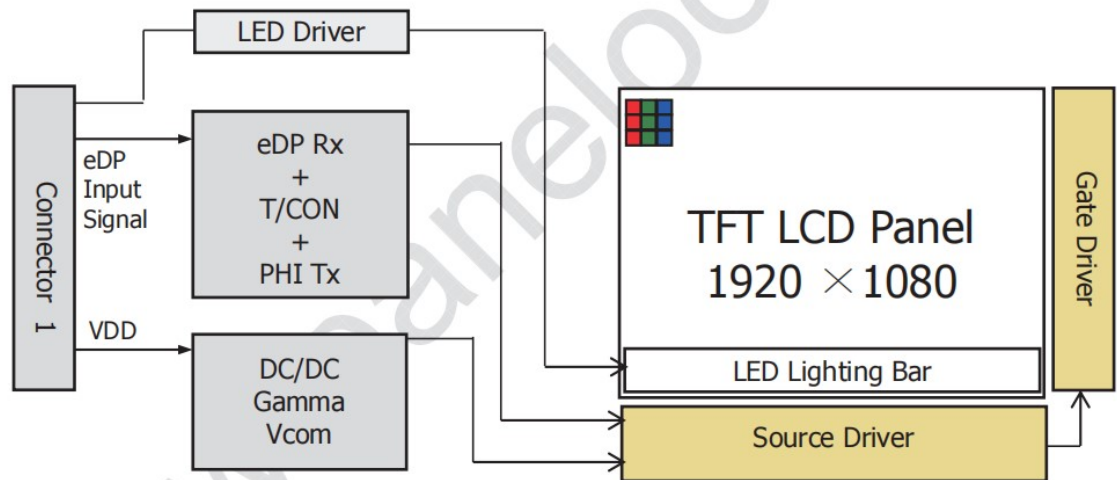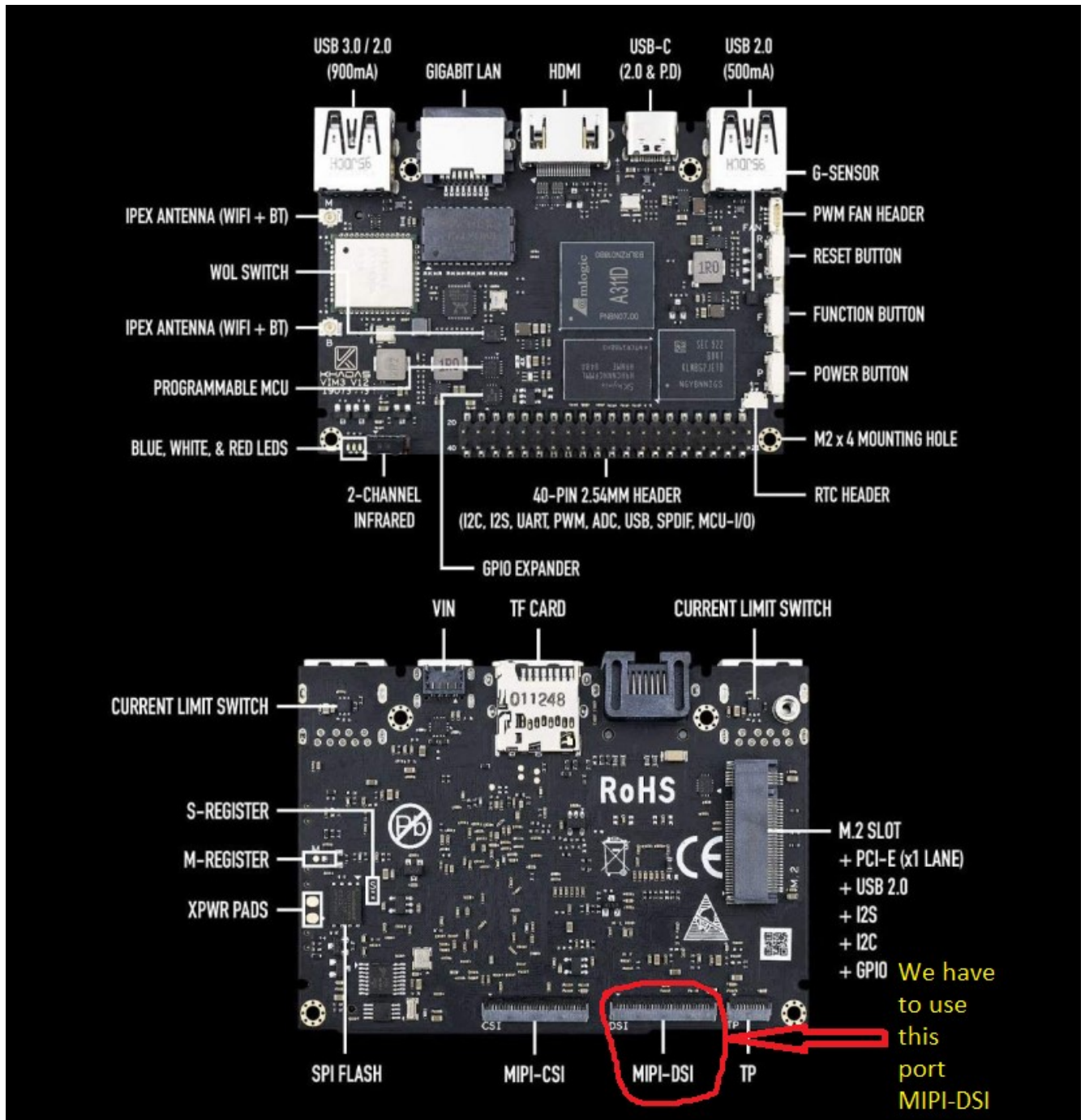## LCD : NV156FHM-N42

1.2 Features

- 2 lane eDP Interface with 2.7Gbps Link Rates
- Thin and light weight
- 6-bit color depth, display 262K colors
- Single LED Lighting Bar. (Down side/Horizontal Direction)
- Green Product (RoHS & Halogen free product)
- On board LED Driving circuit
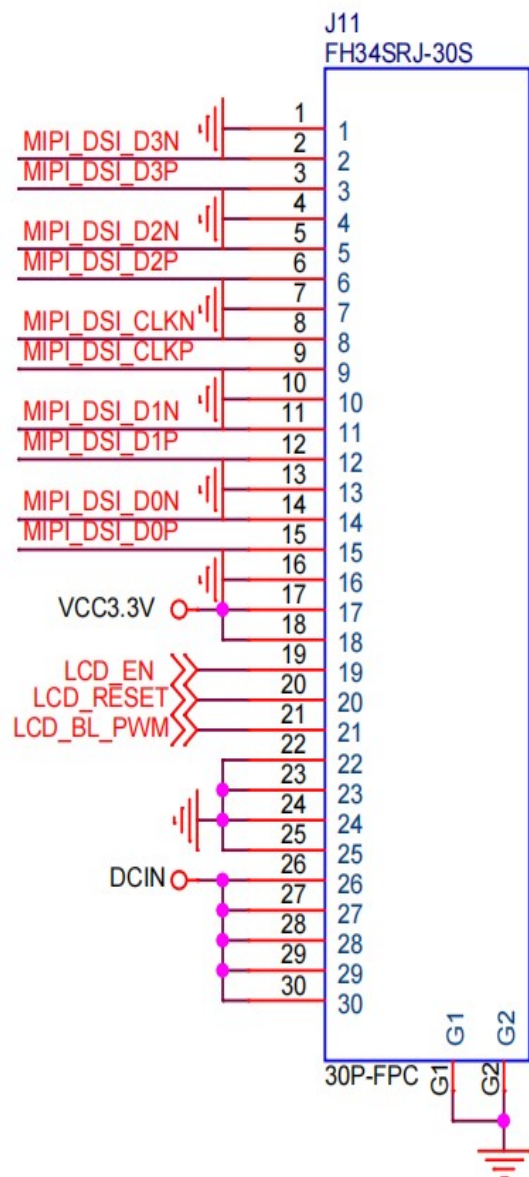- Low driving voltage and low power consumption
- On board EDID chip

LCD connector pinout:

Terminal	Symbol	Functions
Pin No.	Symbol	Description
1	NC	No Connection
2	H_GND	Ground
3	LANE1_N	eDP RX channel 1 negative
4	LANE1_P	eDP RX channel 1 positive
5	H_GND	Ground
6	LANE0_N	eDP RX channel 0 negative
7	LANE0_P	eDP RX channel 0 positive
8	H_GND	Ground
9	AUX_CH_P	eDP AUX CH positive
10	AUX_CH_N	eDP AUX CH negative
11	H_GND	Ground
12	LCD_VCC	Power Supply, 3.3V (typ.)
13	LCD_VCC	Power Supply, 3.3V (typ.)
14	NC	No Connection
15	H_GND	Ground
16	H_GND	Ground
17	HPD	Hot plug detect output
18	BL_GND	LED Ground
19	BL_GND	LED Ground
20	BL_GND	LED Ground
21	BL_GND	LED Ground
22	BL_ENABLE	LED enable pin(+3.3V Input)
23	BL_PWM	System PWM Signal Input
24	Hsync	Hsync
25	NC	No Connection
26	BL_POWER	LED Power Supply 5V-21V
27	BL_POWER	LED Power Supply 5V-21V
28	BL_POWER	LED Power Supply 5V-21V
29	BL_POWER	LED Power Supply 5V-21V
30	NC	No Connection

Processor Board:VIM3 Single Board Computer Amlogic A311D

USB 3.0 / 2.0 (900mA), GIGABIT LAN, HDMI, USB-C (2.0 & P.D), USB 2.0 (500mA)

IPEX ANTENNA (WIFI + BT)
WOL SWITCH
IPEX ANTENNA (WIFI + BT)
PROGRAMMABLE MCU
BLUE, WHITE, & RED LEDS

G-SENSOR
PWM FAN HEADER
RESET BUTTON
FUNCTION BUTTON
POWER BUTTON
M2 x 4 MOUNTING HOLE
RTC HEADER

2-CHANNEL INFRARED
40-PIN 2.54MM HEADER (I2C, I2S, UART, PWM, ADC, USB, SPDIF, MCU-I/O)
GPIO EXPANDER

VIN, TF CARD, CURRENT LIMIT SWITCH

CURRENT LIMIT SWITCH
S-REGISTER
M-REGISTER
XPWR PADS

RoHS

M.2 SLOT
+ PCI-E (x1 LANE)
+ USB 2.0
+ I2S
+ I2C
+ GPIO We have to use this port MIPI-DSI

SPI FLASH, MIPI-CSI, MIPI-DSI, TP

Processor Board PINOUT:

MIPI-DSI