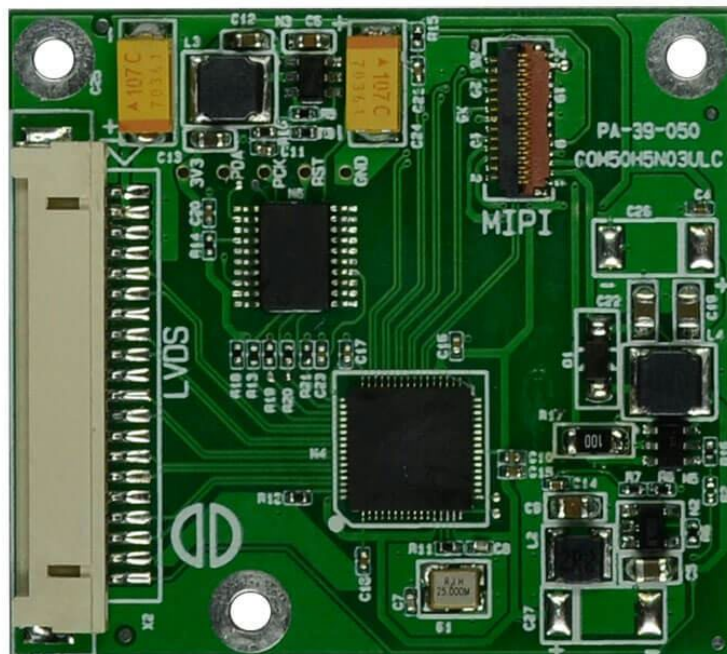


Datasheet

FORTEC Integrated

PrismaMIPI-L-00

PrismaMIPI-L-00/ COM50H5N03ULC
PA-39-050



Version 1.3
17.03.2020

 APOLLO DISPLAY
TECHNOLOGIES



FORTEC
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UNITED KINGDOM



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Preliminary

1 Revision History

Date	Rev.No.	Description	Page
21.03.2019	1.0	Initial	All
28.03.2019	1.1	Add Power Consumption	5
28.02.2020	1.2	Chapter 6 Note 1 updated	5
17.03.2020	1.3	Chapter 6 Note 1 typos corrected	5

Preliminary

2 Overview

PrismaMIPI-L-00 is our cost-efficient LVDS to MIPI converter board for the direct connection of Ortustech COM50H5N03ULC TFT display with resolution (720X1280).

The board is mechanically designed for easy assembly on the back side of the TFT Display.

3 Features

Single Channel LVDS / Mapping: VESA / Bit: 8bit

4 Timing Table

Use timing table COM50H5N03ULC

5 Absolute Maximum Ratings

Description	Item	Min	Max	Unit	Note
Supply Voltage	V _{CC}	4.5	15	VDC	
Storage Temperature	T _{ST}	-35	85	C°	
Operating Temperature	T _{OP}	-25	75	C°	

6 Electrical Characteristics

All measurements done at 25°C ambient temperature.

Description	Item	Min	Typ	Max	Unit	Note
Supply Voltage	V _{CC}		5.0		VDC	Voltage noise 80mV
Current Consumption	I _{at VCC 5V}		100	185	mA	
Power Consumption	P		0.5	1	W	
Brightness control	F _{PWM}	50		100	Hz	1
PWM duty cycle		0		100	%	1
Brt control voltage	V _{PWM}	0		3,3V	VDC	1

Note 1: Without occupy control pin the brightness is 100% none dimming method.

For PWM control an assembled resistor on R2 with 0Ω 0402 is necessary.

7 LVDS Connector

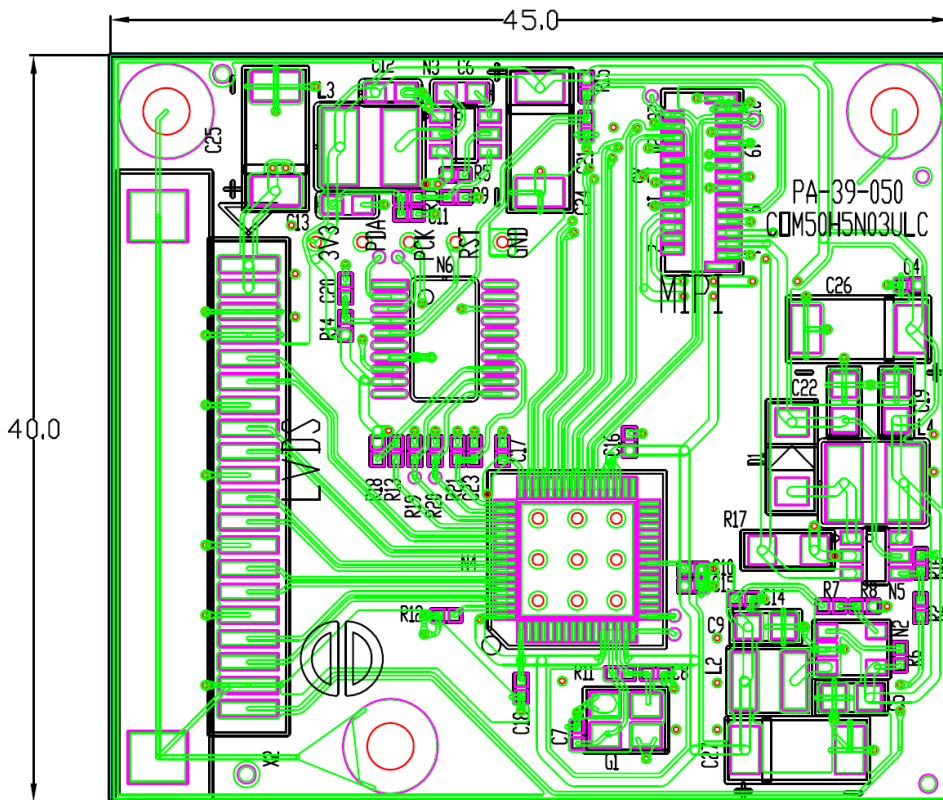
LVDS Connector Type: DF14-20P-1.25H Manufacturer Hirose

Pin	Signal	Description	Pin	Signal	Description
1	VDD		11	L2N	
2	VDD		12	L2P	
3	GND		13	GND	
4	GND		14	LCN	
5	L0N		15	LCP	
6	L0P		16	GND	
7	GND		17	L3N	
8	L1N		18	L3P	
9	L1P		19	GND	
10	GND		20	PWM	

8 Outline Dimensions

Description	Typ	Unit	Note
Width	40.2	mm	
Length	45.0	mm	
PCB thickness	1.2	mm	
Total thickness	4.0	mm	

3D model available on request



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