

DATA SHEET



Model : DP to LVDS

Ver. 0.3

Jun 04, 2013

#705, Gunpo Hyundai I Valley, Dang-Dong,
Gunpo-Si, Kyunggi-Do, Korea, 435-010
Tel : 82-31-427-8101
Fax : 82-31-427-8108
Web side: www.estecom.co.kr

CONTENTS

1.	Revisions of History	-----	3
2.	General Descriptions	-----	4
3.	Features	-----	4
4.	Block Diagram	-----	5
5.	Outline Dimensions	-----	6
6.	Connectors Information	-----	8
7.	Reference Data	-----	11

The information presented in this document may form a part of quotation or contract under the agreement of both parties. Otherwise, this datasheet is subject to change without prior notice.

1. Revisions of History

Revision No.	Date	Page	Description
Ver. 01	Aug.21.2012	All	First Draft, Preliminary Specification
Ver. 02	May.21.2013	Page.6	Outline Dimensions
Ver. 03	Jun.04.2013	Page.3	Add PCB Revision History

1.1 PCB Revisions History

Revision No.	Date	Description
Ver.00	May 10.2012	Preliminary PCB Design
Ver.01	May 21.2012	DP None Display Change DP Circuti from Bead to Coil
Ver.02	Jun 22.2012	DP Noise & Blank & None Display Issue Separate DP Circuit PCB Ground
Ver.03	Jul 05.2012	DP Noise & Blank & None Display Issue Change PCB from 2layer to 4layer
Ver.04	Aug 16.2012	Touch EMI Issue Modify Touch Part Circuit
Ver.05	Mar 25.2013	LVDS Dimming None Control Modify Dimming Part Circuit
Ver.A	Apr 09.2013	Mass Production



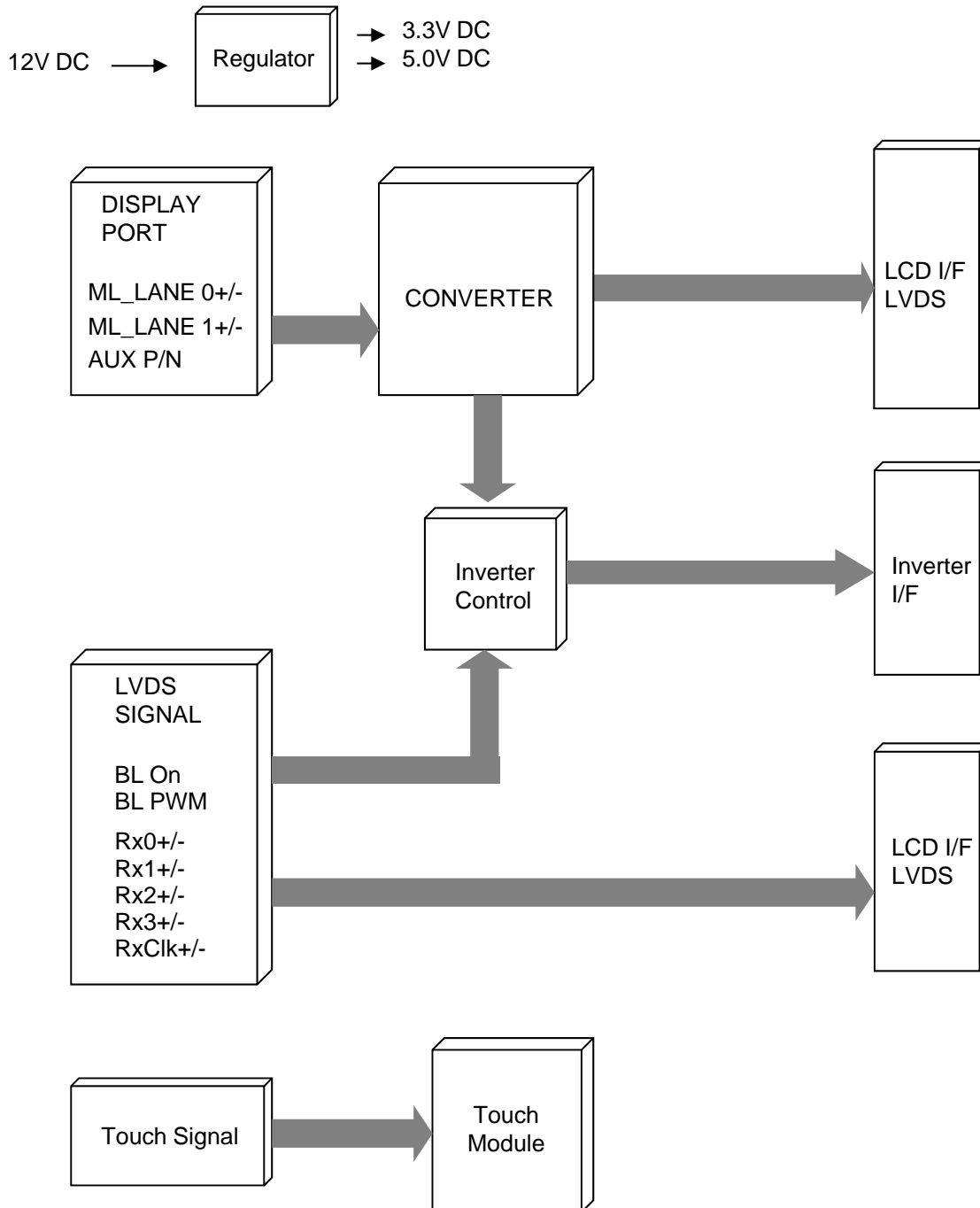
2. General Descriptions

DP to LVDS is Carl zeiss PC of dedicated an advanced TFT-LCD Monitor Control Board. It is suitable for video resolution XGA @ 60Hz video modes, the full display area of the module is used. The design is implemented as a single printed circuit board.

3. Features

- Designed to give state-of-the-art picture quality
- Single LVDS & Display Port signal Input and Single LVDS Output
- XGA to full screen display
- Form factor
DP to LVDS Board -> 110.3mm (L) x 76.2mm (W) x 15mm(H)
- +12VDC Single power input.
- Operating temperature: 0°C to 50°C

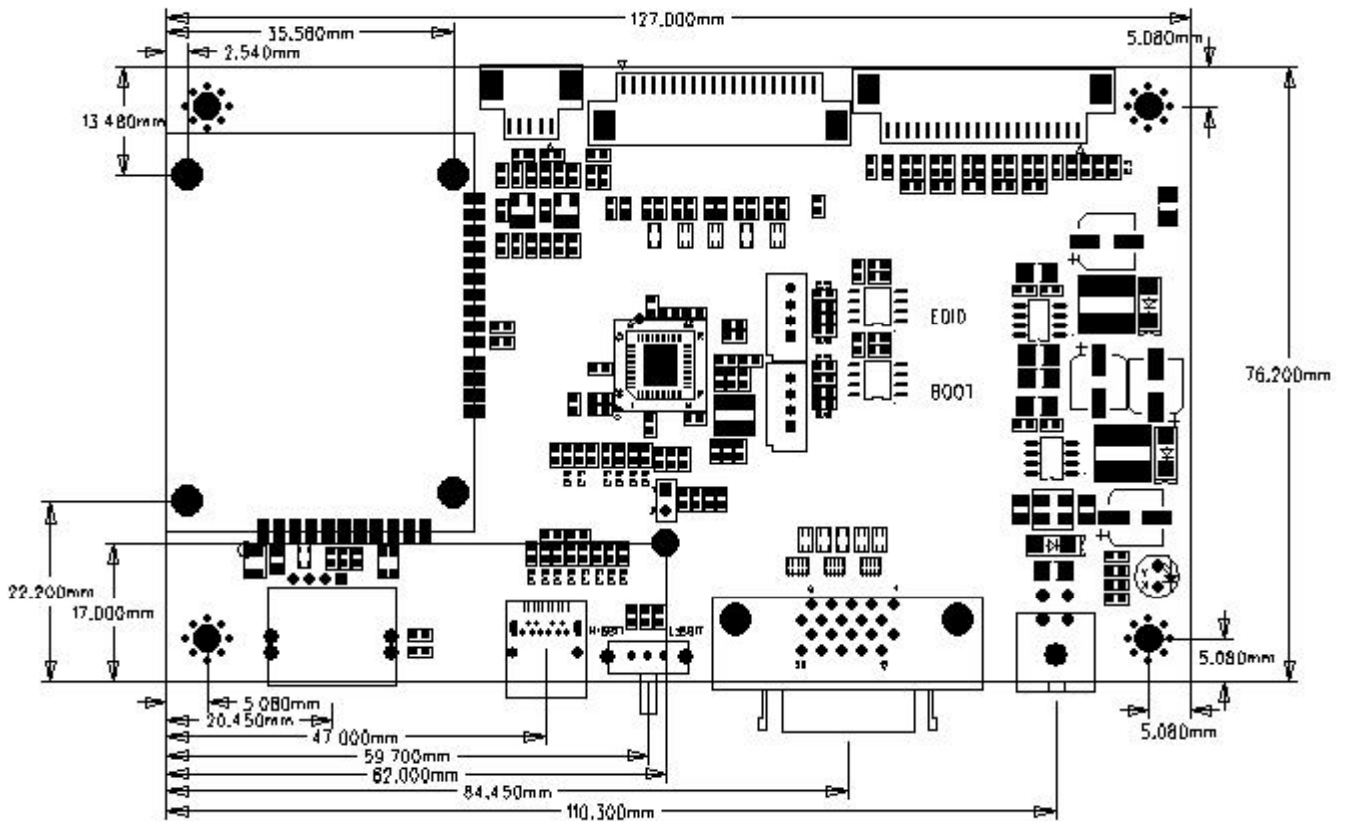
4. Block Diagram



5. Outline Dimensions

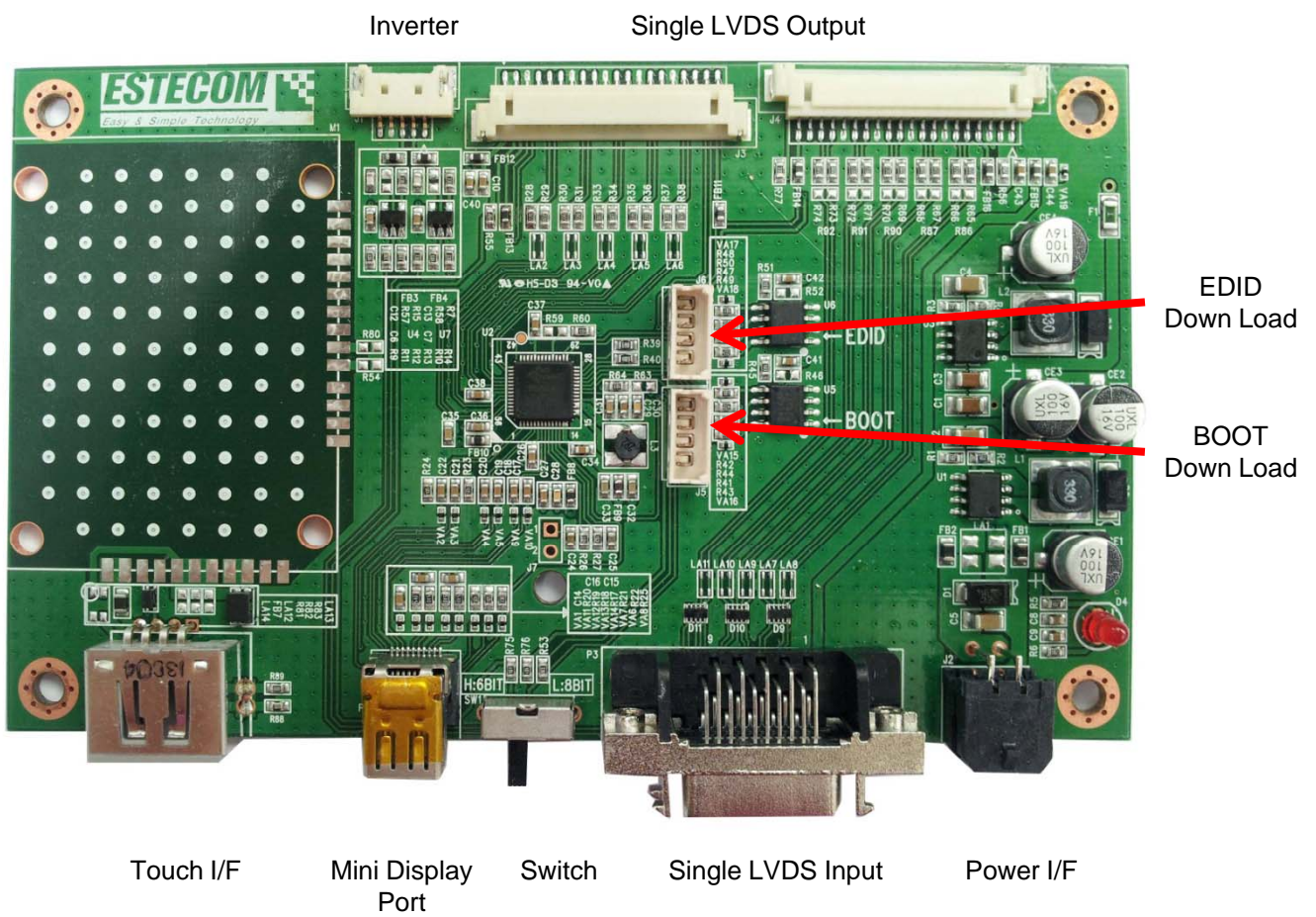
5.1 Low profile Connectors

- Dimension : 110.3mm (L) x 76.2mm (W) x 15mm(H)



5.1.1 Actual connectors location

- Single LVDS and Mini Display Port Input



6. Connectors Information

6.1 Input Connectors

- Power Input Connector (Alternative)

Connector : Molex 43045-0400 (J2)

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	Vin	+12V DC	2	Vin	+12V DC
3	Vin	Ground	4	Vin	Ground

- External I2C Connector

Input Connector : Molex 53047-04 (J5)

Pin No.	Symbol	Description
1	N.C	No Connect
2	I2C_SCL	Serial Clock
3	I2C_SDA	Serial Data
4	GND	Ground

- EDID Connector

Input Connector : Molex 53047-04 (J6)

Pin No.	Symbol	Description
1	N.C	No Connect
2	DDC_SCA	EDID Clock
3	DDC_SDA	EDID Data
4	GND	Ground

- Display Port Input Connector

Connector : Wieson G3167C219 (P1)

Pin No.	Symbol	Pin No.	Symbol
1	GND	2	H.P.D
3	ML_LANE 3-	4	CONFIG 1
5	ML_LANE 3+	6	CONFIG 2
7	GND	8	GND
9	ML_LANE 2-	10	ML_LANE 0-
11	ML_LANE 2+	12	ML_LANE 0+
13	GND	14	GND
15	ML_LANE 1-	16	AUX CH+
17	ML_LANE 1+	18	AUX CH-
19	GND	20	DP_PWR

- LVDS Input Connector

Connector : Ribbon MCR-20P (P3)

Pin No.	Symbol	Pin No.	Symbol
1	VCC	11	VCC
2	GND	12	GND
3	TX0-	13	TX0+
4	GND	14	TX1-
5	TX1+	15	GND
6	TX2-	16	TX2+
7	GND	17	TXCLK-
8	TXCLK+	18	GND
9	TX3-	19	TX3+
10	BL_PWM	20	BL_EN

6.2 Output Connectors

- LVDS Output Connector

Connector : Yeonho 12507WR-20 (J3 and J4)

Pin No.	Symbol	Pin No.	Symbol
1	Panel Power	11	TX2-
2	Panel Power	12	TX2+
3	GND	13	GND
4	REV_SCAN	14	TXCLK-
5	TX0-	15	TXCLK+
6	TX0+	16	GND
7	GND	17	TX3-
8	TX1-	18	TX3+
9	TX1+	19	N.C
10	GND	20	SEL_6_8

- Backlight Connector :

Connector : Yeonho 12513WR-05 (J1)

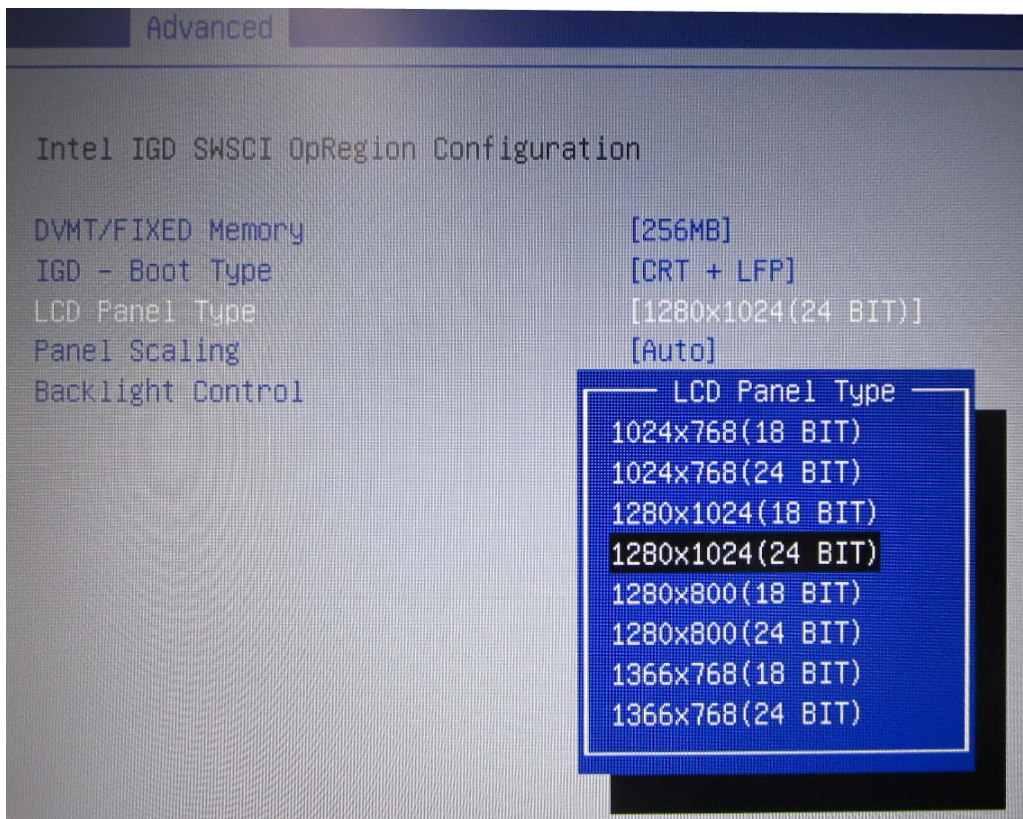
Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	N.C	No Connect	2	ADJ	Brightness
3	BL_EN	Back-light On/Off	4	GND	Ground
5	Power	+12V DC			

7. Reference Data

7.1 LCD Input Type

Select the LCD Panel Type from CMOS-Setup of CPC

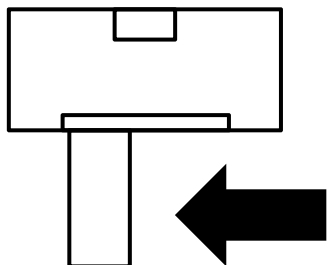
1024 x 768	18 Bit
1024 x 768	24 Bit



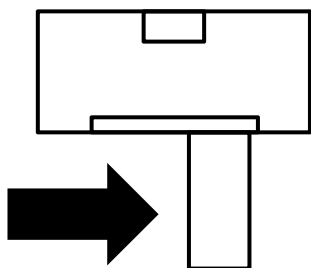
7.2 LVDS BIT Select

Switch(SW1) to select the type for LVDS input setting are as follows:

- 6 bits LVDS input Setting



- 8 bits LVDS input Setting



Note 1 . Be careful that the Panel Power Option (3.3V / 5V / 12V)