

Doc. Number:

- Tentative Specification
- Preliminary Specification
- Approval Specification

**MODEL NO.: PP057IC-01A**

**Part NO.: 9430S0570026Q**

<p><b>Customer :</b></p>	
<b>APPROVED BY</b>	<b>SIGNATURE</b>
<p><b>Name / Title</b> _____</p> <p>Note _____</p>	<p>_____</p>
<p>Please return 1 copy for your confirmation with your signature and comments.</p>	

Approved By	Checked By	Prepared By
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## 1.PURPOSE

The specification PP057IC-01A is a 5.7" LTPS TFT Liquid Crystal Display cell. The cell has been designed by Innolux, and manufactured by Innolux under the agreement of customer. The LTPS TFT-LCD cell will be applied to a high transmittance operating in the normally black mode LTPS TFT-LCD product.

## 2.GENERAL RULES OF SINGLE PANEL

### 2.1 GENERAL SPECIFICATION

No.	Item		Specification	unit
1	Glass thickness	TFT	0.2	mm
		CF	0.2	
2	Shipping mode		Panel	-
3	Shipping size		73.436 (H) x 132.584 (V) x 0.4 (D)	mm
4	Panel outline dimension		73.436 (H) x 132.584 (V) x 0.4 (D)	mm
5	Active screen size		70.956 x 126.144 (5.7" diagonal)	-
6	Resolution		1080RGB x 1920	pixel
7	Pixel driving element		LTPS TFT	-
8	Sub pixel size		21.9 x 65.7	um
9	Pixel arrangement		RGB-stripe	-
10	View direction (Gray inversion)		Free	-
11	Cell gap		3.2 ± 0.3	um
12	Driver IC		R63315	-
13	Weight without POL		9.7 +/- 10%	g
14	Display mode		AAS , normally black	-

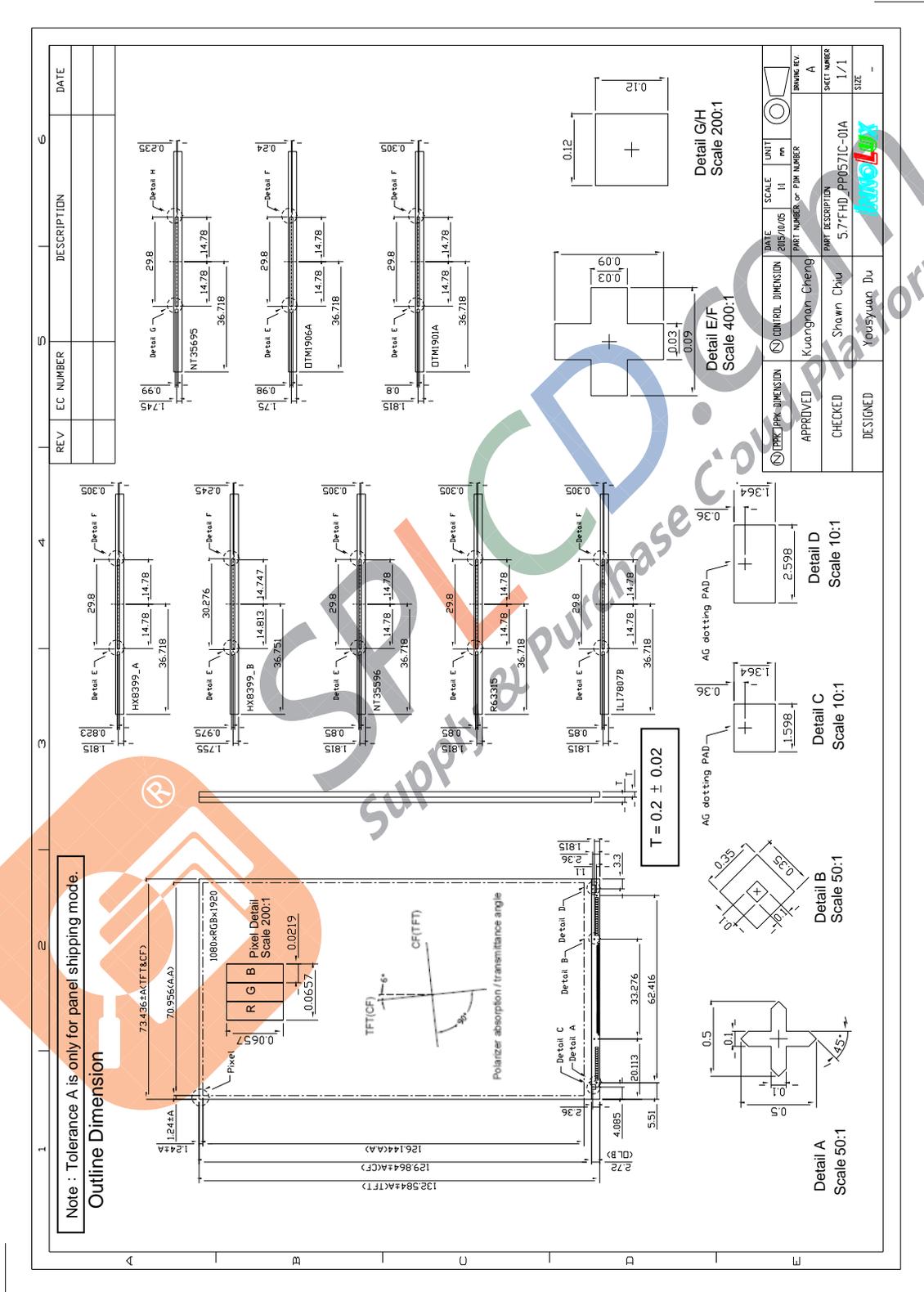
<Note> 1. Compatible IC : HX8399-A/ HX8399-B/ NT35596/ NT35695/ OTM1901A/ OTM1906A/ ILI7807B

The other compatible IC are also considered for the design of pad locations.

2. Those compatible IC should be verified for panel performance. Please refer to the IC datasheet (AP note) respectively.

**2.2 DIMENSION**

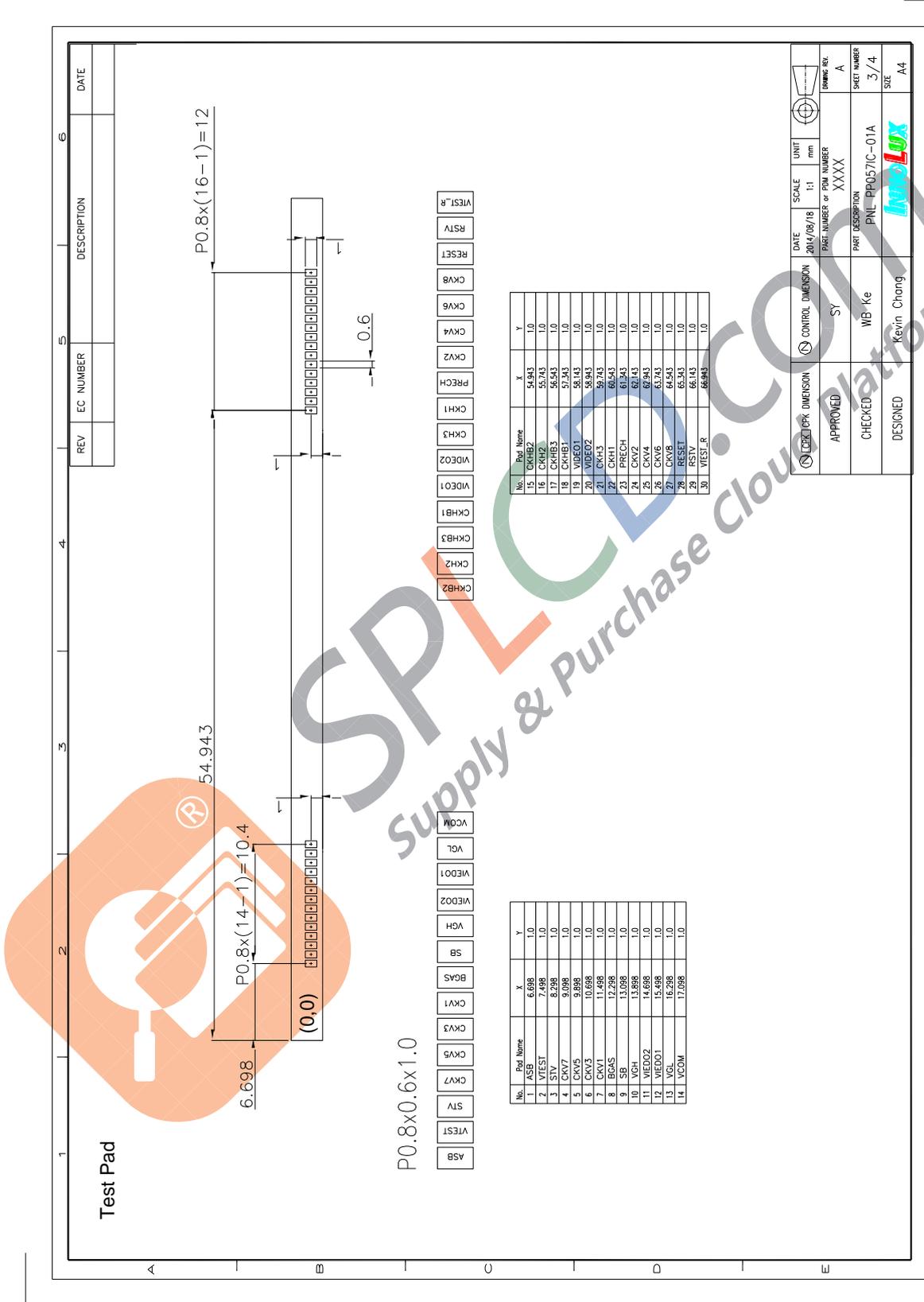
**2.2.1 OUTLINE DIMENSION**



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



2.2.3 TEST PAD



### 3. PIN ASSIGNMENT

#### 3.1 LCD FPC/IC PIN ASSIGNMENT TABLE

##### 3.1.1 R63315 IC to FPC

IC side		Connect to	FPC side	
Pad No	R63315 Pad Name		R63315 PinOut Name	FPC PinOut Number
	ILI7807B/ILI/v0.01			
		FPC	DUMMY	1
		FPC	DUMMY	2
		FPC	VSS	3
		FPC	VSS	4
1	DUMMY	FPC	OPEN	
2	DUMMY	FPC	OPEN	
3	DUMMY	FPC	OPEN	
4	VCOM			
5	VCOM	FPC	VCOM	5
6	VCOM			
7	VCOM			
8	VCOM	FPC	VCOM	6
9	VCOM			
10	AGND			
11	AGND	FPC	AGND	7
12	AGND	FPC	AGND	8
13	VGLO			
14	VGLO	FPC	GVSS	9
15	VGLO	FPC	GVSS	10
16	AGND			
17	AGND	FPC	GND	11
18	AGND	FPC	GND	12
19	DUMMY			
20	DUMMY	FPC	PBCTLA1	13
21	DUMMY			
22	DUMMY			
23	DUMMY	FPC	PBCTLA2	14
24	DUMMY			
25	DUMMY			
26	VPP	FPC	PBCTLB1	15
27	VPP			
28	VPP			
29	VPP	FPC	PBCTLB2	16

30	DUMMY			
31	VGHO			
32	VGHO	FPC	GVDD	17
33	VGHO			
34	VGHO			
35	VGHO	FPC	GVDD	18
36	VGHO			
37	VGH			
38	VGH	FPC	VGH	19
39	VGH			
40	VGH			
41	VGH	FPC	VGH	20
42	VGH			
43	C21P			
44	C21P	FPC	C21P	21
45	C21P			
46	C21P			
47	C21P	FPC	C21P	22
48	C21P			
49	C21P			
50	C21P	FPC	C21P	23
51	C21P			
52	C21M			
53	C21M	FPC	C21M	24
54	C21M			
55	C21M			
56	C21M	FPC	C21M	25
57	C21M			
58	C21M	FPC	C21M	26
59	C21M			
60	DUMMY	FPC	OPEN	
61	VSPR	FPC	SVDD	27
62	VSPR			
63	VSPR	FPC	SVDD	28
64	VSPR			
65	VSPR	FPC	SVDD	29
66	VSPR			
67	VSPR			
68	VSPR	FPC	SVDD	30
69	VSPR			

70	VSP	FPC	VSP	31
71	VSP			
72	VSP	FPC	VSP	32
73	VSP			
74	VSP	FPC	VSP	33
75	VSP			
76	VSP	FPC	VSP	34
77	VSP			
78	VSP			
79	ENPWRP	FPC	EXPWRP	35
80	ENPWRP			
81	DUMMY	FPC	DUMMY	36
82	EXTP	FPC	VSWP	37
83	EXTP			
84	EXTP	FPC	VSWP	38
85	VSNR	FPC	SVSS	39
86	VSNR			
87	VSNR			
88	VSNR	FPC	SVSS	40
89	VSNR			
90	VSNR			
91	VSN	FPC	VSN	41
92	VSN			
93	VSN	FPC	VSN	42
94	VSN			
95	VSN <sup>®</sup>			
96	VSN	FPC	AGND	43
97	AGND			
98	AGND			
99	AGND			
100	AGND	FPC	AGND	44
101	AGND			
102	AGND	FPC	AGND	45
103	C41M	FPC	C41M	46
104	C41M			
105	C41M	FPC	C41M	47
106	C41M			
107	C41M	FPC	C41M	48
108	C41M			
109	C41P	FPC	C41P	49

110	C41P			
111	C41P	FPC	C41P	50
112	C41P			
113	C41P			
114	C41P	FPC	C41P	51
115	VCL	FPC	VCL	52
116	VCL			
117	VCL			
118	VCL	FPC	VCL	53
119	VCL			
120	VCL			
121	VCI			
122	VCI	FPC	VCI	54
123	VCI			
124	VCI			
125	VCI	FPC	VCI	55
126	VCI			
127	VCI			
128	VCI			
129	VCI	FPC	VCI	56
130	GVDDP			
131	VREF			
132	GVDDN	FPC	VPLVL	57
133	VCOM	FPC	OPEN	58
134	VCOM			
135	VCOM			
136	VCOM			
137	VCOM	FPC	VNLVL	59
138	VCOM			
139	VCOM			
140	VCOM			
141	VCOM	FPC	VCOMDC	60
142	AGND			
143	AGND			
144	AGND			
145	AGND	FPC	AVSS	61
146	AGND			
147	AGND			
148	VDD	FPC	VDD	62
149	VDD			

150	VDD	FPC	VDD	66
151	VDD			
152	VDD	FPC	VDD	67
153	VDD			
154	IOVCC	FPC	IOVCCRF	68
155	IOVCC	FPC	IOVCCRF	69
156	IOVCC	FPC	IOVCCRF	70
157	IOVCC	FPC	IOVCC	71
158	IOVCC			
159	IOVCC			
160	IOVCC	FPC	IOVCC	72
161	IOVCC			
162	IOVCC			
163	IOVCC	FPC	IOVCC	73
164	IOVCC			
165	IOVCC			
166	GND	FPC	GNDRF	74
167	GND			
168	GND			
169	GND	FPC	VSS	75
170	GND			
171	GND			
172	GND	FPC	VSS	76
173	GND			
174	EN4PWR	FPC	TESTE	77
175	TEST_I[7]	OPEN	OPEN	
176	LEDPWM	FPC	LEDPWM	78
177	TEST_I[6]	OPEN	OPEN	
178	TEST_I[5]	OPEN	OPEN	
179	EXCK	FPC	EXCK	79
180	TEST_IO[23]	OPEN	OPEN	
181	TEST_IO[22]	OPEN	OPEN	
182	DBIST	FPC	FRM	80
183	TEST_IO[21]	OPEN	OPEN	
184	TEST_IO[20]	OPEN	OPEN	
185	DSWAP[1]	FPC	LNSW1	81
186	TEST_IO[19]	OPEN	OPEN	
187	TEST_IO[18]	OPEN	OPEN	
188	DSWAP[0]	FPC	LNSW0	82
		FPC	LNSW0	83

189	TEST_IO[17]	OPEN	OPEN	
190	TEST_IO[16]	OPEN	OPEN	
191	PNSWAP	FPC	PNSW	84
192	TEST_IO[15]	OPEN	OPEN	
193	TEST_IO[14]	OPEN	OPEN	
194	IM[2]	FPC	IM[2]	85
195	TEST_IO[13]	OPEN	OPEN	
196	TEST_IO[12]	OPEN	OPEN	
197	IM[1]	FPC	IM[1]	86
		FPC	IM[1]	87
198	TEST_IO[11]	OPEN	OPEN	
199	GND	OPEN	OPEN	
200	IM[0]	FPC	IM[0]	88
201	TEST_IO[10]	OPEN	OPEN	
202	TEST_IO[9]	OPEN	OPEN	
203	VSOUT	FPC	VSOUT	89
204	DUMMY	OPEN	OPEN	
205	DUMMY	OPEN	OPEN	
206	HSOUT	FPC	HSOUT	90
207	TEST_I[4]	OPEN	OPEN	
208	TEST_I[3]	OPEN	OPEN	
209	FTE1	FPC	TE2	91
210	TEST_I[2]	OPEN	OPEN	
211	TEST_I[1]	OPEN	OPEN	
212	FTE	FPC	TE	92
		FPC	TE	93
213	TEST_IO[8]	OPEN	OPEN	
214	TEST_IO[7]	OPEN	OPEN	
215	CSX	FPC	CSX	94
216	TEST_IO[6]	OPEN	OPEN	
217	TEST_IO[5]	OPEN	OPEN	
218	DCX	FPC	DCX	95
219	TEST_IO[4]	OPEN	OPEN	
220	TEST_IO[3]	OPEN	OPEN	
221	WRXSCL	FPC	WRX/SCL	96
222	TEST_IO[2]	OPEN	OPEN	
223	TEST_IO[1]	OPEN	OPEN	
224	SDO	FPC	DOUT	97
225	TEST_I[0]	OPEN	OPEN	
226	SDI	FPC	DIN	98

227	SDI			
228	SDI	FPC	DIN	99
229	TEST_IO[0]	OPEN	OPEN	
230	RESX	FPC	RESX	100
231	GND	OPEN	OPEN	
232	IOVCC	FPC	IOVCC	101
233	IOVCC			
234	IOVCC	FPC	IOVCC	102
235	IOVCC			
236	IOVCC	FPC	IOVCC	103
237	IOVCC	FPC	IOVCC	104
238	GND	FPC	GND	105
239	GND			
240	GND	FPC	GND	106
241	GND			
242	GND	FPC	GND	107
243	GND			
244	GND	FPC	GND	108
245	GND			
246	GND	FPC	GND	109
247	GND			
248	GND	FPC	GND	110
249	GND			
250	AGND	FPC	AGND	111
251	AGND			
252	AGND	FPC	AGND	112
253	AGND			
254	AGND	FPC	AGND	113
255	AGND			
256	AGND	FPC	AGND	114
257	AGND			
258	AGND	FPC	AGND	115
259	AGND			
260	AGND	FPC	AGND	116
261	AGND			
262	VCI	FPC	VCI	117
263	VCI			
264	VCI	FPC	VCI	118
265	VCI			
266	VCI	FPC	VCI	119

267	VCI			
268	VCI			
269	VCI	FPC	VCI	118
270	VCI			
271	VCI			
272	VCI	FPC	VCI	119
273	VCI			
274	VSPR			
275	VSPR	FPC	SVDD	120
276	VSPR			
277	VSPR			
278	VSPR	FPC	SVDD	121
279	VSPR			
280	VSPR			
281	VSPR	FPC	SVDD	122
282	VSPR			
283	VSPR			
284	VSPR	FPC	SVDD	123
285	VSPR			
286	VSPR			
287	VSPR	FPC	SVDD	124
288	VSPR			
289	VGS	FPC	VGS	125
290	VGS			
291	VGS	FPC	VGS	126
292	VGS			
293	VGS	FPC	VGS	127
294	VGS			
		DUMMY	DUMMY	128
295	VSNR	FPC	SVSS	129
296	VSNR			
297	VSNR	FPC	SVSS	130
298	VSNR			
299	VSNR	FPC	SVSS	131
300	VSNR			
301	VSNR			
302	VSNR	FPC	SVSS	132
303	VSNR			
304	VSNR	FPC	SVSS	133
305	VSNR			

306	VSNR			
307	VSNR			
308	VSNR	FPC	SVSS	134
309	VSNR			
310	VCL	FPC	VCL	135
311	VCL			
312	VCL	FPC	VCL	136
313	VCL			
314	VCL	FPC	VCL	137
315	VCL			
316	VCL			
317	VCL	FPC	VCL	138
318	VCL			
319	VCL			
320	VCL	FPC	VCL	139
321	VCL			
322	AGND	FPC	AGND	140
323	AGND			
324	AGND	FPC	AGND	141
325	AGND			
326	AGND	FPC	AGND	142
327	AGND			
328	AGND			
329	AGND	FPC	AGND	143
330	AGND			
331	AGND			
332	AGND	FPC	AGND	144
333	AGND			
334	GND	FPC	GND	145
335	GND			
336	GND	FPC	GND	146
337	GND			
338	GND	FPC	GND	147
339	GND			
340	GND			
341	GND	FPC	GND	148
342	GND			
343	GND			
344	GND	FPC	GND	149
345	GND			

346	VDD	FPC	VDD	150
347	VDD			
348	VDD	FPC	VDD	151
349	VDD			
350	VDD	FPC	VDD	152
351	VDD			
352	IOVCC	FPC	IOVCC	153
353	IOVCC	FPC	IOVCC	154
354	IOVCC	FPC	IOVCC	155
355	GND	FPC	GND	156
356	GND			
357	GND	FPC	GND	157
358	GND			
359	GND			
360	GND			
361	DPHYGND	FPC	DPHYGND	158
362	DPHYGND			
363	DPHYGND	FPC	DPHYGND	159
364	DPHYGND			
365	DPHYGND			
366	DPHYGND			
367	DPHYGND	FPC	DPHYGND	160
368	DPHYGND			
369	DPHYGND	FPC	DATA2P	161
370	DATA2P			
371	DATA2P			
372	DATA2P			
373	DATA2P			
374	DATA2P			
375	DATA2P	FPC	DATA2N	162
376	DATA2N			
377	DATA2N			
378	DATA2N			
379	DATA2N			
380	DATA2N	FPC	DPHYGND	163
381	DATA2N			
382	DPHYGND			
383	DPHYGND	FPC	DPHYGND	163
384	DPHYGND			
385	DATA1P	FPC	DATA1P	164

386	DATA1P			
387	DATA1P			
388	DATA1P			
389	DATA1P			
390	DATA1P			
391	DATA1N			
392	DATA1N			
393	DATA1N			
394	DATA1N	FPC	DATA1N	165
395	DATA1N			
396	DATA1N			
397	DPHYGND			
398	DPHYGND	FPC	DPHYGND	166
399	DPHYGND			
400	CLKP			
401	CLKP			
402	CLKP			
403	CLKP	FPC	CLK_P	167
404	CLKP			
405	CLKP			
406	CLKN			
407	CLKN			
408	CLKN			
409	CLKN	FPC	CLK_N	168
410	CLKN			
411	CLKN			
412	DPHYGND			
413	DPHYGND	FPC	DPHYGND	169
414	DPHYGND			
415	DATA0P			
416	DATA0P			
417	DATA0P			
418	DATA0P	FPC	DATA0P	170
419	DATA0P			
420	DATA0P			
421	DATA0N			
422	DATA0N			
423	DATA0N	FPC	DATA0N	171
424	DATA0N			
425	DATA0N			

426	DATA0N			
427	DPHYGND			
428	DPHYGND	FPC	DPHYGND	172
429	DPHYGND			
430	DATA3P			
431	DATA3P			
432	DATA3P	FPC	DATA3P	173
433	DATA3P			
434	DATA3P			
435	DATA3P			
436	DATA3N			
437	DATA3N			
438	DATA3N	FPC	DATA3N	174
439	DATA3N			
440	DATA3N			
441	DATA3N			
442	DPHYVCC	FPC	DPHYVCC	175
443	DPHYVCC			
444	DPHYVCC	FPC	DPHYVCC	176
445	DPHYVCC			
446	DPHYVCC	FPC	DPHYVCC	177
447	DPHYVCC			
448	DPHYVCC			
449	DPHYVCC	FPC	DPHYVCC	178
450	DPHYVCC			
451	VDDL	FPC	VDDL	179
452	VDDL			
453	VDDL	FPC	VDDL	180
454	VDDL			
455	VDDL	FPC	VDDL	181
456	VDDL			
457	GND			
458	GND	FPC	GND	182
459	GND			
460	GND			
461	GND	FPC	GND	183
462	GND			
463	GND			
464	GND	FPC	GND	184
465	GND			

466	AGND			
467	AGND	FPC	AVSS	185
468	AGND			
469	AGND			
470	AGND	FPC	AVSS	186
471	AGND			
472	AGND			
473	AGND	FPC	AVSS	187
474	AGND			
475	DUMMYR1	FPC	DUMMYR1	188
476	VCI1T	OPEN	OPEN	
477	VCI1T	OPEN	OPEN	
478	VCI1T	OPEN	OPEN	
479	VCI1T	OPEN	OPEN	
480	DUMMYR2	FPC	DUMMYR2	189
481	VCL	FPC	VCL	190
482	VCL			
483	VCL	FPC	VCL	191
484	VCL			
485	VCL	FPC	VCL	192
486	VCL			
487	VCI			
488	VCI	FPC	VCI	193
489	VCI			
490	VCI			
491	VCI			
492	VCI			
493	VCI	FPC	VCI	194
494	VCI			
495	VCI			
496	VSPR	FPC	SVDD	195
497	VSPR			
498	VSPR	FPC	SVDD	196
499	VSPR			
500	VSPR	FPC	SVDD	197
501	VSPR			
502	VSP	FPC	VSP	198
503	VSP			
504	VSP	FPC	VSP	199
505	VSP			

506	VSP	FPC	VSP	200
507	VSP			
508	ENPWRN	FPC	EXPWRN	201
509	ENPWRN			
510	DUMMY	OPEN	OPEN	
511	VSN	FPC	VSN	202
512	VSN			
513	VSN			
514	VSN			
515	VSN	FPC	VSN	203
516	VSN			
517	VSN	FPC	VSN	204
518	VSN			
519	VSN			
520	VSNR	FPC	SVSS	205
521	VSNR			
522	VSNR			
523	VSNR			
524	VSNR	FPC	SVSS	206
525	VSNR			
526	VSNR	FPC	SVSS	207
527	VSNR			
528	VSNR			
529	EXTN	FPC	VSWN	208
530	EXTN	FPC	VSWN	209
531	DUMMY	DUMMY	DUMMY	210
532	C31P	FPC	C31P	211
533	C31P			
534	C31P			
535	C31P			
536	C31P	FPC	C31P	212
537	C31P			
538	C31P	FPC	C31P	213
539	C31P			
540	C31P			
541	C31M	FPC	C31M	214
542	C31M			
543	C31M			
544	C31M	FPC	C31M	215
545	C31M			

546	C31M			
547	C31M			
548	C31M	FPC	C31M	216
549	C31M			
550	VGL			217
551	VGL	FPC	VGL	218
552	VGL			
553	VGL			219
554	VGL	FPC	VGL	220
555	VGL			
556	VGLO			
557	VGLO	FPC	GVSS	221
558	VGLO			
559	VGLO			
560	VGLO	FPC	GVSS	222
561	VGLO			
562	AGND			
563	AGND	FPC	AVSS	223
564	AGND			
565	AGND			
566	AGND	FPC	AVSS	224
567	AGND			
568	VGHO	FPC	GVDD	225
569	VGHO	FPC	GVDD	226
570	VGHO	FPC	GVDD	227
571	AGND			
572	AGND	FPC	AGND	228
573	AGND			
574	AGND			
575	AGND	FPC	AGND	229
576	AGND			
577	VCOM			
578	VCOM	FPC	VCOM	230
579	VCOM			
580	VCOM			
581	VCOM	FPC	VCOM	231
582	VCOM			
583	DUMMY	OPEN	OPEN	
584	DUMMY	OPEN	OPEN	
585	DUMMY	OPEN	OPEN	

		FPC	ASB	232
		FPC	SB	233
		FPC	VSS	234
		FPC	VSS	235
		DUMMY	DUMMY	236
		DUMMY	DUMMY	237

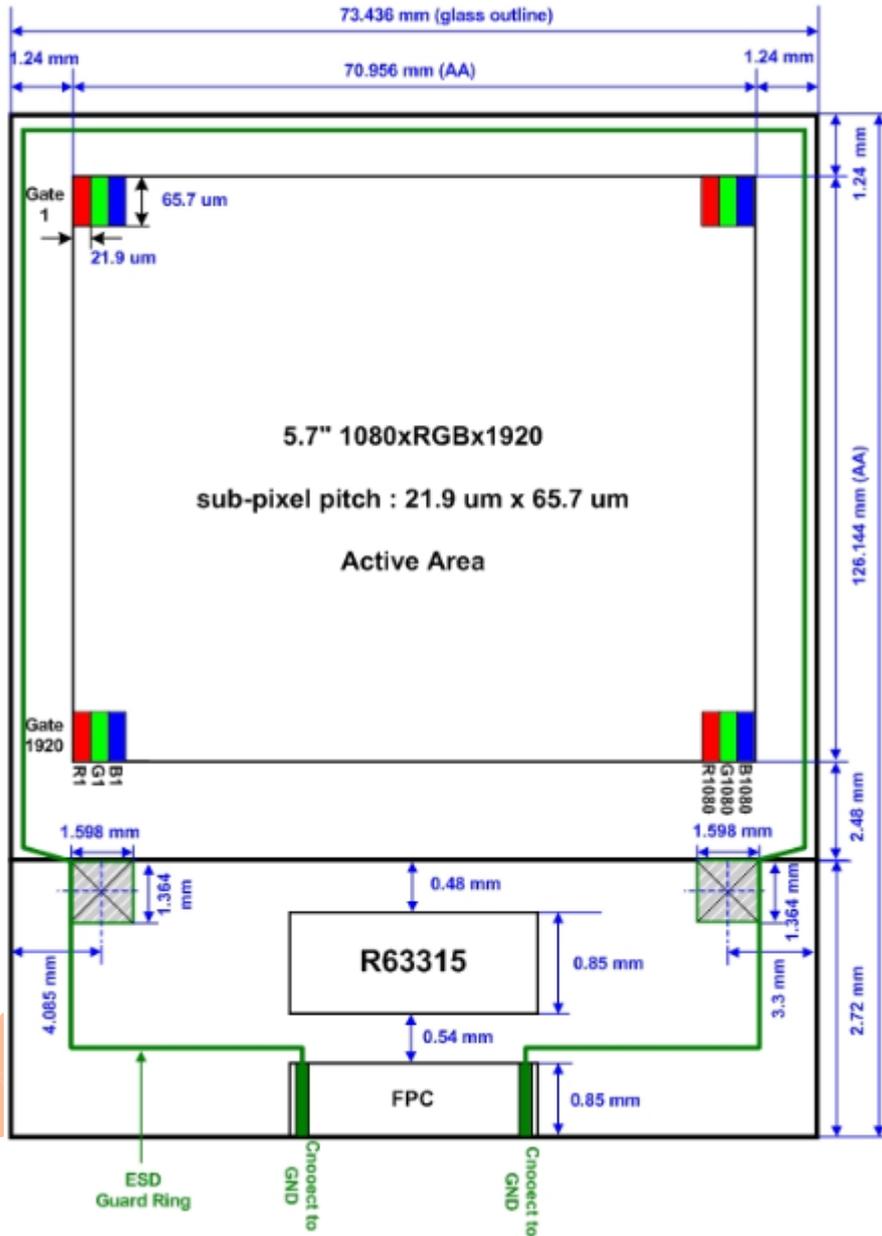
Note:

- (1) FPC pin No. 3/4/234/235: Please connect these pins to GND on FPCa design.
- (2) FPC pin No. 232 (ASB) & No. 233 (SB): Please short these pins with FPC pin No. 9/10/221/222 on FPCa design.



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3.2 SCHEMATIC PANEL LAYOUT



Note : GOP can support dual scan.



5. ELECTRICAL SPECIFICATION

Item	Symbol	Specification			Unit
		Min.	Typ	Max.	
TFT gate on voltage	VGH	9.5	10	10.5	V
TFT gate off voltage	VGL	-6.5	-6	-5.5	V
TFT common electrode voltage	Vcom	-0.7	-0.2	0.3	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

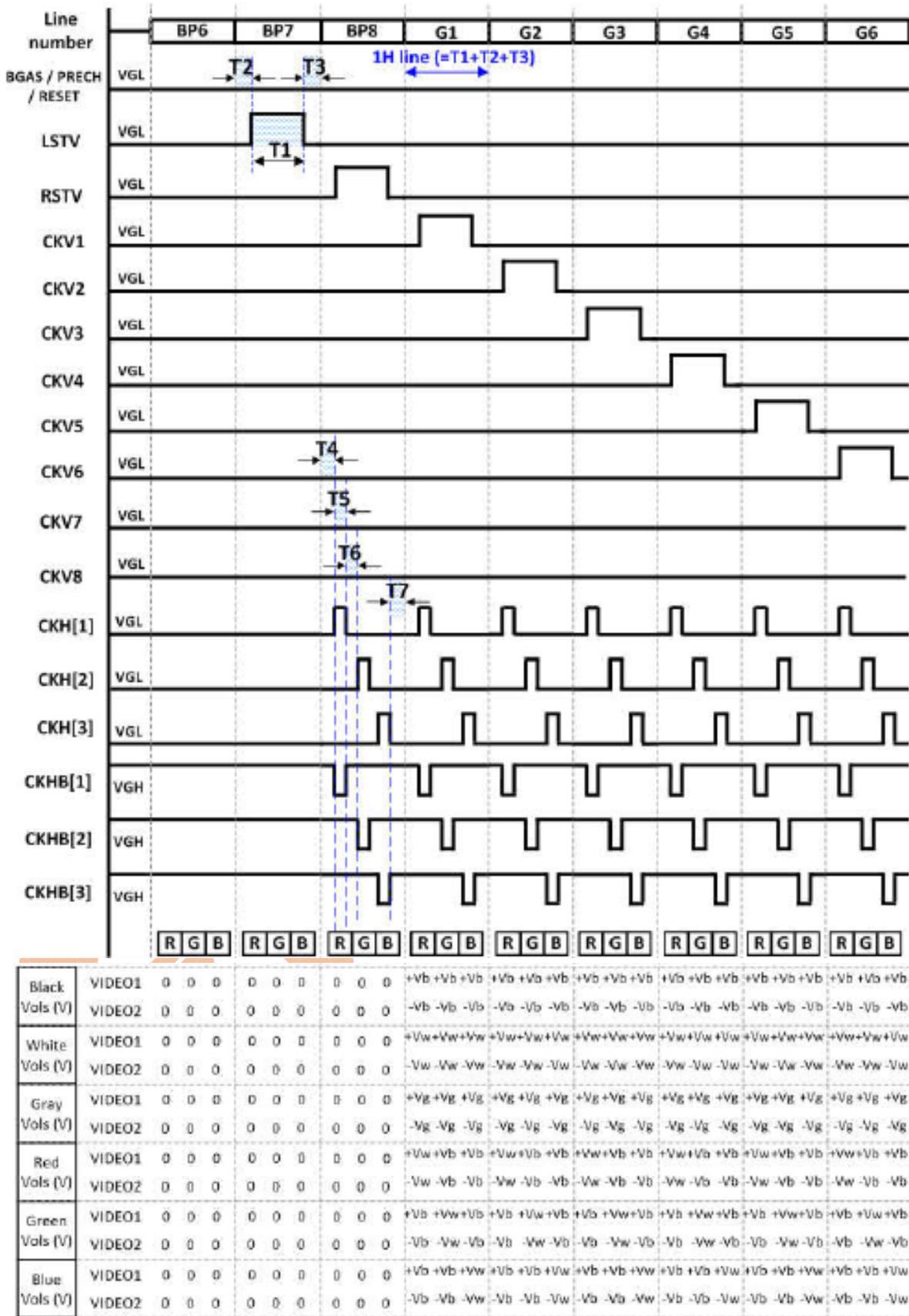
(4) Environmental condition: 25±5°C

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

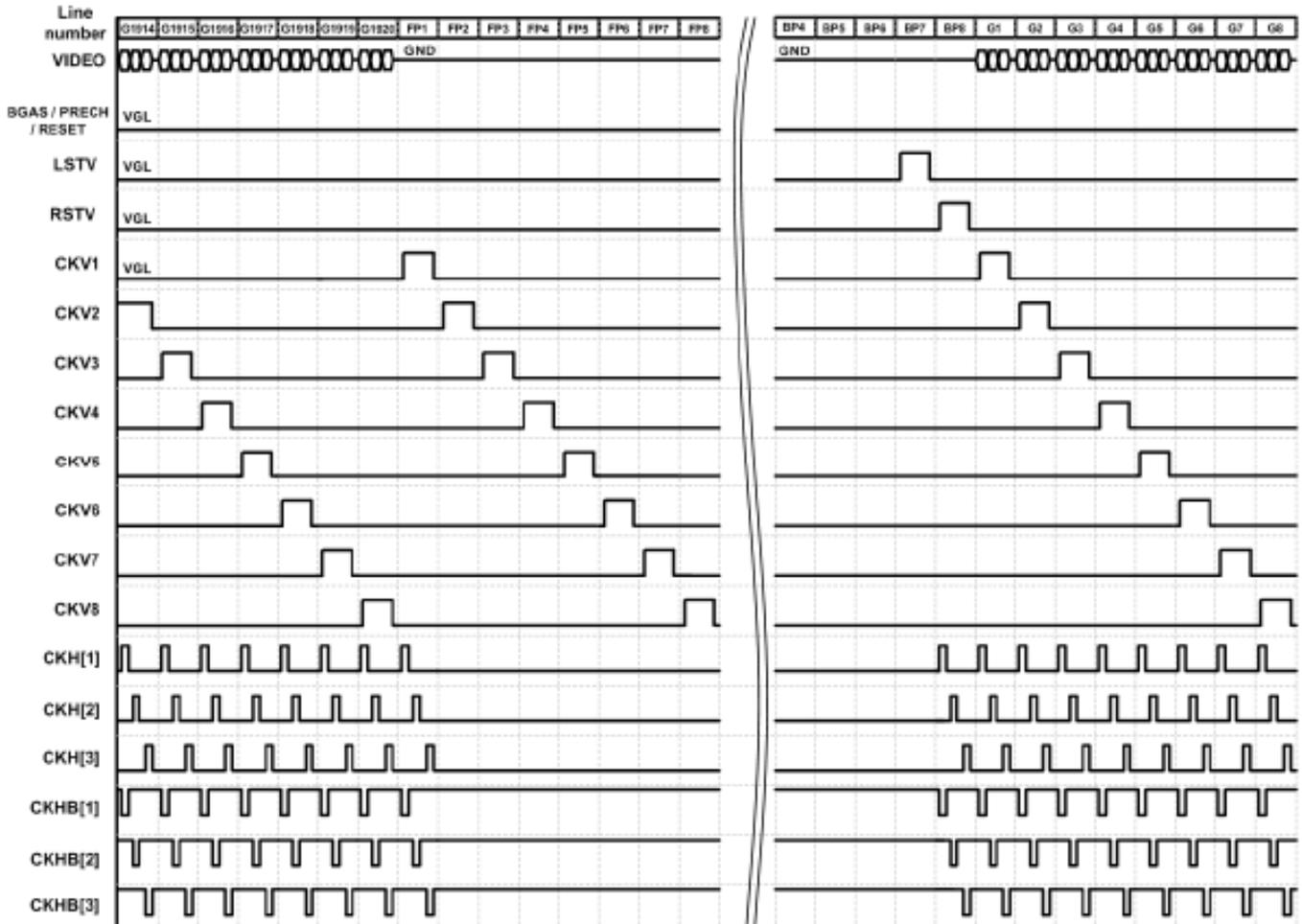
	T1	T2	T3	T4	T5	T6	T7	1H line
Timing (us)	7.5	0	1.1	0	2.0	0.5	1.6	8.6
Freq. (Hz)	60							
Blanking lines	16 (front porch=back porch=8, suggest value)							
Resolution (HxV)	1080 x RGB x 1920							



Supply



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



## 6. OPTICAL SPECIFICATION

Item	Symbol	Conditions	Specifications			Unit	Note
			Min.	Typ.	Max.		
Transmittance (without APCF) (no WOTP)	T%	Viewing normal angle $\theta_X = \theta_Y = 0^\circ$	2.8	3.29		%	All left side data are based on INX following condition – 1.Polarizer w/o APCF 2.Light Source : BL is only typical spectrum (measured by INX) based on real sample . 3.Machine : DMS 900
Contrast Ratio	CR		800	1000			
Response Time	Ton + Toff			25	30	ms	
Viewing Angle	Hor.	$\theta_{X+}$	70	80	--	deg.	
		$\theta_{X-}$	70	80	--		
	Ver.	$\theta_{Y+}$	70	80	--		
		$\theta_{Y-}$	70	80	--		
CF only (RGB+OC+ Backside ITO) Color Chromaticity (CIE 1931)	Red	XR	0.623	0.653	0.683	w/i OC w/i ITO Under C light simulation.	
		YR	0.289	0.319	0.349		
	Green	XG	0.236	0.266	0.296		
		YG	0.528	0.558	0.588		
	Blue	XB	0.115	0.145	0.175		
		YB	0.054	0.084	0.114		
	White	XW	0.271	0.301	0.331		
		YW	0.283	0.313	0.343		
Color Gamut (x, y)	CG	57.2	67.2	--	%		
LC Operation Voltage	V white		--	4.5	--	V	
	V dark		--	0.2	--	V	

Note : (1) Definition of Response Time  
(2) Definition of Viewing Angle

\*Note (1) Definition of Response Time ( $T_{on}$ ,  $T_{off}$ ):

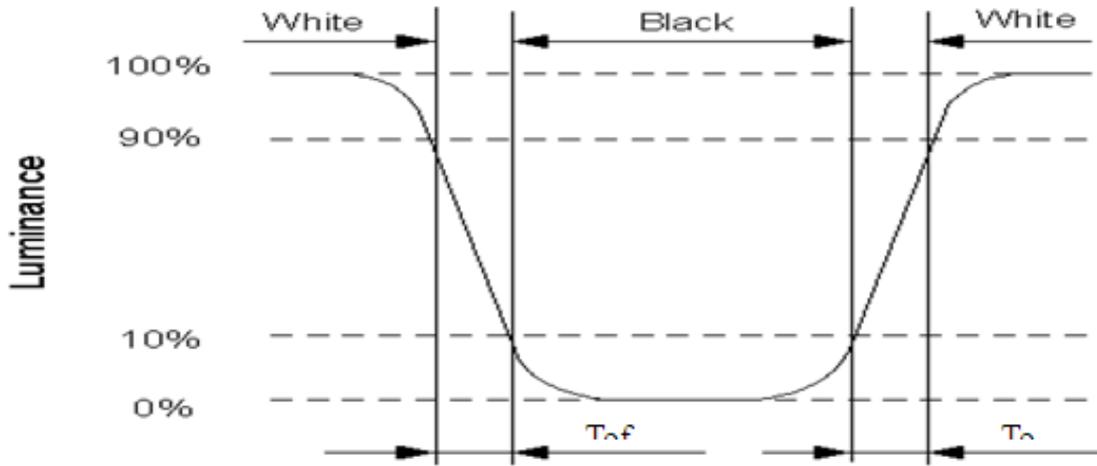
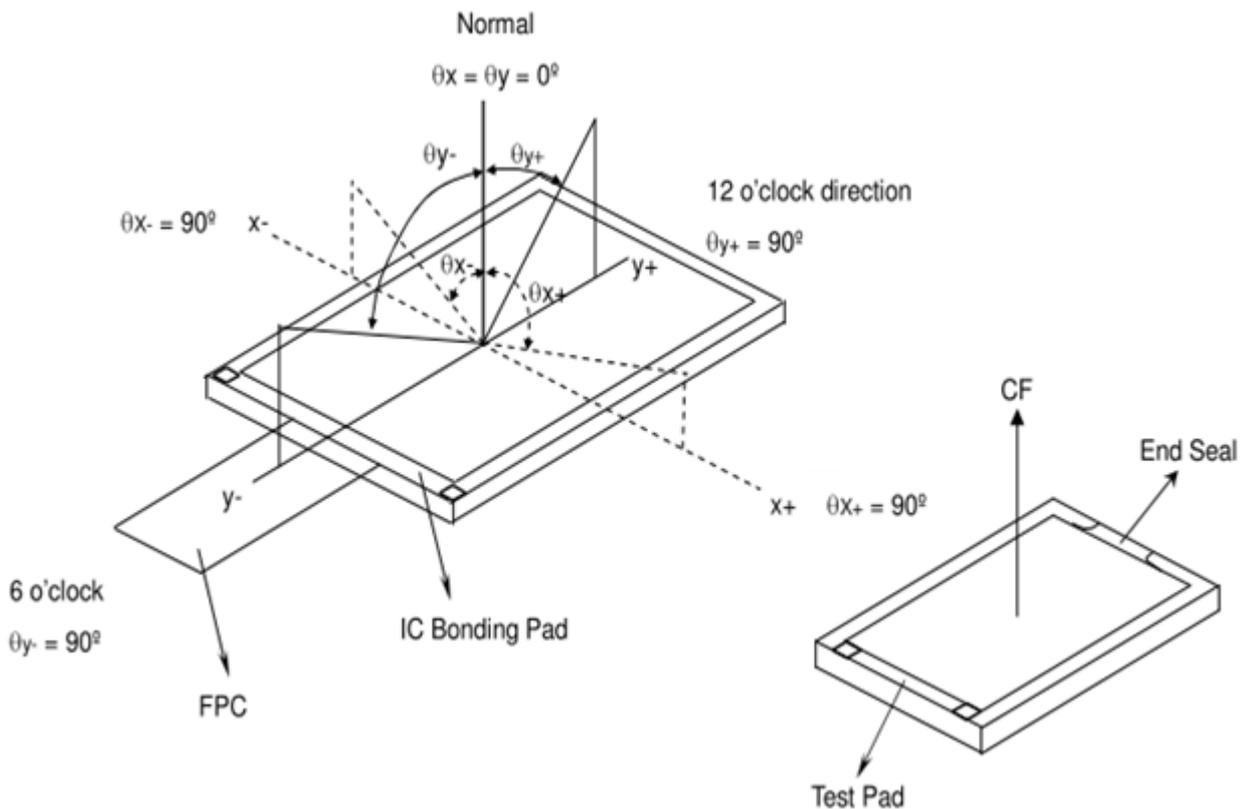


Fig 9 Definition of Response Time

\*Note(2) Definition of Viewing Angle



7. RELIABILITY SPECIFICATION

No.	Test Item	Test Condition	Check Time
1	High Temp Storage	Ta= 80°C	240 hrs
2	Low Temp Storage	Ta= -30°C	240 hrs
3	High Temp Operation	Ta= 70°C	240 hrs
4	Low Temp Operation	Ta= -20°C	240 hrs
5	High Temp & High Humidity Operation	Ta=60°C H=90%RH	240 hrs
6	Packing Vibration	1.0G/5~300Hz~5/30min for each direction of X,Y,Z	Each direction: 30min
7	Packing drop	1corner,3edges, 6faces	1 time/direction

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.

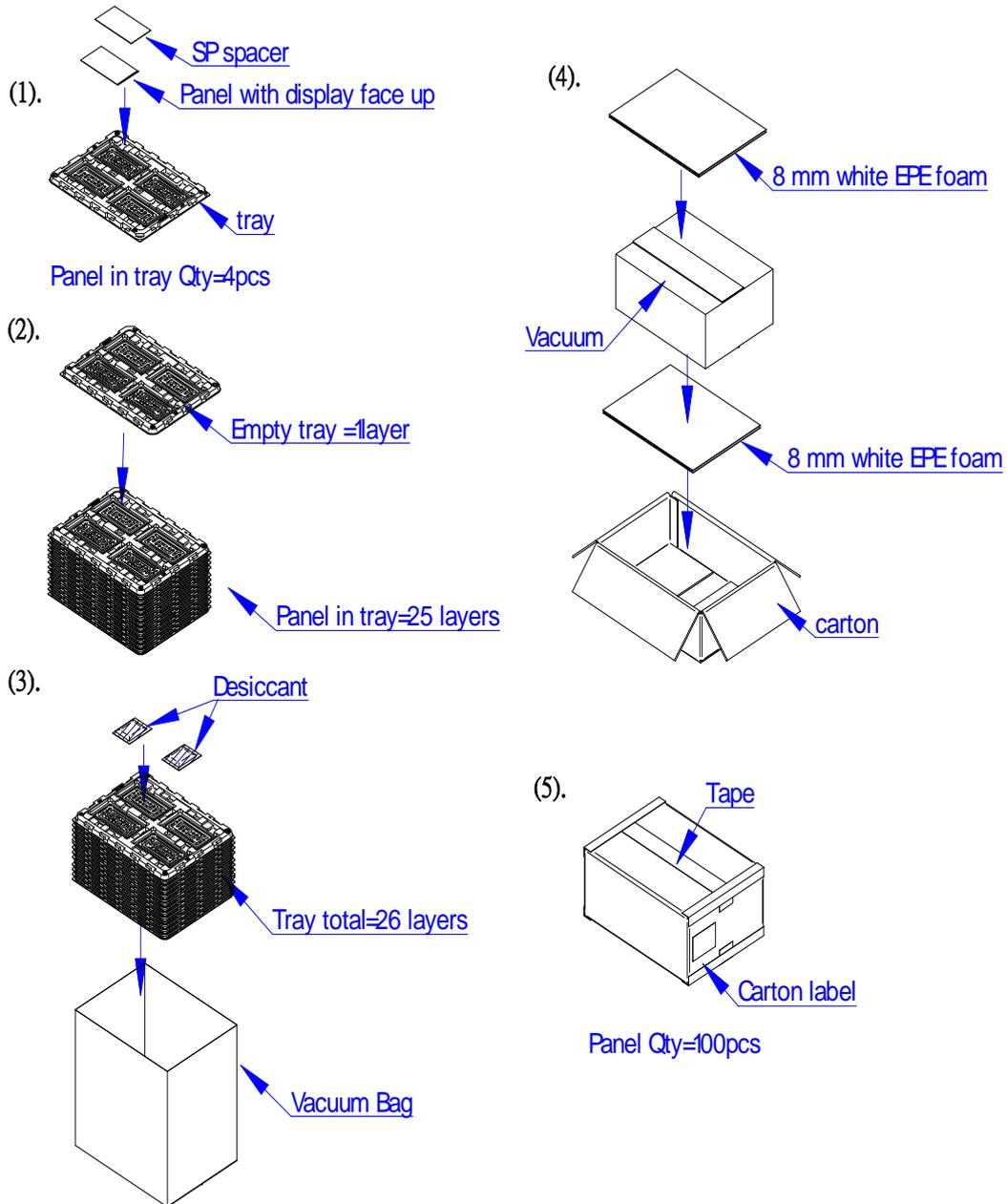
(4) Under no condensation of dew



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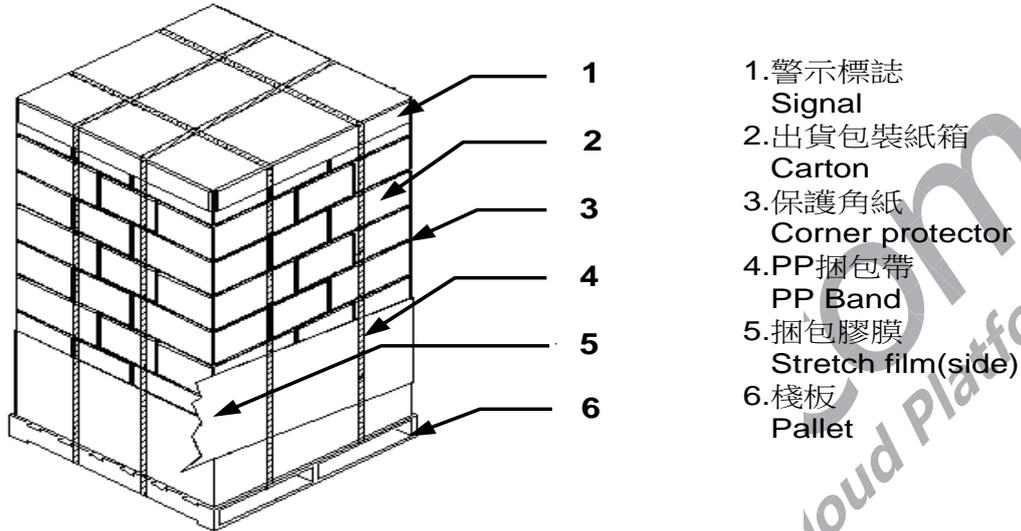
8. PACKAGE FORM

8.1 CELL PACKAGE



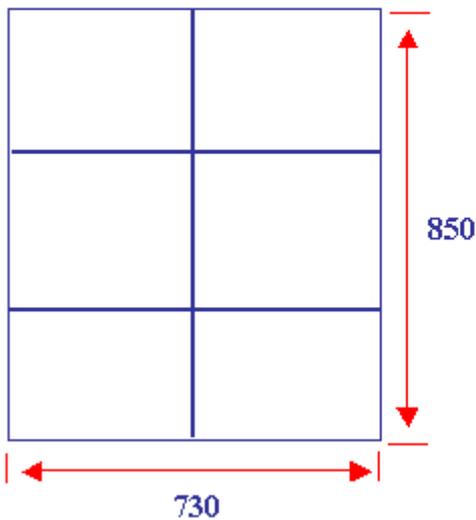
8.2 PALLET PACKAGE

Packaging Materials



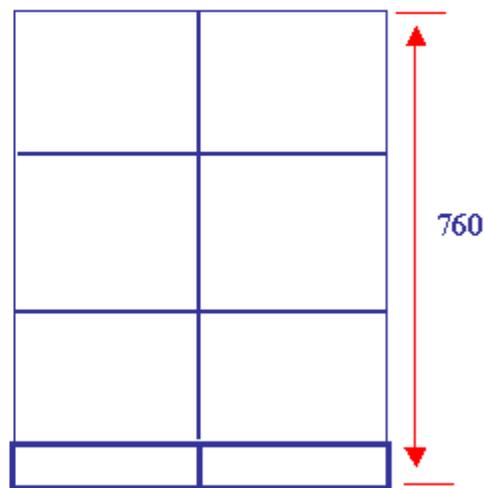
carton size: 360(L)\*280(W)\*210(H)mm  
Pallet 18 ctn/pt

Top view



Pallet L850\*W730\*H130mm

Side View



Total height 760mm (Including Pallet 130mm)  
W850\*W730\*H760mm