

ePoster T-CON Board EJ8951EL-1W-50 Product Specification

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Record of Revision

Version	Issue Date	Page	Description
1.0	2020/9/18		Final specification released

1. General Description

1.1. Introduction

EJ8951EL-1W is designed for driving Electrical Paper Display with the following features:

- Support EPD panel modules:
 - EINK ED113TC1
- Two Adjustable LDOs for Source Driver Supply
 - VPOS: +15V, 200mA at VIN= 5V
 - VNEG: -15V, 200mA at VIN= 5V
- Adjustable VCOM Driver for Accurate Panel Backplane Biasing 0V to -5.11V
- Two Adjustable LDOs for Gate Driver Supply
 - VGH: +27V, 15mA at VIN= 5V
 - VGL: -20V, 15mA at VIN= 5V
- External IO
 - Micro USB x 1 / USB (Wafer) x 1
 - SPI x 1
 - DC-in 5V x 1
- Internal IO
 - Panel Out x 1
 - Rotary Coded Switch (10 Steps) x 1
- Working Temperature: -15°C-70°C
- Dimension: 180(L)x45(H)mm
- Weight: 25g

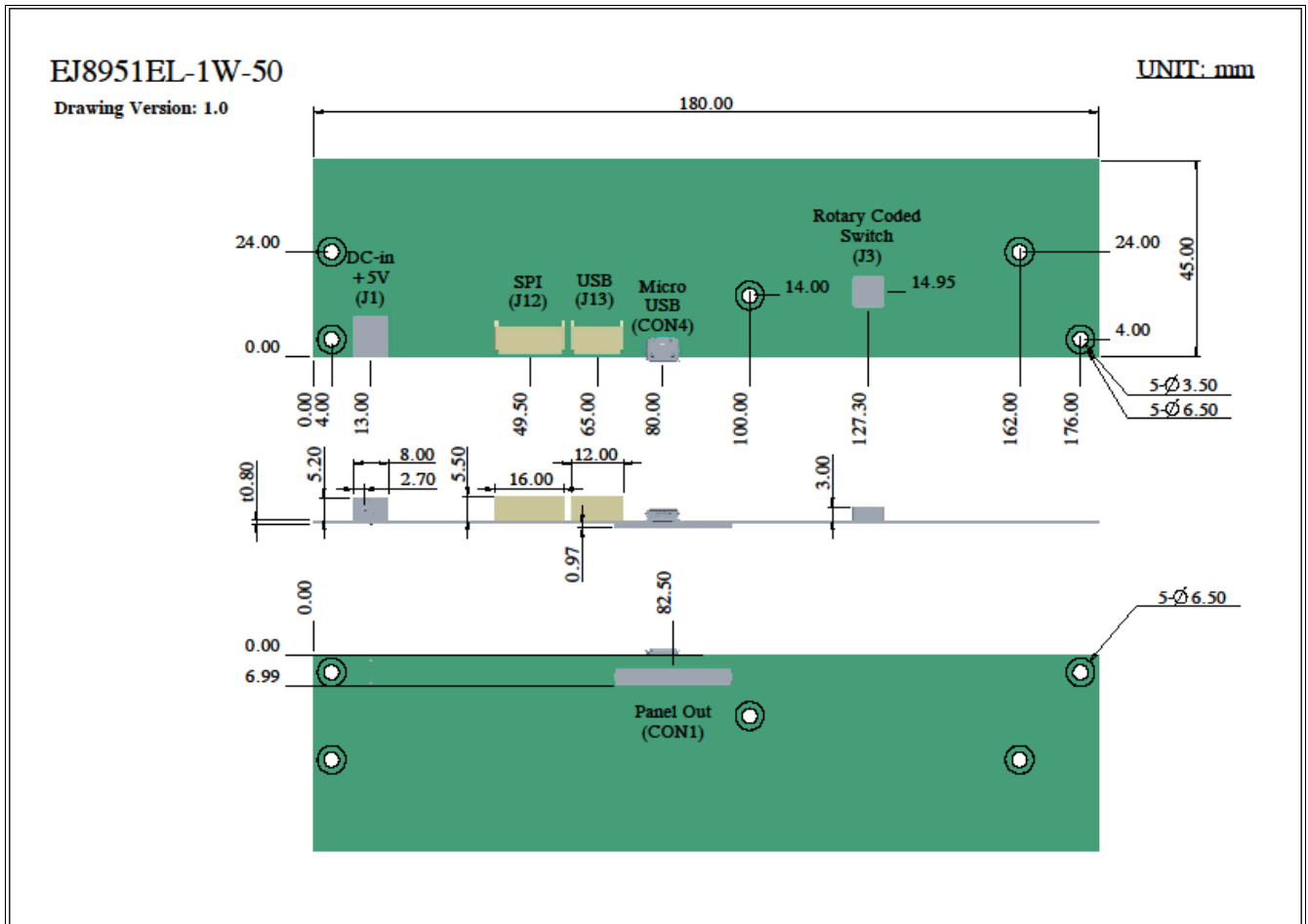
1.2. Electrical Characteristics

ITEM	SYMBOL	MIN.	MAX.	I
Power Supply	Vs		12 V	
Panel Power	VPOS	+14.25 V	+15.0 V	200 mA
	VNEG	-15.0 V	-14.25 V	200 mA
	VCOM	-5.11 V	0.0 V	15 mA
	VGH	+26.0 V	+28.0 V	15 mA
	VGL	-21.0 V	-19.0 V	15 mA

1.3. Power Consumption

ITEM	MIN.	MAX.	UNIT
TCON Board Only		5.0	W
Standby		0.8	W

2. Mechanical Drawing



3. Electrical Definition

3.1. Panel Out (CON1): Hirose FH34SRJ-50S-0.5SH(50) or compatible

PIN	SIGNAL	DESCRIPTION
1	SPI_SDO	Serial Data Output for Flash Memory
2	SPI_SDI	Serial Data Input for Flash Memory
3	SPI_NCS	Chip Select for Flash Memory
4	SPI_SCL	Serial Data Clock for Flash Memory
5	VDD2	SPI flash power supply
6	VSS	Ground
7	AGND	Thermistor analog Ground
8	TS	Thermistor sensor pin
9	MODE	Output mode selection gate driver
10	TEST	E Ink test pin
11	CKV	Clock gate driver
12	SPV	Start pulse gate driver
13	VSS	Ground
14	VGH	Positive power supply gate driver
15	VSS	Ground
16	VEE	Negative power supply gate driver
17	VSS	Ground
18	XOE	Outpur enable source driver
19	XLE	Latch enable source driver
20	XSTL	Start pulse gate driver
21	VSS	Ground
22	D15	Data signal source driver
23	D14	Data signal source driver
24	D13	Data signal source driver
25	D12	Data signal source driver
26	D11	Data signal source driver
27	D10	Data signal source driver
28	D9	Data signal source driver
29	D8	Data signal source driver
30	VSS	Ground
31	XCL	Clock source driver

32	VSS	Ground
33	D7	Data signal source driver
34	D6	Data signal source driver
35	D5	Data signal source driver
36	D4	Data signal source driver
37	D3	Data signal source driver
38	D2	Data signal source driver
39	D1	Data signal source driver
40	D0	Data signal source driver
41	VDD	Digital power supply drivers
42	VSS	Ground
43	VNEG	Negative power supply source driver
44	VNEG	Negative power supply source driver
45	VSS	Ground
46	VPOS	Positive power supply source driver
47	VPOS	Positive power supply source driver
48	VCOM	Common Voltage
49	VSS	Ground
50	BORDER	Border connection

3.2. Micro USB (CON4): MicroUSB Jack

PIN	SIGNAL
1	+5V
2	D+
3	D-
4	GND

3.3. USB (J13): Wafer 4-Pin Pitch=2.0mm

PIN	SIGNAL
1	+5V
2	D+
3	D-
4	GND

3.4. SPI (J12): Wafer 6-Pin Pitch=2.0mm

PIN	SIGNAL
1	HRDY
2	MISO
3	MOSI
4	SCK
5	CS
6	GND

3.5. DC-IN 5V (J1): DC Jack

PIN	SIGNAL
1	+5V
2	GND

4. Packing Information

4.1. Definition of Label

OOOOO YYWW XXX

OOOOO: Simplified Part Number

YYWW: Production Year/Week

XXX: Serial Number