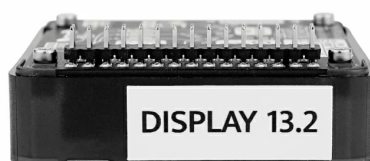
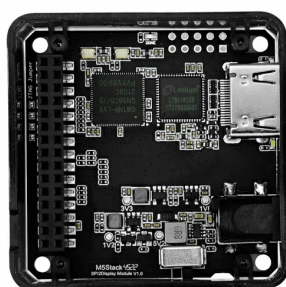


Module13.2 Display

SKU:M126

MODULE 13.2
DISPLAY



Description

Module13.2 Display is an expansion module designed for **high-definition audio and video**. It uses the **Gowin GW1NR series FPGA** chip to output **Display signals** and the **LT8618S** chip for signal conditioning, enabling **24-bit color depth Display signals** and **up to 8-channel audio signals** with a resolution of up to **1080P**. The FPGA internally implements the **I2S audio generation function**, and the module includes a **DC power input socket** and corresponding **DC-DC circuits** for powering the entire device. This product is suitable for **various programmable high-definition audio and video output applications**.

Features

- Supports 24-bit RGB input
- Resolution up to 1080P
- Supports up to 8-channel audio input
- Includes 9-24V to 5V, 3.3V, and 1.2V DC-DC circuits and 5V to 1.8V LDO circuit
- High-definition audio and video interface, JTAG download interface
- 9-24V DC power interface
- Power switch

Includes

- 1 x Module13.2 Display

Applications

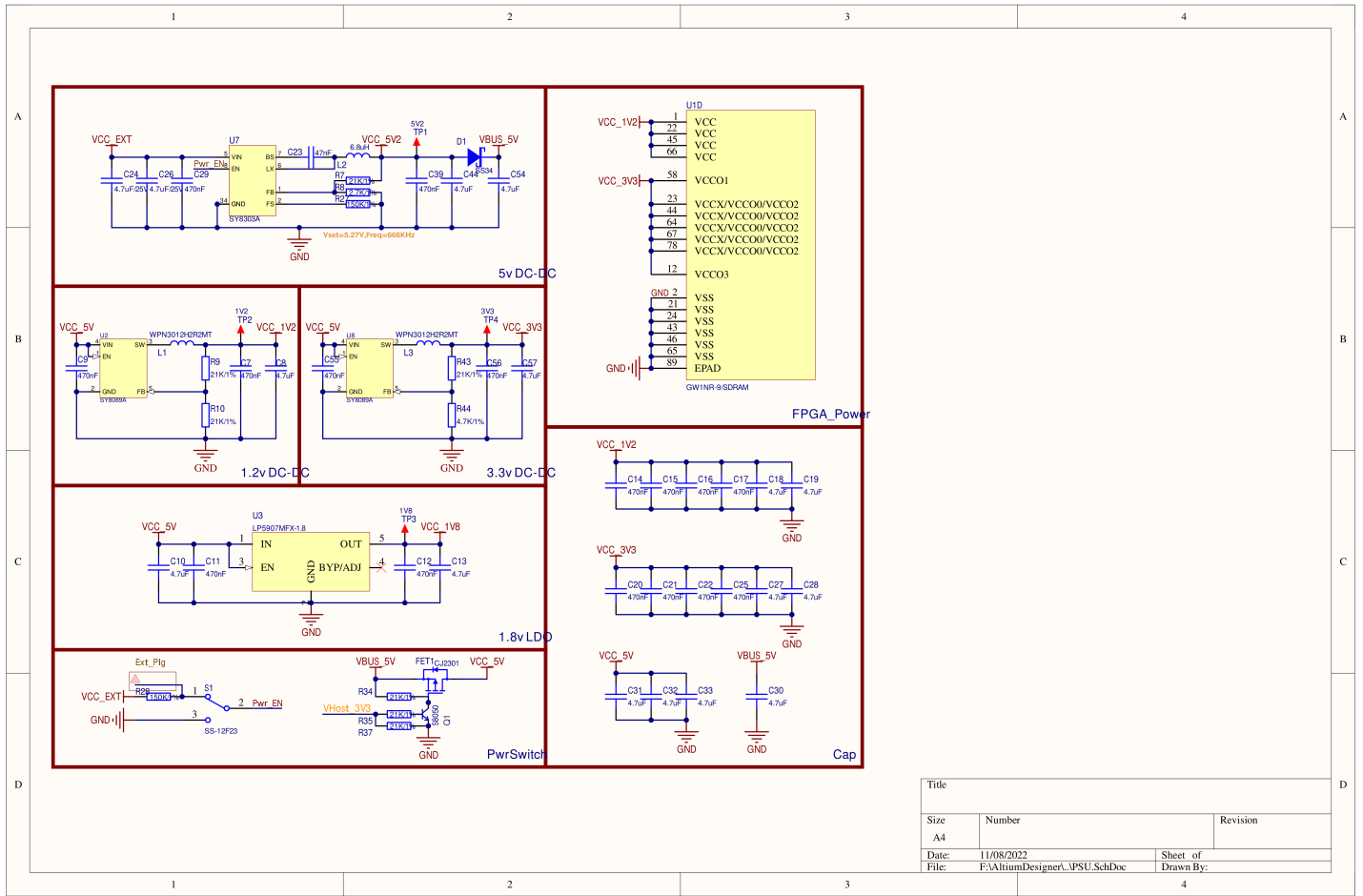
- Output high-definition audio and video signals
- Human-machine interaction

Specifications

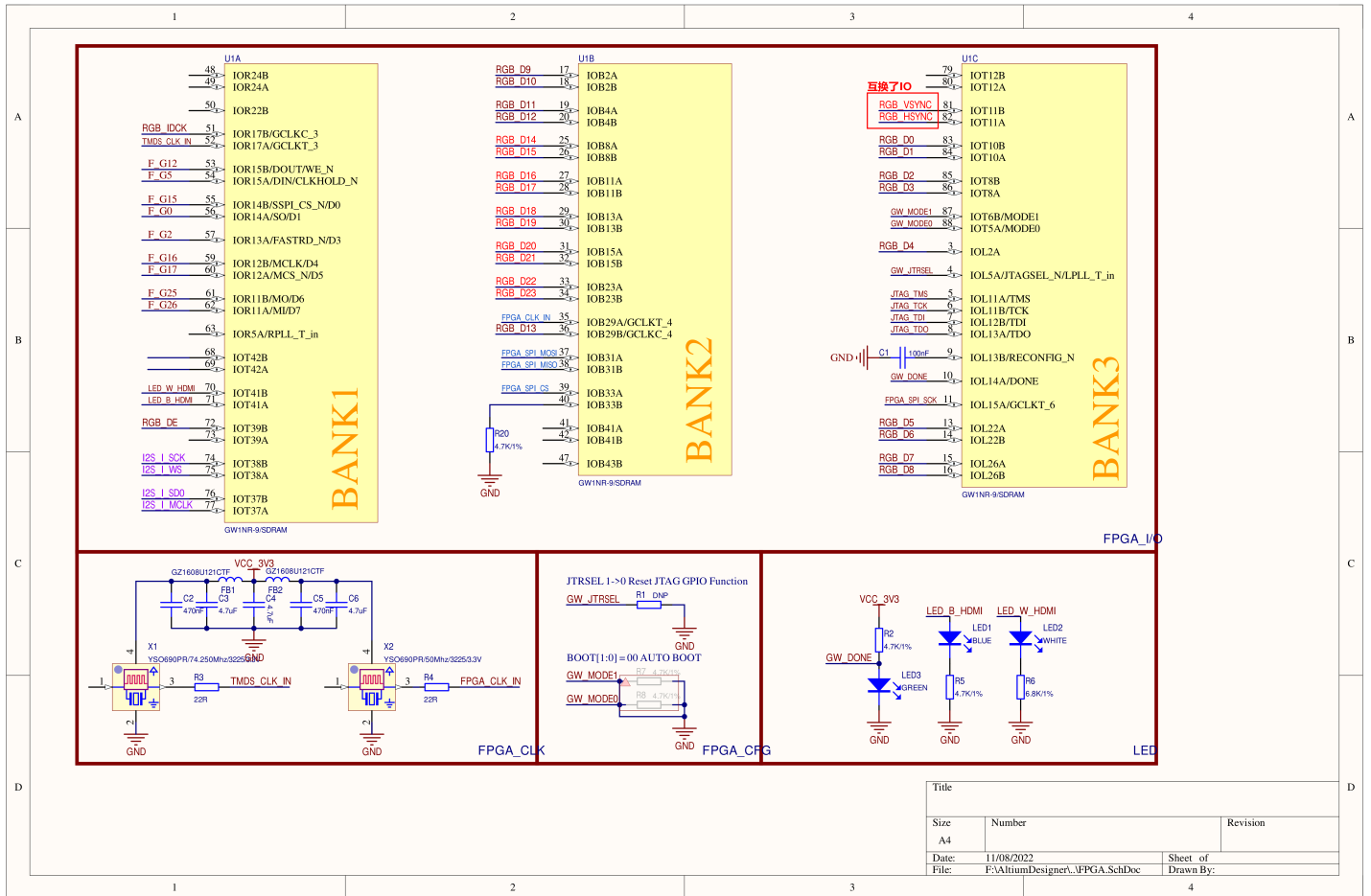
Specification	Parameter
Audio/Video Signal Acquisition Chip	GW1NR-LV9QN88C6-I5 FPGA
Audio/Video Signal Processing Chip	LT8616SXB @ 0x39
9-24V to 5V DC-DC Buck Chip	SY8303
5V to 3.3V and 1.2V DC-DC Buck Chip	SY8089
5V to 1.8V LDO Buck Chip	LP5907
Resolution	Up to 1080P (1920x1080)
Power Input	9 ~ 24V
Product Size	54.0 x 54.0 x 19.8mm
Product Weight	21.6g
Package Size	134.0 x 95.0 x 20.2mm
Gross Weight	41.2g

Schematics

- [Module13.2 Display Schematics PDF](#)



Title		
Size	Number	Revision
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Date:	11/08/2022	Sheet of
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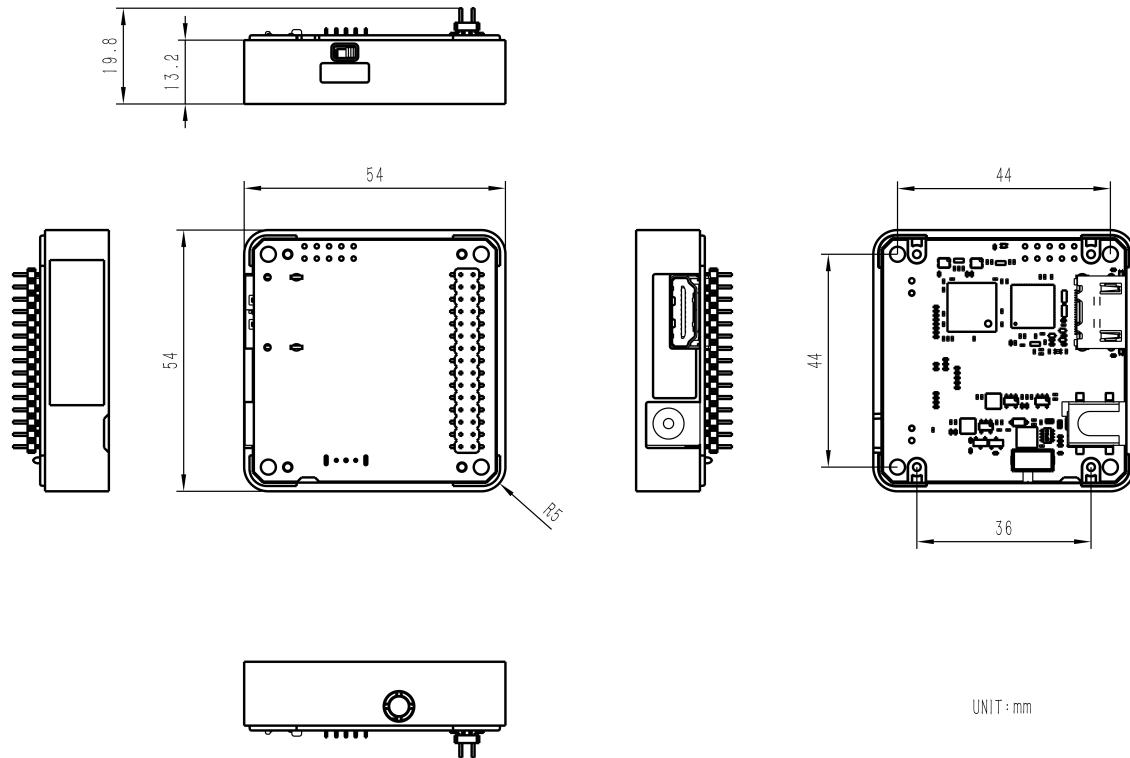
Title		
Size	Number	Revision
A4		
Date:	11/08/2022	Sheet of
File:	F:\AltiumDesigner\..FPGA.SchDoc	Drawn By:

M5-Bus

PIN	LEFT	RIGHT	PIN
GND	1	2	
GND	3	4	
GND	5	6	
SPI_MOSI	7	8	
SPI_MISO	9	10	
SPI_CLK	11	12	3V3
	13	14	
	15	16	
I2C_SDA	17	18	I2C_SCL
	19	20	
	21	22	
	23	24	
	25	26	
	27	28	5V
	29	30	

Model Size

- [Module13.2 Display Model Size PDF](#)



Datasheets

- [GW1NR-LV9 FPGA](#)
- [LT8616SXB](#)
- [SY8089](#)
- [SY8303](#)
- [LP5907](#)

Softwares

Arduino

- [Module13.2 Display Arduino Example](#)

UiFlow1

- [Module13.2 Display UiFlow1 Docs](#)

UiFlow2

- [Module13.2 Display UiFlow2 Docs](#)

Easyloader

Easyloader	Download Link	Notes
Module13.2 Display Example Easyloader	download	/