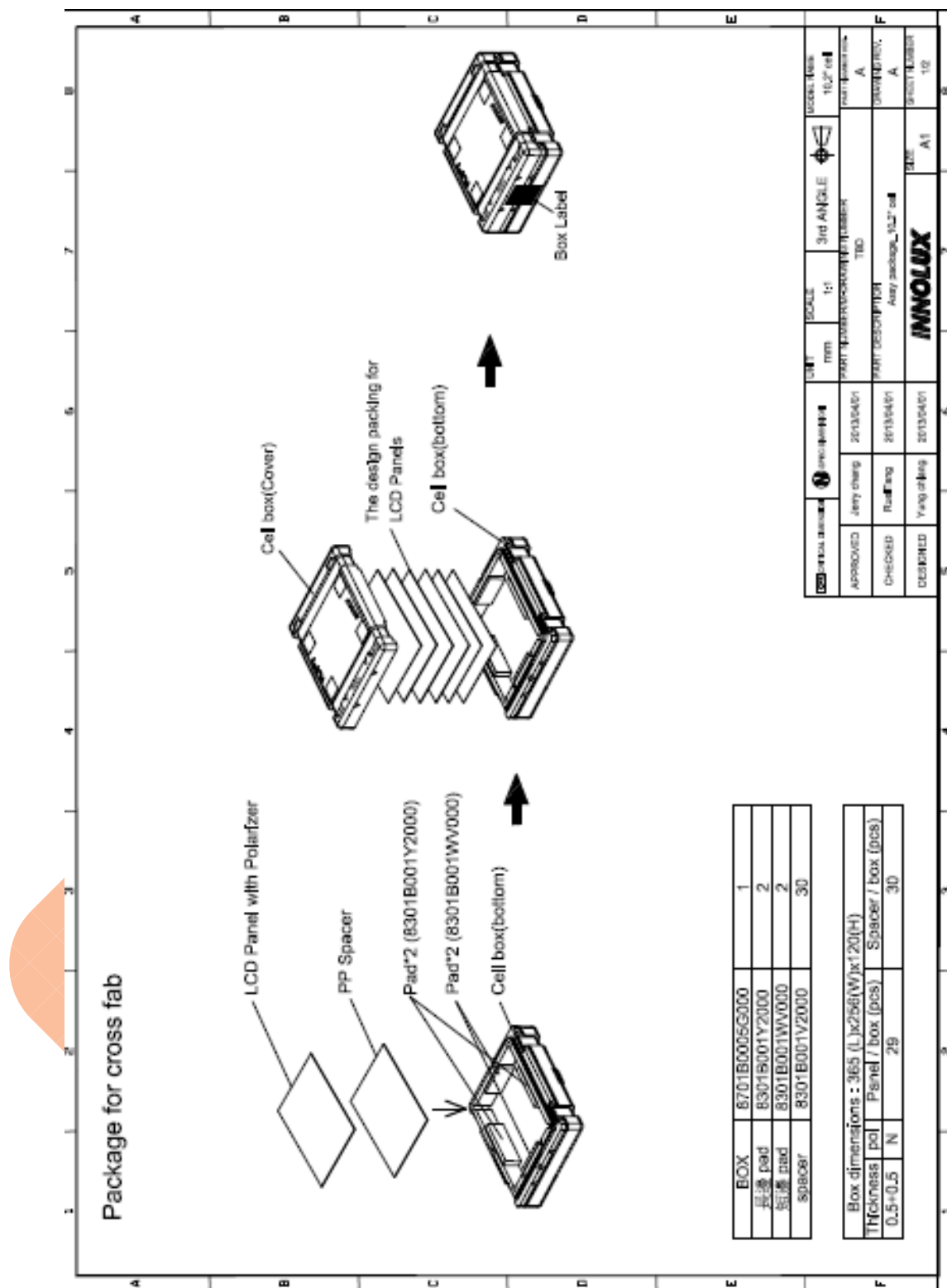
(4) Under no condensation of dew



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8. PACKAGE FORM

8.1 CELL PACKAGE



8.2 PALLET PACKAGE

TBD



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