DATA IMAGE CORPORATION

TFT Module Specification

ITEM NO.: FG1001K0DSSWBG01

Table of Contents

Customer Companies	QA Approved	DQA Check	R&D Approved	R&D Check
Customer Approved by	Version:	Issued Date:	Total Pages:	Prepared
	C	30/JUN/17'	23	

2. RECORD OF REVISION

Rev	Date	Item	Page	Comment	Source
1	18/SEP/14'			Initial PRELIMINARY	ESR0308025
2	17/OCT/14'	3	3	Add Interface Specification.	
3	26/MAR/15'	5.4 7 10 12	6 9 19 22	1. Modify IL from Tpy.200 to 300mA & Note 1,2,3 2. Modify Brightness to Min.450 ; Typ.500. 3. Modify Barcode Size. 4. Modify Outline Drawing from Rev.1 to 2.	ECR110-F10016
4	25/JUN/15'	8.1	13	Modify Note1 SHLR control function.	ECR110-F6033
A	07/NOV/16'	12 13	22 23	1. Modify Outline Drawing from Rev.2 to A. 2. Add Package Information. 3. Release Rev: A for production	NPPR-0837
B	18/NOV/16'	12	22	Modify Outline Drawing from Rev.A to B.	ECR11S-GB0007
C	30/JUN/17'	12	22	Modify Outline Drawing from Rev.B to C. C) Modify White Fix Tape Outline.	ECR110-H50027

3. GENERAL SPECIFICATIONS

Parameter	Specifications	Unit
Screen Size	10.1 (diagonal)	inch
Display Format	1024(W) x (R,G,B) x 600(H)	dot
Active Area	222.72 (W) ×125.28 (H)	mm
Dot Pitch	0.2175(W) × 0.2088(H)	mm
Pixel Configuration	RGB-Stripe	
Outline Dimension	235(W) ×143(H) ×4.9(D)	mm
Surface treatment	Anti-Glare ,Hardness 3H	
Back-light	LED	
Display mode	Normally white	
Interface	24 bit LVDS	
View direction(Gray Inversion)	6 o'clock	
Weight	250	g
Our components and processes are compliant to RoHS standard		

4. ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	MIN.	MAX.	Unit	Remark
Digital Supply Voltage	VDD_LVDS	-0.3	3.96	V	
Analog Supply Voltage	AVDD	-0.5	14.85	V	
Gate On Voltage	VGH	-0.3	40	V	
Gate Off Voltage	VGL	-20	0.3	V	
Gate On-Gate Off Voltage	VGH-VGL	12	40	V	
Signal Input Voltage	NIND0~NIND3 PIND0~PIND3 NINC,PINC	-0.5	5	V	
Operating temperature	TOP	-20	70	°C	Note1
Storage temperature	TsT	-30	80	°C	

Note 1: If users use the product out off the environment operation range (temperature and humidity), it will have visual quality concerns.

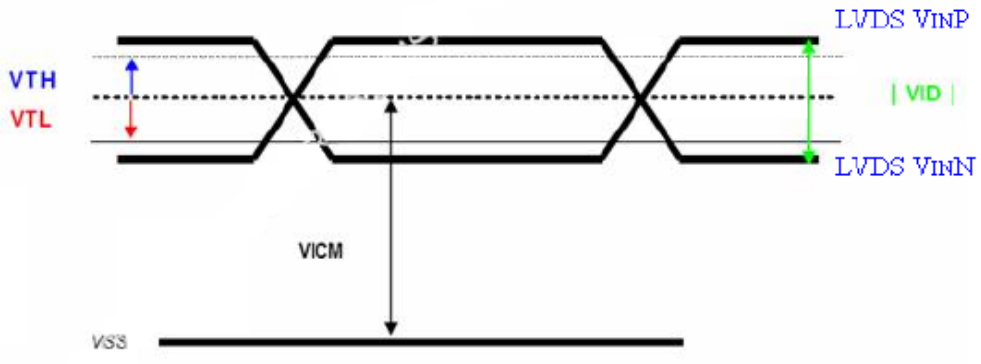
5. ELECTRICAL CHARACTERISTICS

5.1 Power Voltage

Item		Symbol	Values			Unit	Remark
			Min.	Typ.	Max.		
Power Supply Voltage		VDD VDD_LVDS	3.0	3.3	3.6	V	
Logic Input Voltage (LVSC: IN+, IN-)	Common Mode Voltage	VCM	VID/2	-	2.4-(VID/2)	V	Note1
	Differential Input Voltage	VID	200	-	600	mV	Note1
	Threshold Voltage(high)	VTH	-	-	100	mV	VCM=1.2V, Note1
	Threshold Voltage (low)	VTL	-100	-	-	mV	
Analog Power supply voltage		AVDD	9.4	9.6	9.8	V	
Gate On Power supply voltage		VGH	17	18	19	V	
Gate Off Power supply voltage		VGL	-6.6	-6	-5.4	V	
Common Power supply voltage		VCOM	3.8	4.0	4.2	V	Note2
Gamma Voltage		V1		9.02		V	
		V2		9.01		V	

Gamma Voltage	V3		7.62		V	
	V4		7.15		V	
	V5		6.85		V	
	V6		6.52		V	
	V7		6.46		V	
	V8		3.58		V	
	V9		3.5		V	
	V10		3.1		V	
	V11		2.76		V	
	V12		2.23		V	
	V13		0.67		V	
	V14		0.63		V	

Note 1 ：



Note 2 ：Please adjust VCOM to make the flicker level be minimum.

5.2 Current Consumption

Item	Symbol	Condition	Values			Unit	Remark
			Min.	Typ.	Max.		
Gate on Power Current	IVGH	VGH=18V	-	0.5	1	mA	Note 1
Gate off Power Current	IVGL	VGL=-6V	-	0.5	1	mA	
Digital Power Current	IVDD	VDD=3.3V	-	40	50	mA	
Analog power Current	IAVDD	AVDD=9.6	-	35	45	mA	
Total power consumption	PC		-	480	621	mW	

Note 1 ：

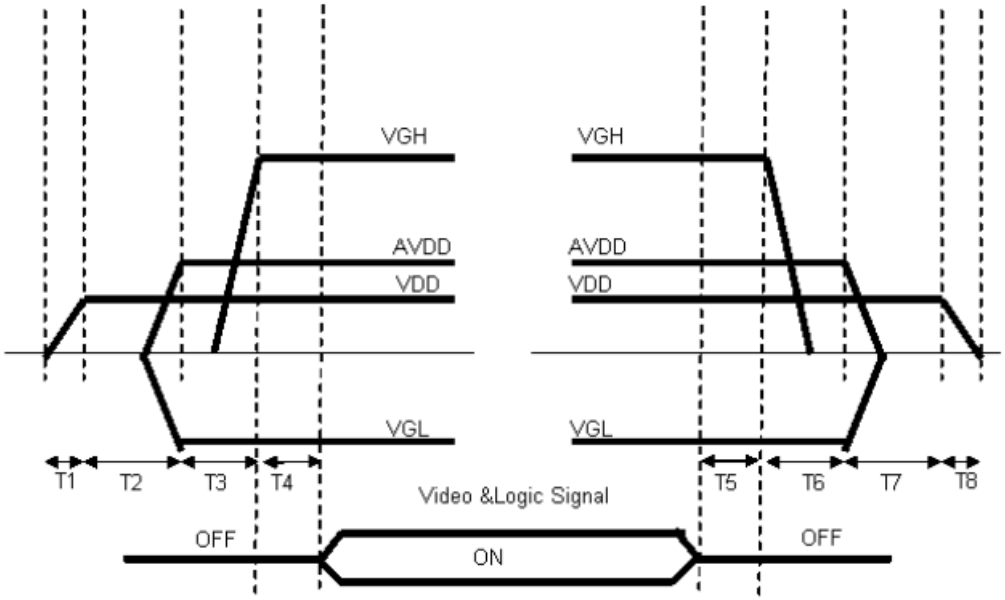
Typical: Under 256 gray pattern
Maximum: Under black pattern

(a) 256 gray pattern

(b)Black Pattern

5.3 Power Signal sequence

Power On:VDD→AVDD/VGL→VGH→Video & Logic Signal
Power Off:Video & Logic Signal→VGH→AVDD/VGL→VDD



$0 < T1 \leqq 10ms$
$20ms < T2$
$10ms < T3$
$0 < T4 \leqq 10ms$

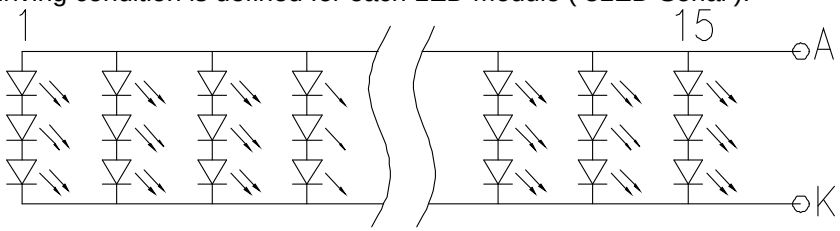
$0 < T5 \leqq 10ms$
$0 < T6$
$0 < T7$
$0 < T8$

5.4 Backlight Driving Conditions

CN2: Connector type: BHSR-02VS (JST) or compatible.

Item	Symbol	Values			Unit	Remark
		Min.	Typ.	Max.		
LED forward voltage	V_L	9	9.9	10.5	V	Note1,3
	I_L	-	300	-	V	Note1
LED Life Time	-	20,000	-	-	Hr	Note2

Note 1: The LED driving condition is defined for each LED module (3LED Serial).



IF= 300mA, VF=9V~10.5V

LED circuit

Note 2: The “LED life time” is defined as the module brightness decrease to 50% original brightness at Ta=25°C and I_{LED} =20mA. The LED lifetime could be decreased if operating I_L is lager than 25 mA.

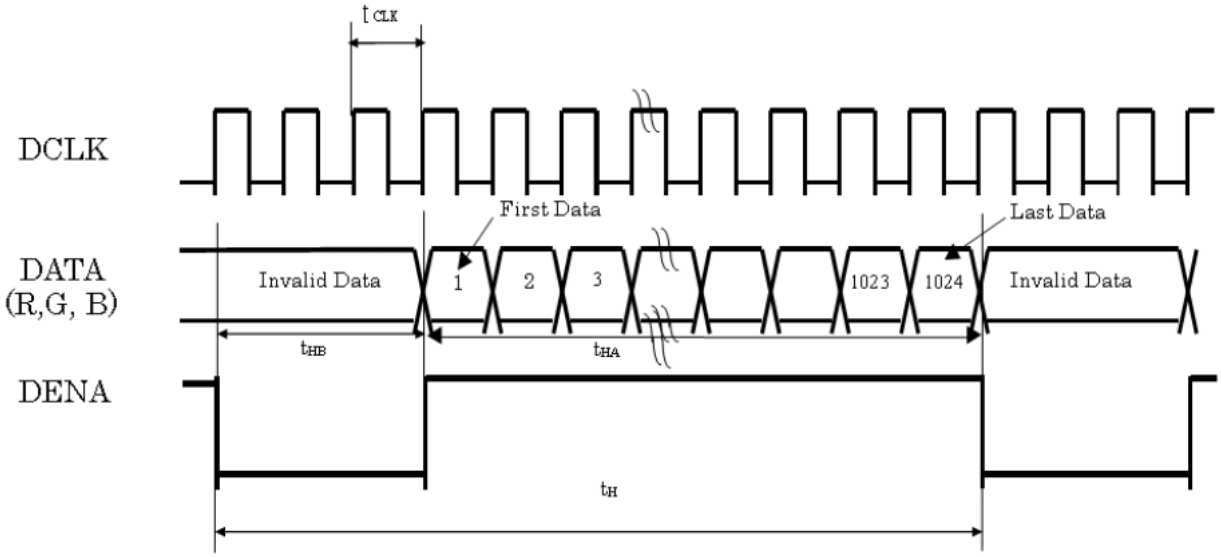
Note 3: The LED Supply Voltage is defined by the number of LED at Ta=25°C and I_{LED} =20mA. In the case of 3pcs LED , VL=3.3*3=9.9V

6. INTERFACE SPECIFICATIONS

6.1 Timing Characteristics

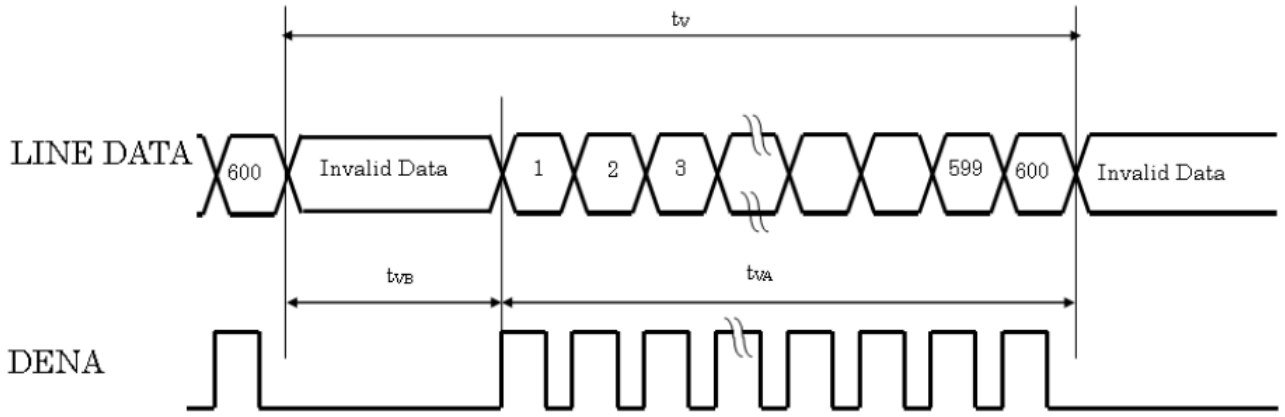
Signal	Item			Symbol	Value			Unit
					Min.	Typ.	Max.	
LVDS input signal	CLK Frequency			Tclk	45	51.2	57	MHz
LCD input signal sequence(input LVDS Transmitter)	DENA	Horizontal	Horizontal total time	tH	1324	1344	1364	tCLK
			Horizontal effective	tHA	1024	1024	1024	tCLK
			Horizontal Blank time	tHB	300	320	340	tCLK
		Vertical	Vertical Period	tV	625	635	645	tH
			Vertical Valid	tVA	600	600	600	tH
			Vertical Blank	tVB	25	35	45	tH

6.2 Horizontal Timing Sequence

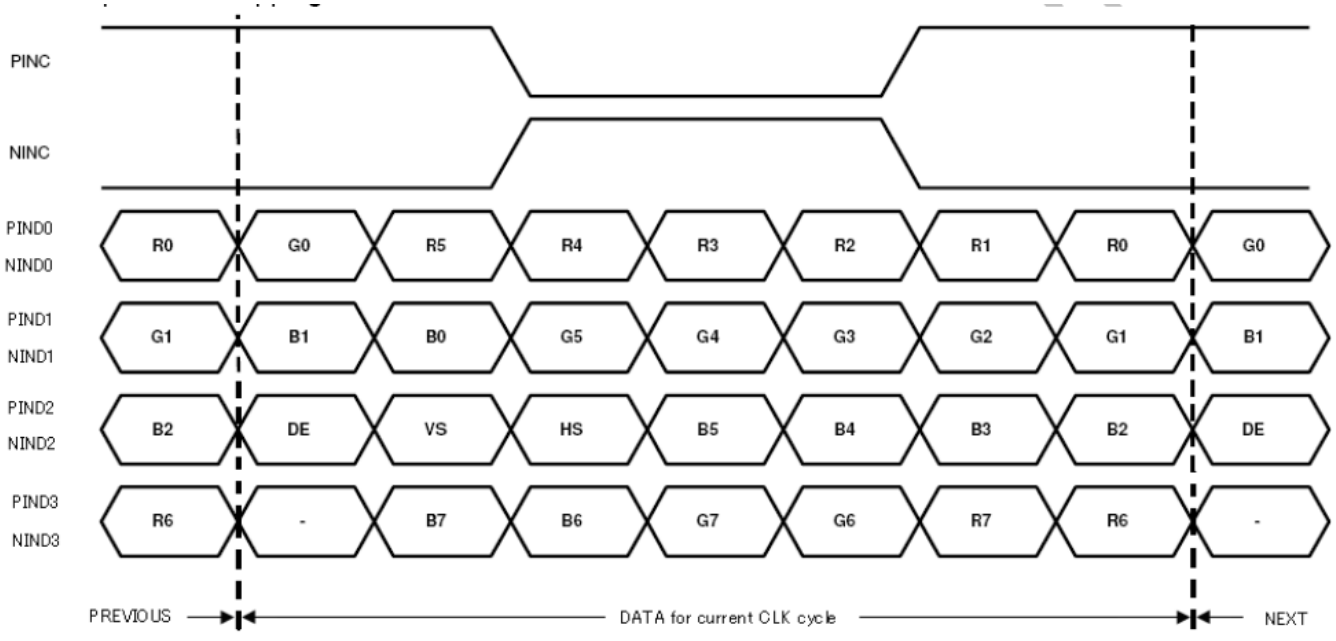


6.3 Vertical Timing Sequence

Vertical Timing Sequence



6.4 LVDS Input Data mapping

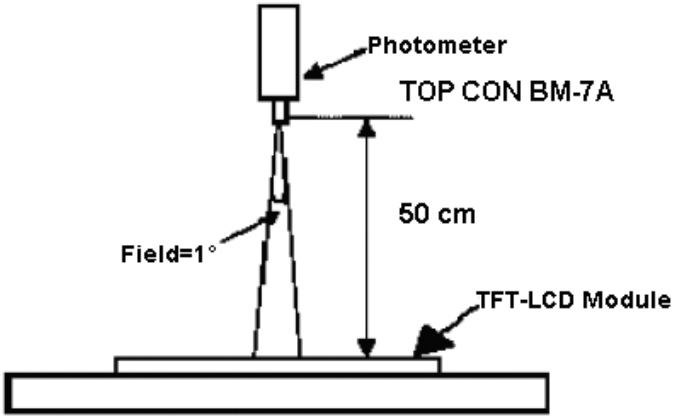


7. OPTICAL CHARACTERISTIC

Parameter		Symbol	Condition	MIN.	TYP.	MAX.	Unit	Remarks
Viewing Angle	Horizontal	θ_x+~θ_x-	Center CR≥10	120	140	-	deg	Note 1,4
	Vertical	θ_Y+~θ_Y-		100	120	-		
Contrast Ratio		CR	Center θx=θy =0°	500	600	-		Note 1,3
Response time		Tr +Tf	Center θx=θy =0°	-	25	40	ms	Note 1,6
Uniformity		B-uni	θx=θy =0°	70	80	-	%	Note1,5
Brightness		L	Center θx=θy =0°	450	500	-	cd/㎡	Note 1,2
Chromaticity		x_W	Center θx=θy =0°	0.273	0.313	0.353	-	Note 1,7
		y_W		0.289	0.329	0.369		
		x_R		0.550	0.590	0.630		
		y_R		0.300	0.340	0.380		
		x_G		0.301	0.341	0.381		
		y_G		0.554	0.594	0.634		
		x_B		0.117	0.157	0.197		
		y_B		0.075	0.115	0.155		

The following optical specifications shall be measured in a darkroom or equivalent state(ambient luminance ≤10 lux, and at room temperature). The operation temperature is 25°C±2°C,The measurement method is shown in Note1.

Note1: The method of optical measurement:

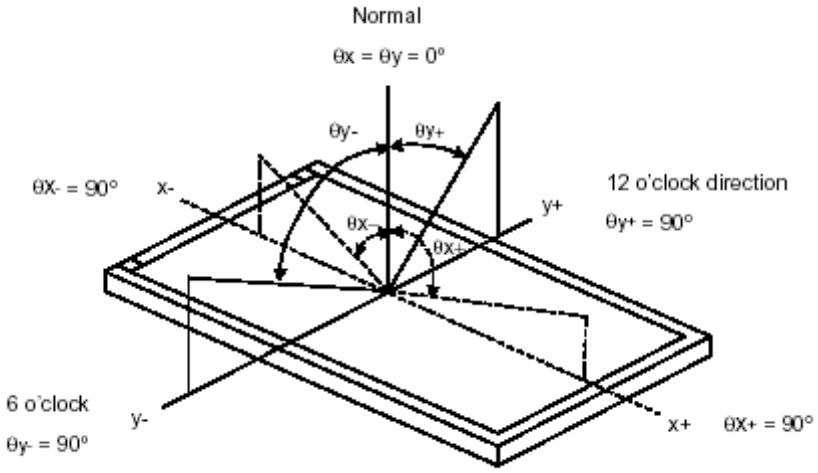


Note2: Measured at the center area of the panel and at the viewing angle of the θx=θy =0°

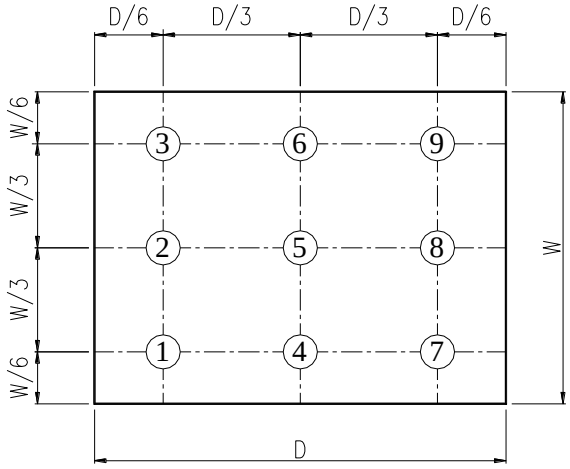
Note3: Definition of Contrast Ratio (CR):

$$CR = \frac{\text{Luminance with all pixels in white state}}{\text{Luminance with all pixels in Black state}}$$

Note4: Definition of Viewing Angle



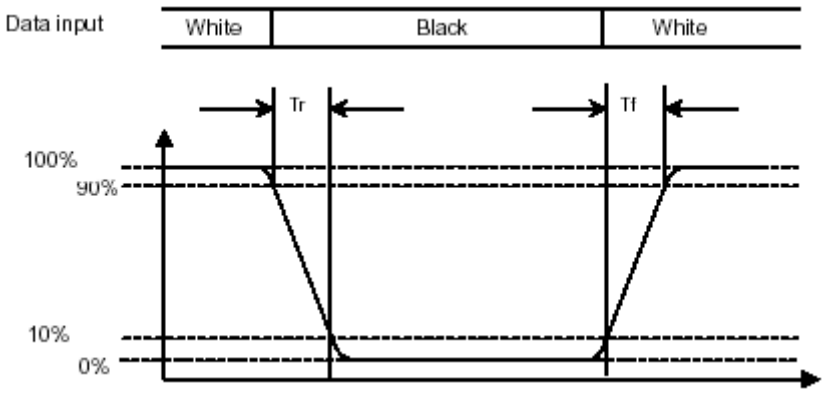
Note 5: Definition of Brightness Uniformity (B-uni):



$$\text{B-uni} = \frac{\text{Minimum luminance of 9 points}}{\text{Maximum luminance of 9points}} \quad \text{(Note 5).}$$

Note6: Definition of Response Time:

The Response Time is set initially by defining the “Rising Time (Tr)” and the “Falling Time (Tf)” respectively. Tr and Tf are defined as following figure.



Note 7: Definition of Chromaticity:

The color coordinates (x_W,y_W),(x_R,y_R),(x_G,y_G),and (x_B,y_B) are obtained with all pixels in the viewing field at white, red, green, and blue states, respectively.

8. INPUT TERMINAL PIN ASSIGNMENT

8.1 TFT LCD Module

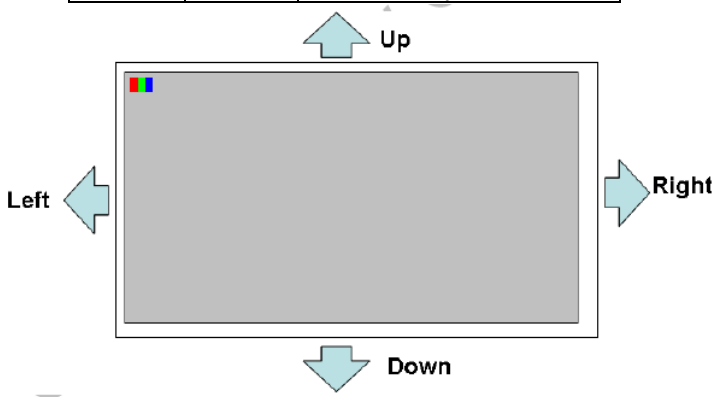
CN1: Connector type: 089K60-000100-G2-R (STARCONN) or compatible.

Pin No.	Symbol	Function	Remark
1	AGND	Analog Ground	
2	AVDD	Analog Power	
3	DVDD	Digital Power	
4	GND	Digital Ground	
5	VCOM	Common Voltage	
6	DVDD	Digital Power	
7	GND	Digital Ground	
8	V14	Gamma Correction Voltage Reference	
9	V13		
10	V12		
11	V11		
12	V10		
13	V9		
14	V8		
15	GND	Digital Ground	
16	DVDD_LVDS	LVDS Power	
17	GND	Digital Ground	
18	PIND3	Positive LVDS differential data inputs	
19	NIND3	Negative LVDS differential data inputs	
20	GND	Digital Ground	
21	PINC	Positive LVDS differential data inputs	
22	NINC	Negative LVDS differential data inputs	
23	GND	Digital Ground	
24	PIND2	Positive LVDS differential data inputs	
25	NIND2	Negative LVDS differential data inputs	
26	GND	Digital Ground	
27	PIND1	Positive LVDS differential data inputs	
28	NIND1	Negative LVDS differential data inputs	
29	GND	Digital Ground	
30	PIND0	Positive LVDS differential data inputs	
31	NIND0	Negative LVDS differential data inputs	
32	GND	Digital Ground	
33	GND_LVDS	LVDS Ground	
34	GRB	Global reset pin .Active low to enter reset state. Suggest to connecting with an RC reset circuit for stability. Normally pull high.(R=10K ohm ,C=0.1uF)	
35	STBYB	Standby mode ,normally pull high STBYB=”1”,normal operation STBYB=”0”,timing control ,source driver will turn off ,output are high-Z	
36	SHLR	Left or right display control	Note 1
37	DVDD	Digital power	
38	UPDN	Up / down display control	Note 2
39	AGND	Analog ground	
40	AVDD	Analog power	

41	VCOM	Common voltage	
42	DITH	Dithering function enable control .Normally pull low DITHER="1",Enable internal dithering function. DITHER="0",Disable internal dithering function.	
43	GND	Digital ground	
44	DVDD	Digital power	
45	GND	Digital ground	
46	V7	Gamma correction voltage reference	
47	V6	Gamma correction voltage reference	
48	V5	Gamma correction voltage reference	
49	V4	Gamma correction voltage reference	
50	V3	Gamma correction voltage reference	
51	V2	Gamma correction voltage reference	
52	V1	Gamma correction voltage reference	
53	GND	Digital ground	
54	DVDD	Digital power	
55	SELB	6bit/8bit mode select, SELB="0",LVDS input data is 8 bits SELB="1",LVDS input data is 6 bits	Note 2
56	VGH	Positive power for TFT	
57	VDD	Digital power Gate IC	
58	VGL	Negative power for TFT	
59	GND	Digital ground for Gate IC	
60	NC	Not connect	

Remarks : Mating connector : 089K60-000100-G2-R(STARCONN)
Note 1 : UPDN and SHLR control function

UPDN	SHLR	Function
0	1	Normal display
0	0	Inverse Left and Right
1	1	Inverse Up and Down
1	0	Inverse Left and Right Inverse Up and Down



Note 2 :If LVDS input data is 6 bits, SELB must must be set to High.
If LVDS input data is 8 bits, SELB must be set to Low.

8.2 LED CONNECTOR

Pin No.	Symbol	Function	Remark
1	LEDA	LED Anode	Black
2	LEDK	LED Cathode	White

9. QUALITY ASSURANCE

9.1 Test Condition

9.1.1 Temperature and Humidity(Ambient Temperature)

Temperature : 25 ± 5°C
Humidity : 65 ± 5%

9.1.2 Operation

Unless specified otherwise, test will be conducted under function state.

9.1.3 Container

Unless specified otherwise, vibration test will be conducted to the product itself without putting it in a container.

9.1.4 Test Frequency

In case of related to deterioration such as shock test. It will be conducted only once.

9.1.5 Test Method

Reliability Test Item & Level			Remark
No.	**Test Item**	**Test Level**	
1	High Temperature Storage Test	Ta=80°C, 120hrs	IEC68-2-2
2	Low Temperature Storage Test	Ta=-30°C, 120hrs	IEC68-2-1
3	High Temperature Operation Test	Ts=70°C, 120hrs	IEC68-2-2
4	Low Temperature Operation Test	Ta=--20°C, 120hrs	IEC68-2-1
5	High Temperature and High Humidity Operation Test	T=60℃,90%RH,120hrs	IEC68-2-2
6	Thermal Cycling Test (No operation)	-30°C /30 min ~ +80°C /30 min for a total 100 cycles, Start with cold temperature and end with high temperature.	IEC68-2-14
7	Vibration Test (No operation)	Frequency range:10~55Hz Stroke:1.5mm Sweep:10Hz~55Hz~10Hz 2 hours for each direction of X. Y. Z.(6 hours for total)	IEC68-2-6
8	Shock Test (No operation)	80G, 6ms Direction：± X,± Y,± Z Cycle：1 times	IEC68-2-14

9.2 Inspection condition

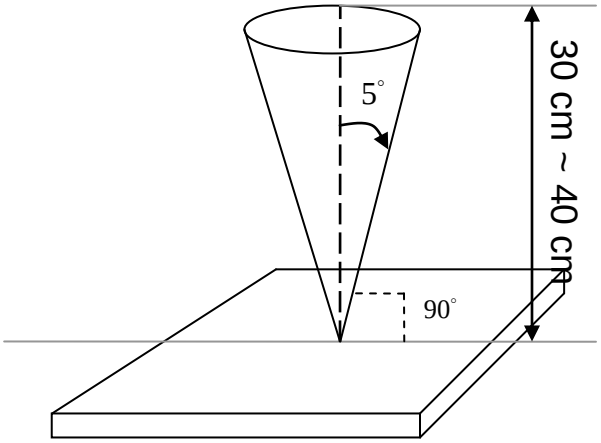
9.2.1 Inspection conditions

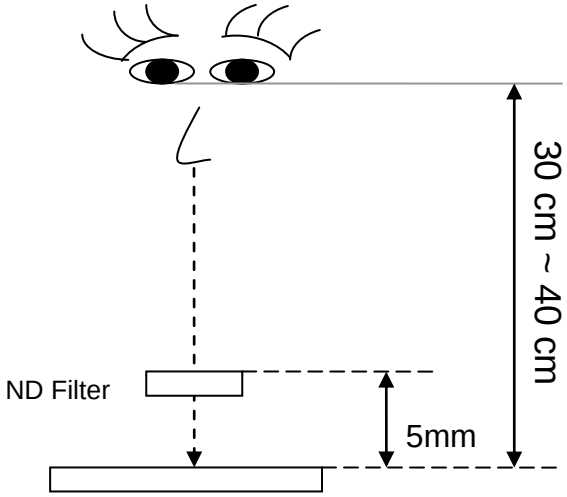
9.2.1.1 Inspection Distance : 35 ± 5 cm

9.2.1.2 View Angle :

(1) Inspection under operating condition : ±5°

(2) Inspection under non-operating condition : ± 45°

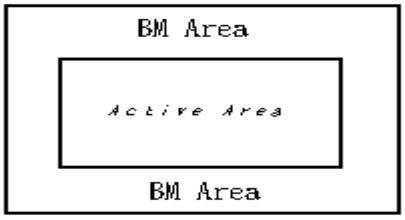




9.2.2 Environment conditions :

Ambient Temperature :		25±5℃
Ambient Humidity :		65±5%
Ambient Illumination	Cosmetic Inspection	400 ~ 600lux
	Functional Inspection	300 ~ 500lux

9.2.3 Definition of applicable Zones



9.3 Inspection Parameters

<table>
<tr><th>No.</th><th>Parameter</th><th>Criteria</th></tr>
<tr><td rowspan="6">1</td><td rowspan="6">Operating</td><td>Display function: No Display malfunction (Major)</td></tr>
<tr><td>Line Defect: No obvious Vertical and Horizontal line defect in bright, dark and colored.</td></tr>
<tr><td>Point Defect: Active area ≦ 8 dots (Minor) (Note:1)
<table>
<tr><th colspan="2" rowspan="2">Item</th><th>Acceptable number</th><th rowspan="2">Total</th></tr>
<tr><th>Active Area</th></tr>
<tr><td rowspan="2">Bright</td><td>Random</td><td>4</td><td rowspan="4">8</td></tr>
<tr><td>Two dots adjacent</td><td>1</td></tr>
<tr><td rowspan="2">Dark</td><td>Random</td><td>4</td></tr>
<tr><td>Two dots adjacent</td><td>2</td></tr>
</table></td></tr>
<tr><td>Non-uniformity: Visible through 2 %ND filter White , R , G ,B and gray 50% pattern.</td></tr>
<tr><td>Foreign material in Black or White spots shape (W>1/4L)
<table>
<tr><th>Zone / Dimension</th><th>Acceptable number</th><th>Class of Defects</th></tr>
<tr><td>D> 0.5</td><td>0</td><td rowspan="3">Minor</td></tr>
<tr><td>0.3 ＜ D ≦ 0.5</td><td>5</td></tr>
<tr><td>0.3≦ D</td><td>*</td></tr>
</table>
D = (Long + Short) / 2 *: Disregard</td></tr>
<tr><td>Foreign Material in Line or spiral shape (W ≦1/4L) (Note: 4)
<table>
<tr><th>Zone / L (mm)</th><th>Zone / W(mm)</th><th>Acceptable number</th><th>Class of Defects</th></tr>
<tr><td>L ＞10</td><td>W>0.1</td><td>0</td><td rowspan="3">Minor</td></tr>
<tr><td>L ≦10</td><td>0.05 ＜W≦ 0.1</td><td>5</td></tr>
<tr><td>L ≦10</td><td>W≦ 0.05</td><td>*</td></tr>
</table>
L : Length W : Width * : Disregard</td></tr>
<tr><td rowspan="3">2</td><td rowspan="3">External Inspection (non-operating)</td><td>Dimension: Outline (Major)</td></tr>
<tr><td>Bezel appearance: uneven (Minor)</td></tr>
<tr><td>Scratch on the polarize: (Note:2)
<table>
<tr><th>Zone / L (mm)</th><th>Zone / W(mm)</th><th>Acceptable number</th><th>Class of Defects</th></tr>
<tr><td>L ＞10</td><td>W>0.1</td><td>0</td><td rowspan="2">Minor</td></tr>
<tr><td>L ≦10</td><td>0.05 ＜W≦ 0.1</td><td>5</td></tr>
</table></td></tr>
</table>

		L ≦10 | W≦ 0.05 | * |
		L : Length W : Width * : Disregar
		Dent or bubble on the polarize (Note:2)

Zone / Dimension	Acceptable number	Class of Defects
D> 0.5	0	Minor
0.3 ＜ D ≦ 0.5	5	
0.3≦ D	*	

D = (Long + Short) / 2 *: Disregard

		Polarizer flaw or leak out resin : Defect is defined as the active area.
3	Others	Issues which is not defined defect :defect must be visible through 2% ND Filter.

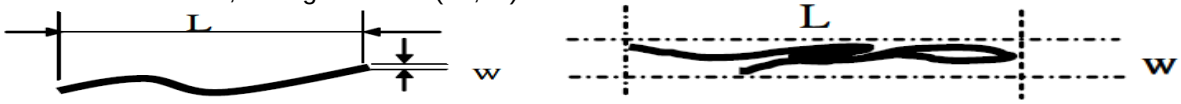
Class of defects	Definition	
	AQL 0.65%	It is a defect that is likely to result in failure or to reduce materially the usability of the product for the intended function.
	AQL 1.5%	It is a defect that will not result in functioning problem with deviation classified.

Note:1.(a)Bright point defect is defined as point defect of R,G,B with area >1/2 dot respectively
(b)Dark point defect is defined as visible in full white pattern.
(c)Definition of distribution of point defect is as follows:
-minumum separation between dark point defects should be larger than 5mm.
-minumum separation between bright point defects should be larger than 5mm.

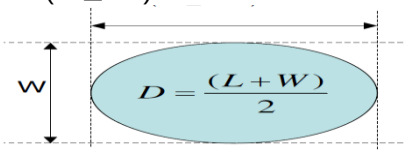
Note:2 The external inspection should be conducted at the distance 35± 5cm between the eyes of inspctor and the panel .

Note:3 Luminance measurement for contrast ratio is at the distance 50± 5cm between the detective head and the panel with ambient illuminance less than 1 lux. Contrast ratio is obtained at optimum view angle.

Note:4 W-Width in mm , L-length of Max.(L1,L2) in mm.



Note:5 Spot Foreign Material (W≧L/4)



9.4 Sampling Condition

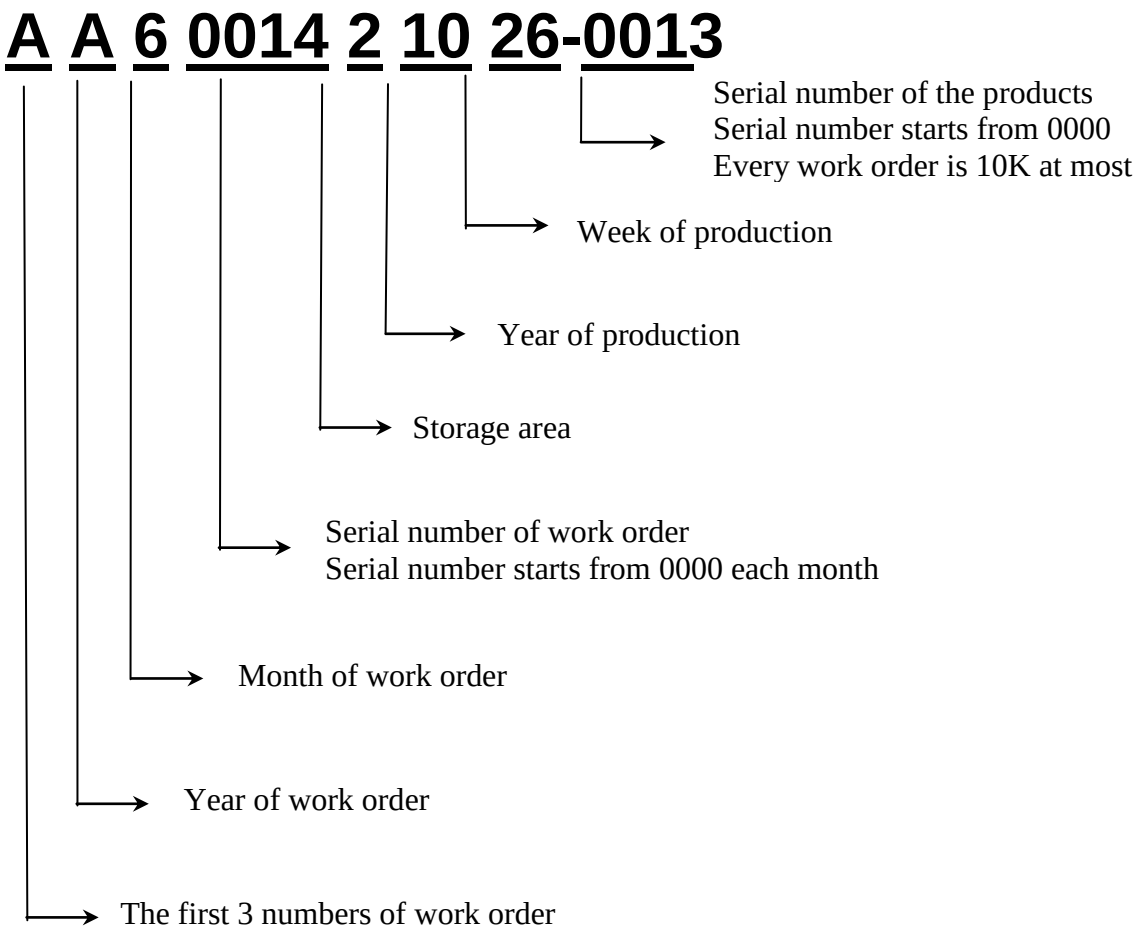
Unless otherwise agree in written, the sampling inspection shall be applied to the incoming inspection of customer.
Lot size: Quantity of shipment lot per model.
Sampling type: normal inspection, single sampling
Sampling table: MIL-STD-105E

Inspection level: Level II

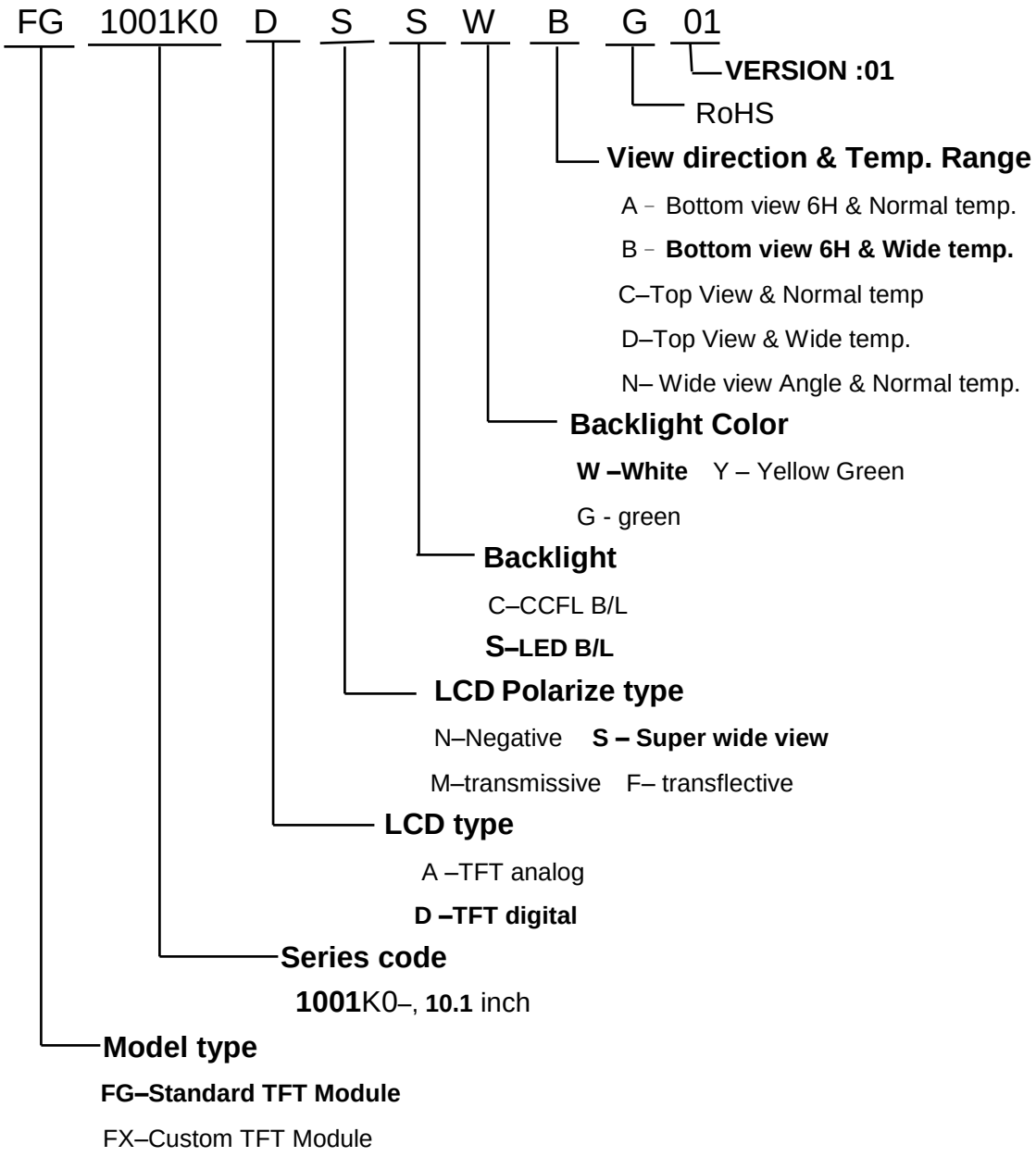
10. LCM PRODUCT LABEL DEFINE

Product Label style:

BarCode Define:



Product Name Define:



11. PRECAUTION FOR USING LCM

1. ASSEMBLY PRECAUTIONS
   (1) You must mount a module using holes arranged in four corners or four sides.
   (2) You should consider the mounting structure so that uneven force (ex. Twisted stress) is not applied to the module. And the case on which a module is mounted should have sufficient strength so that external force is not transmitted directly to the module.
   (3) Do not touch, push or rub the exposed polarizers with glass, tweezers or anything harder than HB pencil lead. And please do not rub with dust clothes with chemical treatment.
   (4) Wipe off saliva or water drops as soon as possible. Their long time contact with polarizer causes deformations and color fading.
   (5) Do not open the case because inside circuits do not have sufficient strength.
   (6) Please do not take a LCD module to pieces and reconstruct it. Resolving and reconstructing modules may cause them not to work well.
   (7) Please do not touch metal frames with bare hands and soiled gloves. A color change of the metal frames can happen during a long preservation of soiled LCD modules.
   (8) Please pay attention to handling lead wire of backlight so that it is not tugged in connecting with inverter.

2. OPERATING PRECAUTIONS
   (1) Please be sure to turn off the power supply before connecting and disconnecting signal input cable.
   (2) Please do not change variable resistance settings in LCD module. They are adjusted to the most suitable value. If they are changed, it might happen LCD does not satisfy the characteristics specification
   (3) Be careful for condensation at sudden temperature change. Condensation makes damage to polarizer or electrical contacted parts. And after fading condensation, smear or spot will occur.
   (4) When fixed patterns are displayed for a long time, remnant image is likely to occur.
   (5) Module has high frequency circuits. Sufficient suppression to the electromagnetic interference shall be done by system manufacturers. Grounding and shielding methods may be important to minimize the interference.
   (6) Please consider that LCD backlight takes longer time to become stable of radiation characteristics in low temperature than in room temperature.

3. ELECTROSTATIC DISCHARGE CONTROL
   (1) The operator should be grounded whenever he/she comes into contact with the module. Never touch any of the conductive parts such the copper leads on the PCB and the interface terminals with any parts of the human body.
   (2) The modules should be kept in antistatic bags or other containers resistant to static for storage.
   (3) Only properly grounded soldering irons should be used.
   (4) If an electric screwdriver is used, it should be well grounded and shielded from commutator sparks.
   (5) The normal static prevention measures should be observed for work clothes and working benches; for the latter conductive (rubber) mat is recommended
   (6) Since dry air is inductive to statics, a relative humidity of 50-60% is recommended.

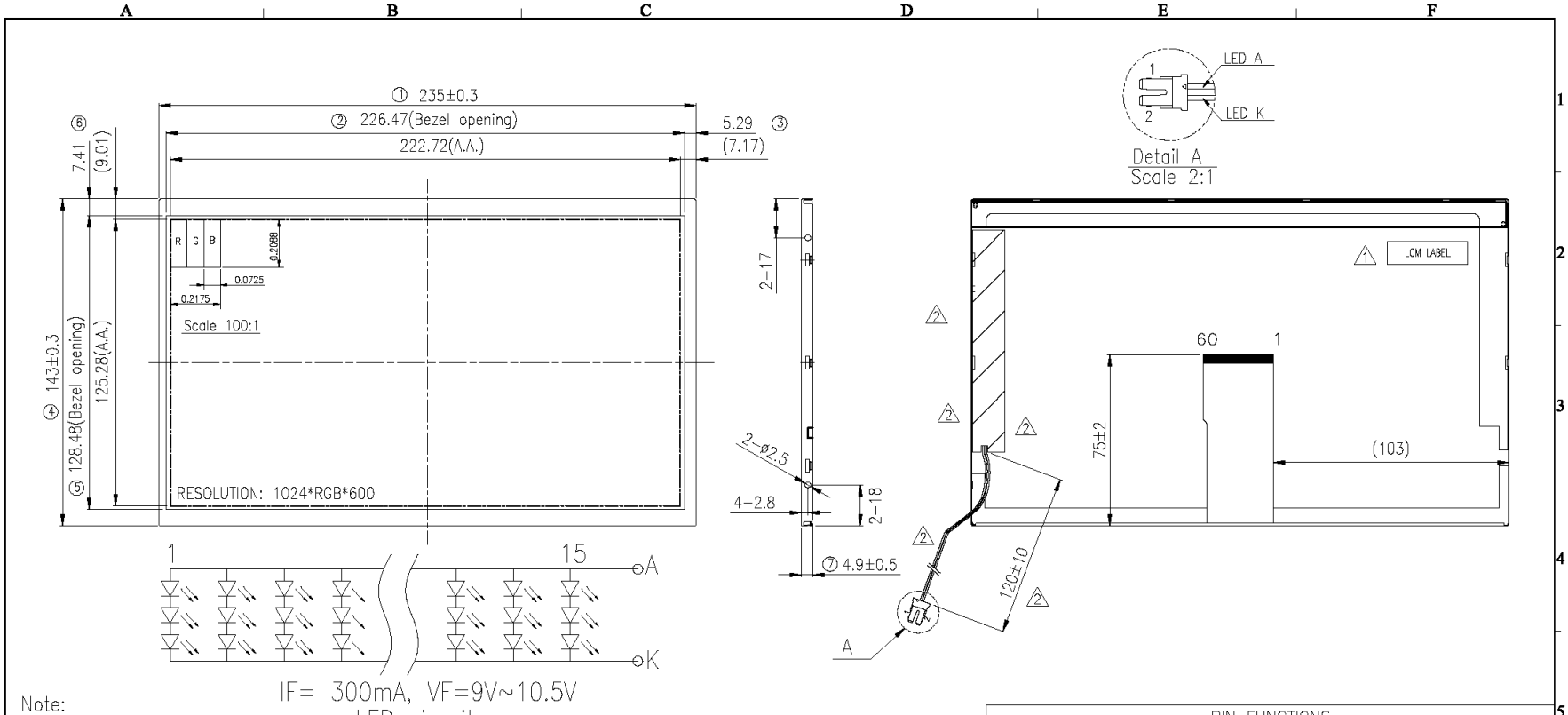
4. STORAGE PRECAUTIONS
   (1) When you store LCDs for a long time, it is recommended to keep the temperature between 0°C-40°C without the exposure of sunlight and to keep the humidity less than 90%RH.
   (2) Please do not leave the LCDs in the environment of high humidity and high temperature such as 60°C 90%RH
   (3) Please do not leave the LCDs in the environment of low temperature; below -20°C.

5. OTHERS
   (1) A strong incident light into LCD panel might cause display characteristics' changing inferior because of polarizer film, color filter, and other materials becoming inferior. Please do not expose LCD module direct sunlight Land strong UV rays
   (2) Please pay attention to a panel side of LCD module not to contact with other materials in preserving it alone.
   (3) For the packaging box, please pay attention to the followings:
      a. Please do not pile them up more than 5 boxes. (They are not designed so.) And please do not turn over.
      b. Please handle packaging box with care not to give them sudden shock and vibrations. And also please do not throw them up.
      c. Packing box and inner case for LCDs are made of cardboard. So please pay attention not to get them wet. (Such like keeping them in high humidity or wet place can occur getting them wet.)

6. LIMITED WARRANTY

Unless otherwise agreed between DATA IMAGE and customer, DATA IMAGE will replace or repair any of its LCD and LCM which is found to be defective electrically and visually when inspected in accordance with DATA IMAGE acceptance standards, for a period on one year from date of shipment. Confirmation of such date shall be based on freight documents. The warranty liability of DATA IMAGE is limited to repair and/or replacement on the terms set forth above. DATA IMAGE will not responsible for any subsequent or consequential events.

12. OUTLINE DRAWING



Note:
1. For RoHS. & REACH.
2. Tolerance is ±0.3 unless otherwise noted.
3. LCM connector : STARCONN 089K60-000100-G2-R or equivalent
4. Important dimension. ① ~ ⑦
5. Center luminance : 500 cd/m²(typ.), 450 cd/m²(min.)
6. Backlight match connector: JST SM02B-BHSS-1-TB or equivalent.
7. Allow ed depth of serhole screw insertion is 1.5mm Max.
8. User hole screw of torque-2.0 kgf/cm Max.

PIN FUNCTIONS

1	AGND	11	V11	21	PINC	31	NINDO	41	VCOM	51	V2
2	AVDD	12	V10	22	NINC	32	GND	42	DITH	52	V1
3	DVDD	13	V9	23	GND	33	GND_LVDS	43	GND	53	GND
4	GND	14	V8	24	PIND2	34	GRB	44	DVDD	54	DVDD
5	VCOM	15	GND	25	NIND2	35	STBYB	45	GND	55	SELB
6	DVDD	16	DVDD_LVDS	26	GND	36	SHLR	46	V7	56	VGH
7	GND	17	GND	27	PIND1	37	DVDD	47	V6	57	VDD
8	V14	18	PIND3	28	NIND1	38	UPDN	48	V5	58	VGL
9	V13	19	NIND3	29	GND	39	AGND	49	V4	59	GND
10	V12	20	GND	30	PIND0	40	AVDD	50	V3	60	NC

2	Modify White Fix Tape Outline. <ECR 110-H50027>	2017/06/29	
1	Modify Label. <ECR 11S-GB0007>	2016/11/16	
	Change the drawing from Rev.2 to RevA. <NPPR-0837>	2016/10/20	
AUTH	DESCRIPTION	DATE	APPROVED
REVISIONS			

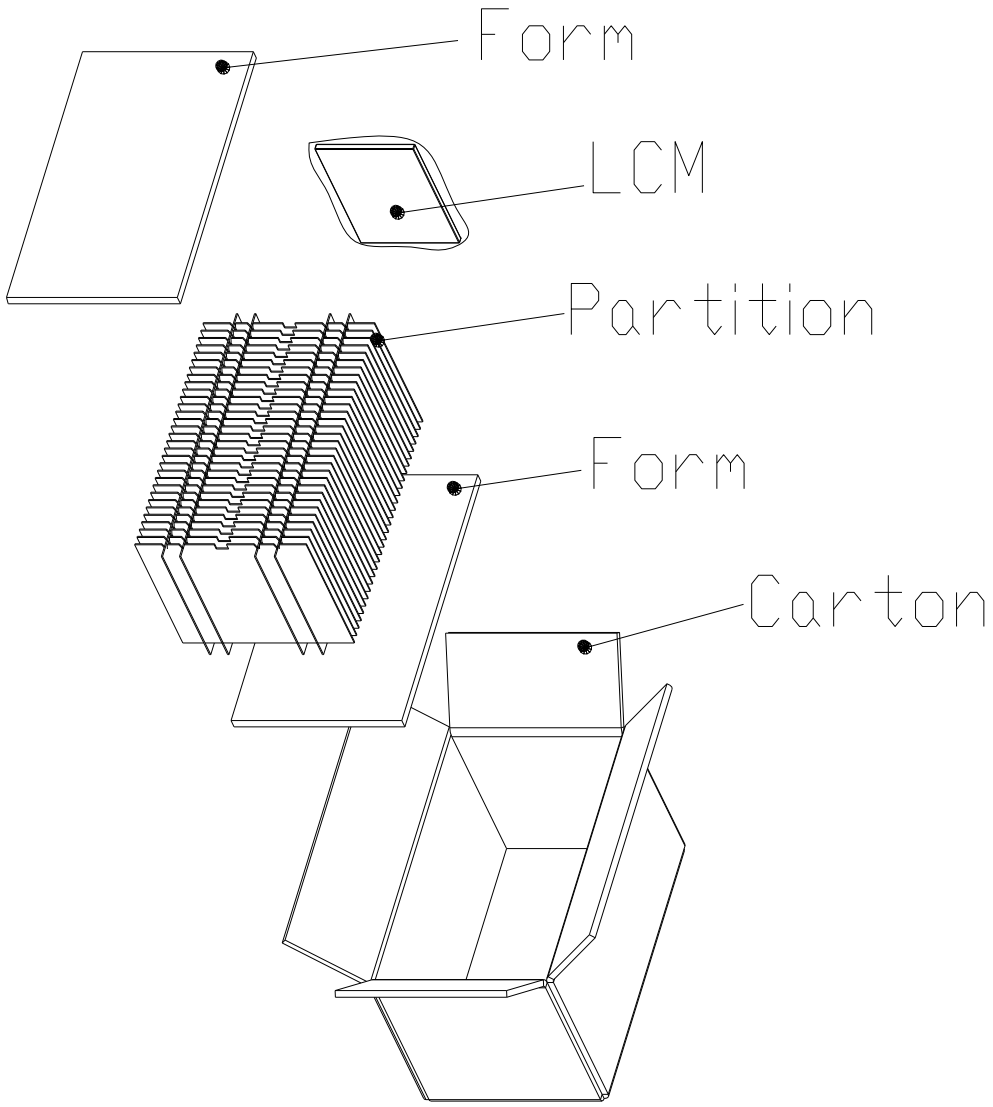
DATE:	2014/08/21
DRAWN:	
CHECK:	
APPROVE:	

TITLE: 10.1"LCM OUTLINE DIMENSION

DWG. NO.	FG1001K0SG01		
UNITS M M		REV.	C
SCALE 1/1	SHEET 1 OF 1		

DATA IMAGE

13. PACKAGE INFORMATION



1 Carton = 16 PCS

Carton size : 482L x 282W x 279H (mm)