



Specification for
GH705A(A2)



SPECIFICATION

Product : LED Backlight Driver

Model Name : GH705A(A2)

GCCT Name : GCCT705AB

Supportable Dimming : External Analog

January 2016



**Specification for
GH705A(A2)**



Revision History

No	Date	Revision	Page
	Jan 2016	Engineering Sample Issued	

1. Application

This specification is an users' guidance for the adoption of mating LED driver.
The target TFT LCD Module is **LG 49"**, **LC490EQE-FHP1** which has not built-in the LED driver for 6 CH type Backlight.

2. Electrical Characteristics

2.1 Absolute Maximum Ratings

Item	Symbol	Spec	Unit	Remarks
Input Voltage1	Vin1	21.6 ~ 26.4	V	
Input Voltage2	On/Off	5.25	V	
Operating Temperature	Top	0 ~ 60	℃	
Storage Temperature	Tstg	-30 ~ 80	℃	
Relative Humidity	RH	80	%	

2.2. Control Signal

Pin No.	Symbol	Status	Action	Remarks
CN1 #12	On/Off	HIGH	LAMP-ON	2.4~5.25V
		LOW	LAMP-OFF	0.8V MAX

2.3. Output Characteristics

No.	Item	SYM	Condition	Min.	Typ.	Max.	Unit
1	Input Voltage	Vin	-	21.6	24.0	26.4	Vdc
2	Input Current	Lin	Vin=24.0V, DIM= 0 V	-	-	3.2	A
3	Output Current	Iout (Max)	Vin=24.0V, DIM= 0 V	165.0	180.0	195.0	mAmean
		Iout (Min)	Vin=24.0V, DIM= 5 V	43.0	48.0	53.0	
4	Backlight On / Off Control	ON	-	2.4	-	5.25	Vdc
		OFF	-	-0.3	-	0.8	
5	Frequency	F	Vin=24V, DIM=0V	210.0	240.0	270.0	KHz

** The Output Voltage is greater than Input Voltage for at least 3V or more.

3. Interface

3.1 CN1 Connector (Input) : 20022WR-14AML (YEONHO) or Equivalent

Pin No.	Symbol	Description
1,2,3,4,5	VIN	Voltage Input : 24V (typ)
6,7,8,9,10,11	GND	Ground
12	On / Off	LED Driver On / Off Control
13	A-DIM	0V (Max) ~ 5V (Min)
14	P-DIM	No connection

3.2 CN2 Connector (Output) : IS100-L08T-C46-B (YEONHO) or Equivalent

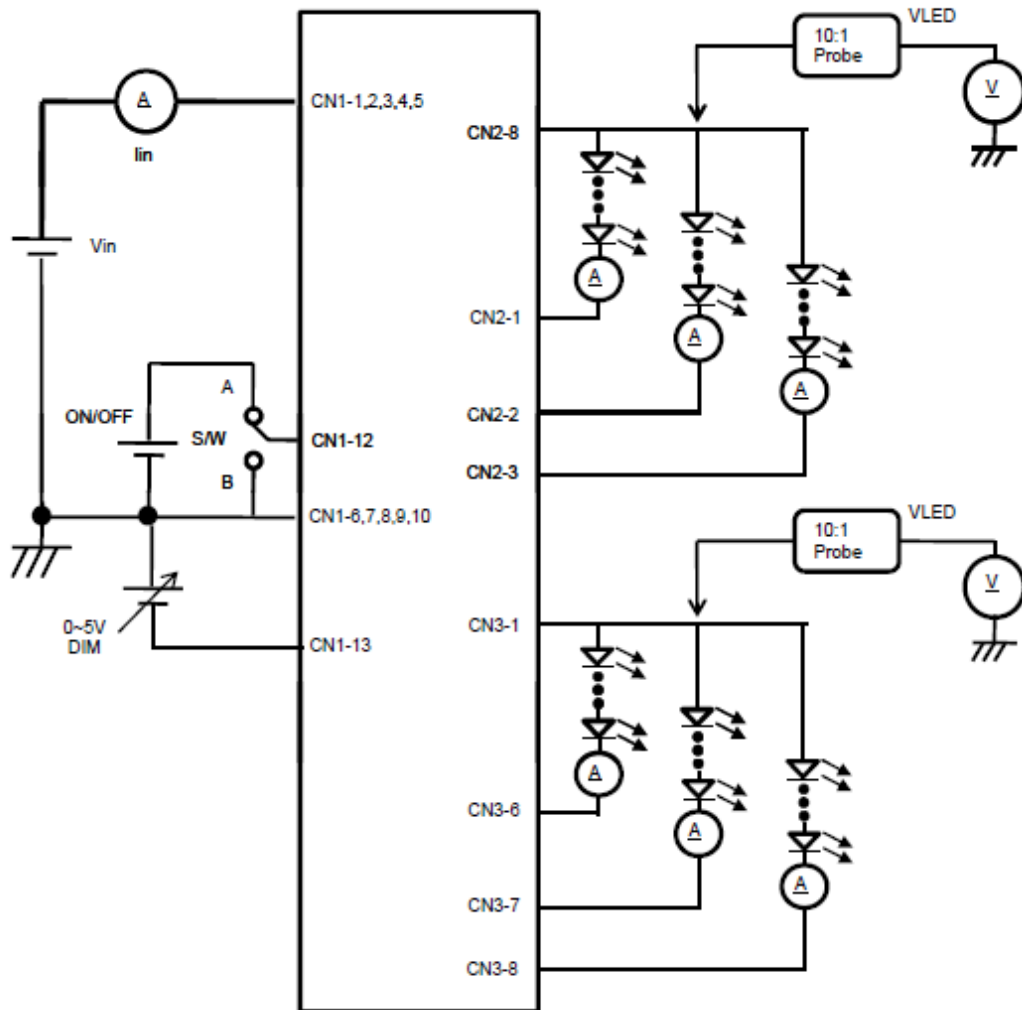
Pin No.	Symbol	Description
1	FB1-1	Feedback 1-1 (Return1-1)
2	FB1-2	Feedback 1-2 (Return1-2)
3	FB1-3	Feedback 1-3 (Return1-3)
4,5,6	N.C	No connection
7	VLED1	System Output1

3.3 CN3 Connector (Output) : IS100-L08T-C46-C (YEONHO) or Equivalent

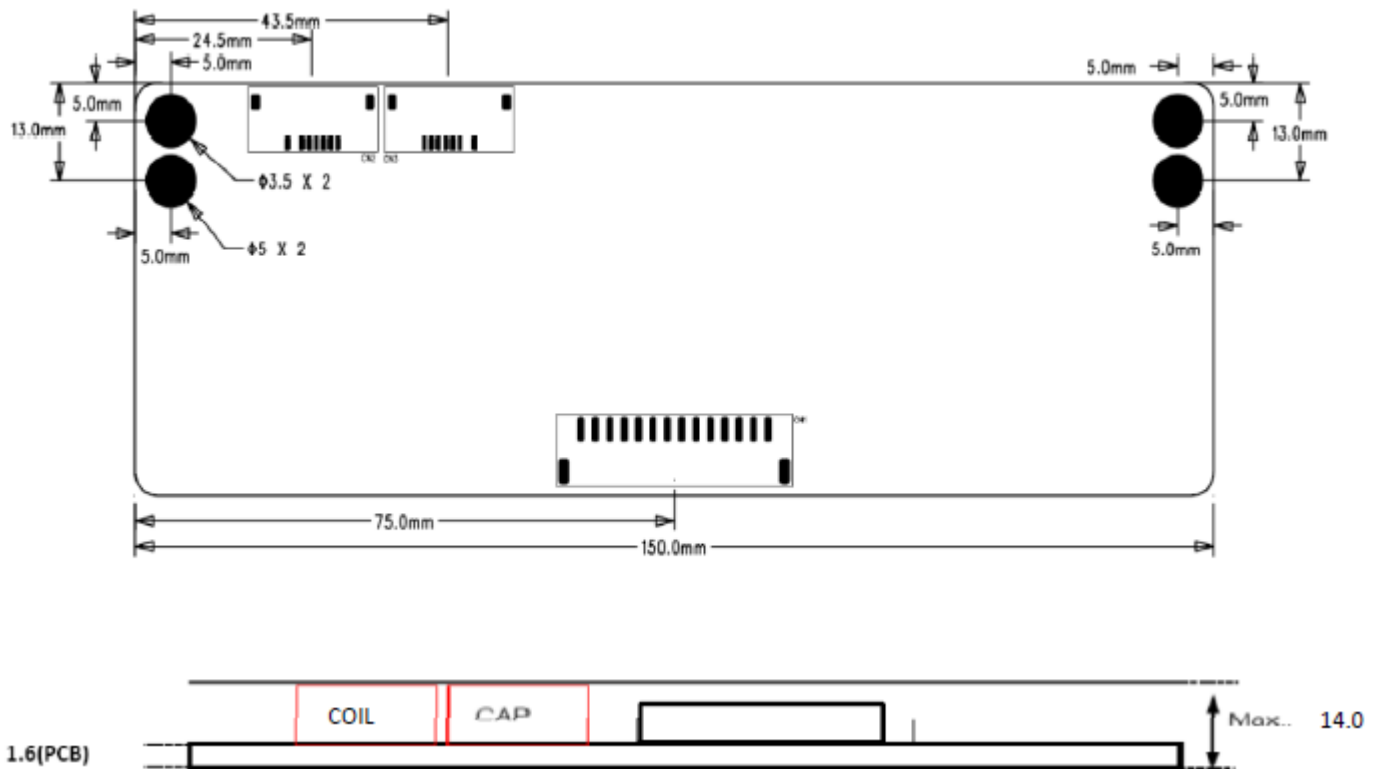
Pin No.	Symbol	Description
1	VLED2	System Output2
2,3,4	N.C	No connection
5	FB2-1	Feedback 2-1 (Return2-1)
6	FB2-2	Feedback 2-2 (Return2-2)
7	FB2-3	Feedback 2-3 (Return2-3)

3.3 Test Circuit

- S/W : A --> BLU ON
B --> BLU OFF

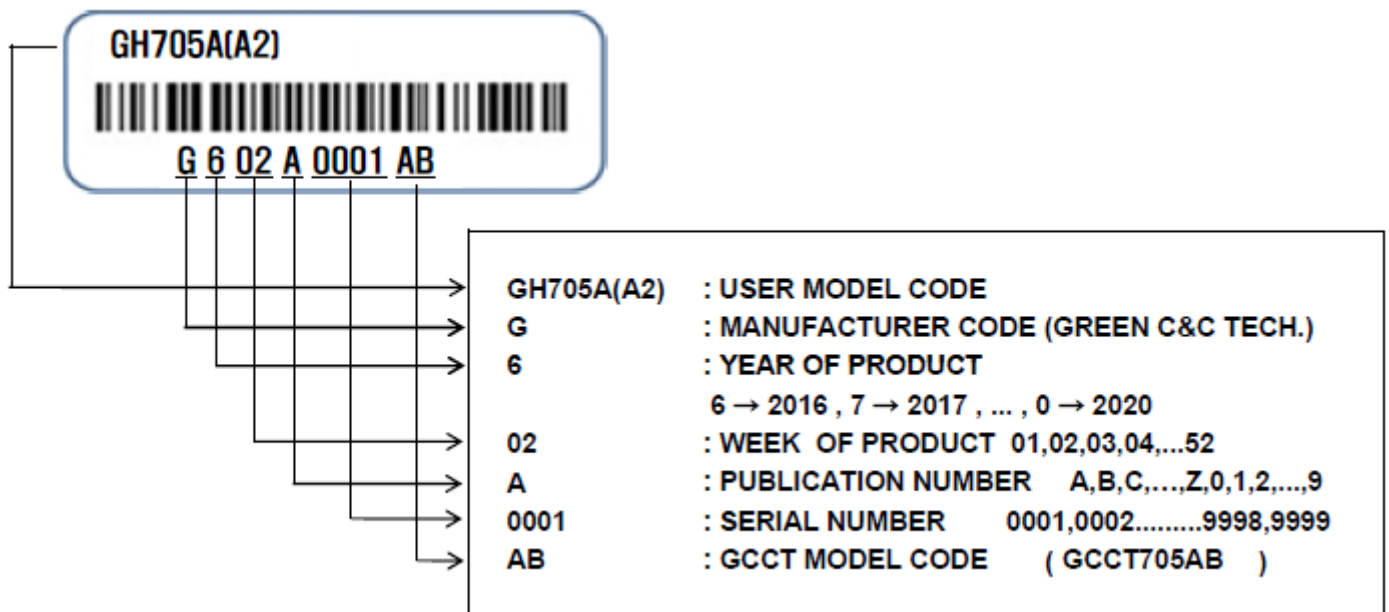


4. Dimension (150 mm x 55 mm / Tolerance : +0.8mm, -0.2mm)



5. Product Label on the rear surface of PCB

Label on the rear surface of PCB

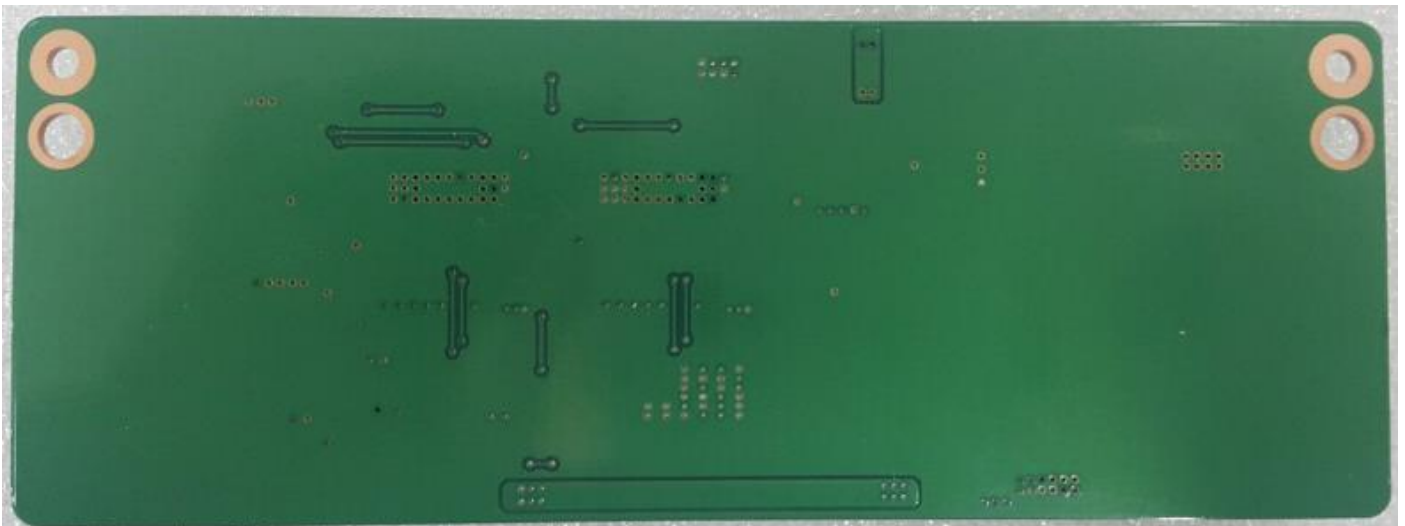


6. Product Pictures

Top View



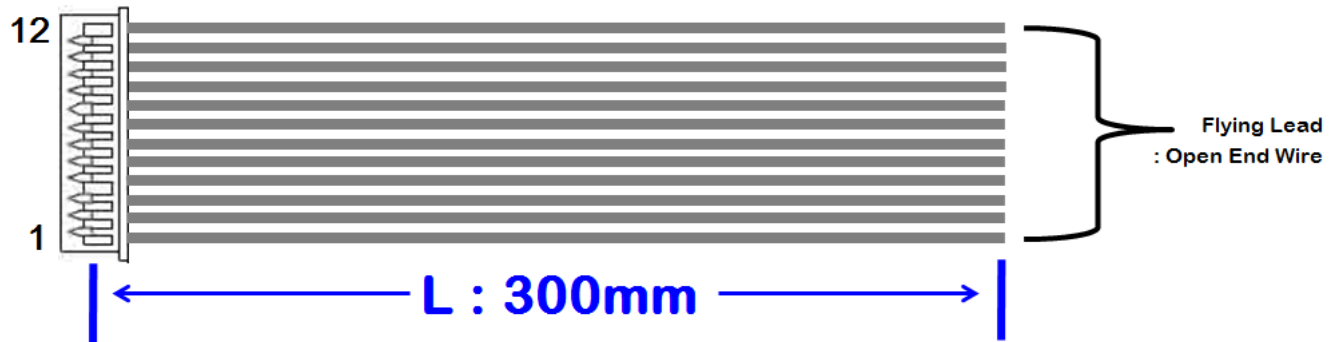
Bottom View



7. Connection cable

7.1 Connection between LED driver and customer's mating diver board

PN : CBL300-LED12V-OPEN



12V INPUT CN1 for GH465A (Version : R3 Only)

W A F E R : 12505WR-12 (YEONHO)
H O U S I N G : 12505HS-12 (YEONHO)

PIN	SPEC	COLOR	CONNECTION	CABLE LENGTH
1	LED INPUT 12V	WHT	FLYING LEAD	300mm
2	LED INPUT 12V	WHT	FLYING LEAD	300mm
3	LED INPUT 12V	WHT	FLYING LEAD	300mm
4	GND	WHT	FLYING LEAD	300mm
5	GND	WHT	FLYING LEAD	300mm
6	P-DIM	WHT	FLYING LEAD	300mm
7	GND	WHT	FLYING LEAD	300mm
8	GND	WHT	FLYING LEAD	300mm
9	ON OFF	WHT	FLYING LEAD	300mm
10	GND	WHT	FLYING LEAD	300mm
11	A-DIM	WHT	FLYING LEAD	300mm
12	GND	WHT	FLYING LEAD	300mm