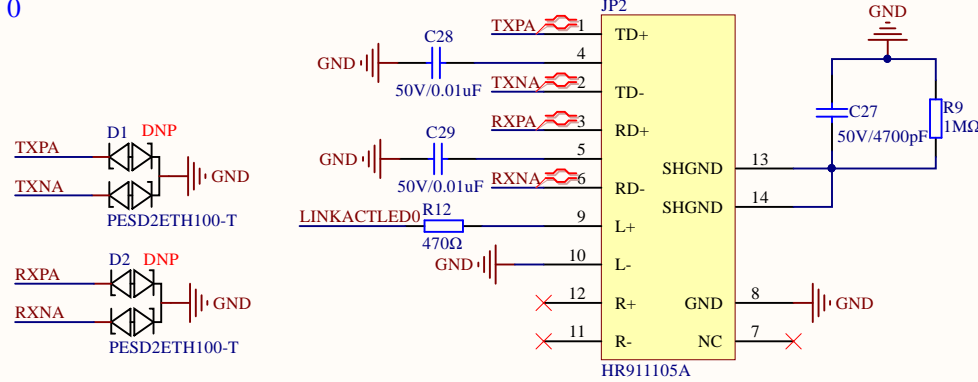
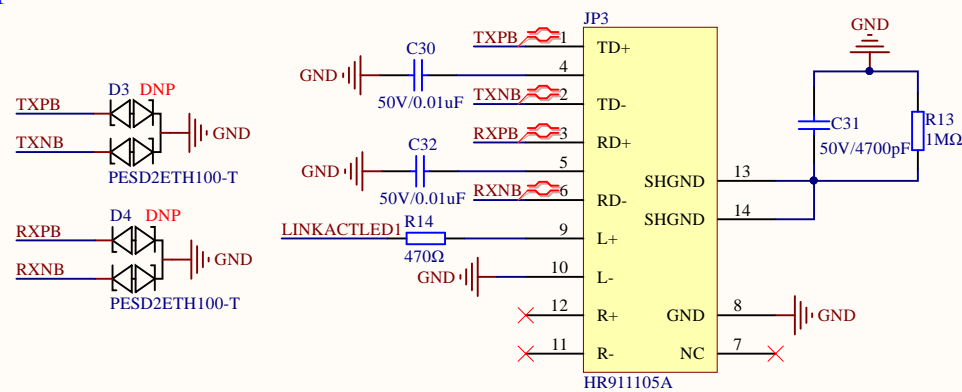


Ethernet

Port 0



Port 1



Network Precautions

Please note that the internal PHY of GDETHC is a voltage-type PHY.

Layout Precautions

The TXP/TXN and RXP/RXN traces should always be as short as possible. The individual trace impedance of TXP/TXN and RXP/RXN must be kept below 50 ohm, and the differential characteristic impedance of the pair must be 100 ohm.

Company Name: GigaDevice

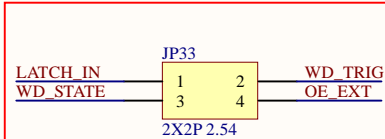
File Name: Ethernet

Revision: 1.0

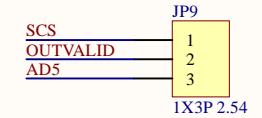
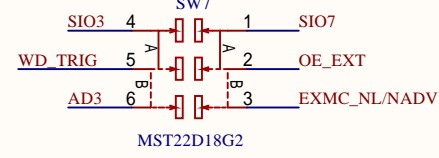
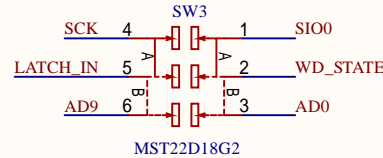
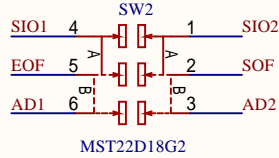
Date: 2024-11

Author: jiawei.yuan

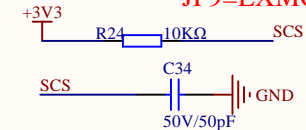
EXMC&SPI+GPIO



Digital IO Header



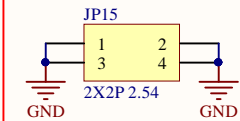
JP9=EXMC or SPI selection



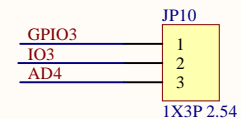
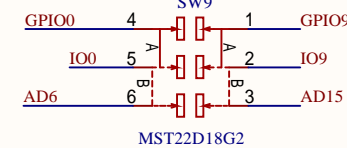
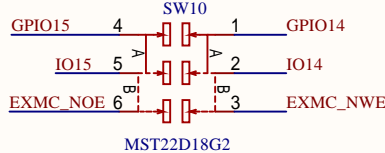
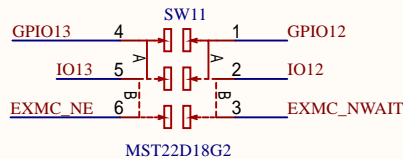
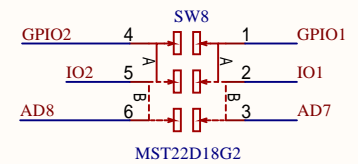
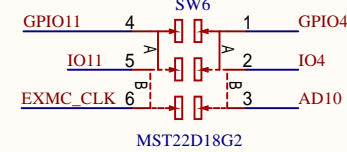
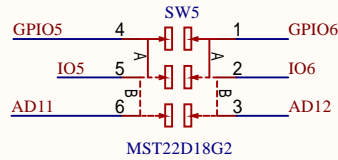
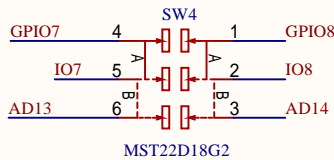
SW2,SW3,SW7=EXMC or SPI selection

↓ Short 2-3&5-6 for EXMC Config(1-2 & 4-5 open)

↑ Short 1-2&4-5 for SPI Config(2-3 & 5-6 open) **Default**



GND Header

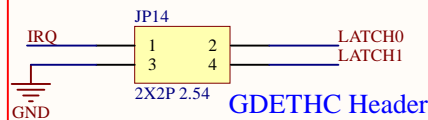


JP10=EXMC or GPIO selection

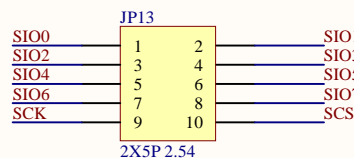
SW4-SW6,SW8-SW11=EXMC or GPIO selection

↓ Short 2-3&5-6 for EXMC Config(1-2 & 4-5 open)

↑ Short 1-2&4-5 for GPIO Config(2-3 & 5-6 open) **Default**

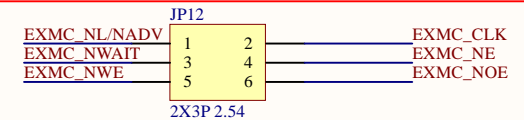
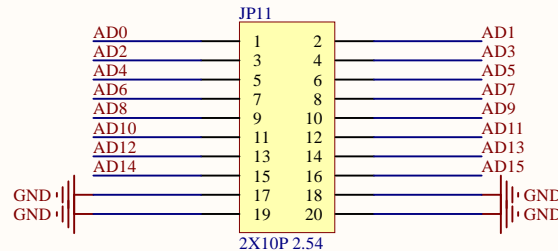


GDETHC Header



OSPI/SPI Header

EXMC Header



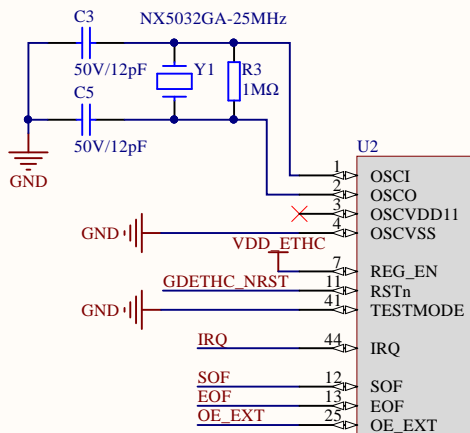
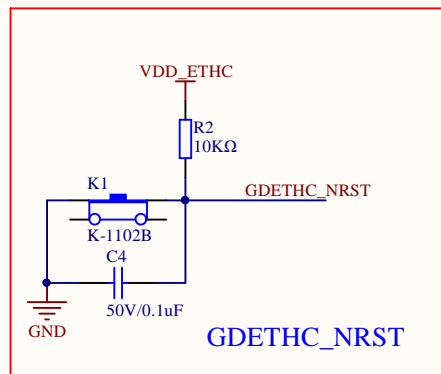
Company Name: GigaDevice

File Name: EXMC&SPI+GPIO

Revision: 1.0

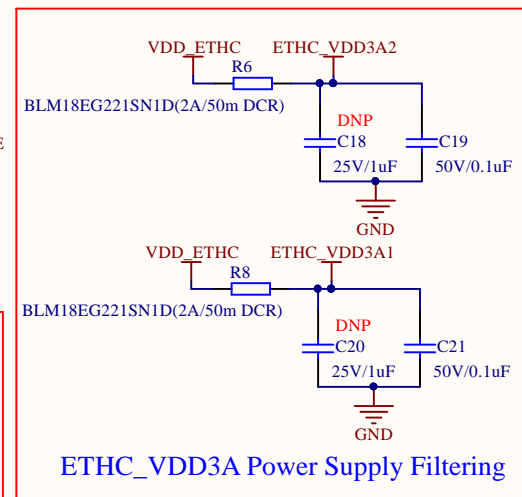
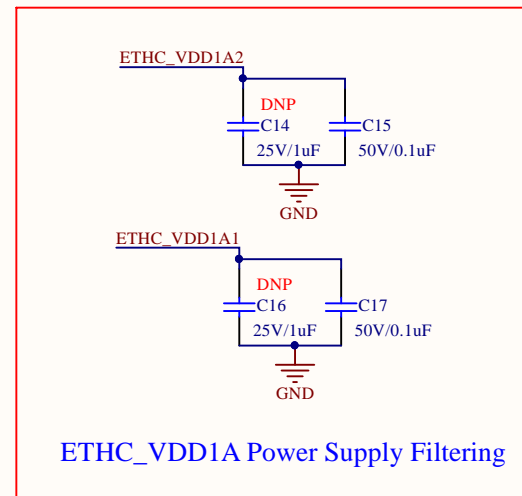
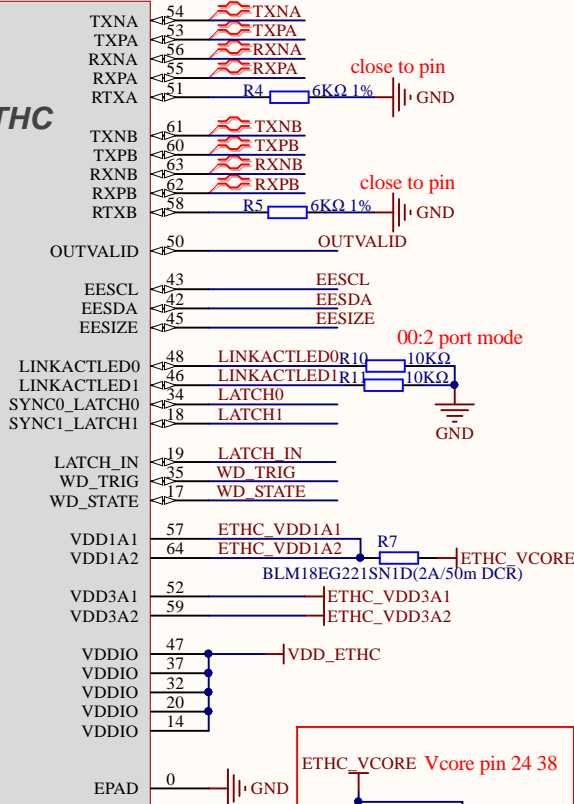
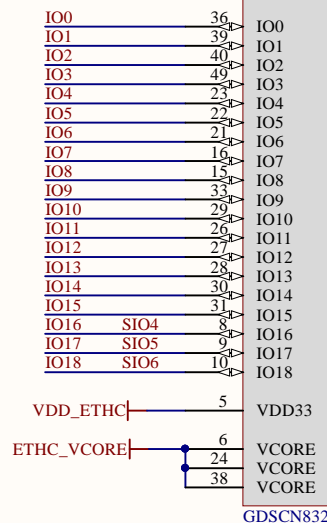
Date: 2024-11

Author: jiawei.yuan

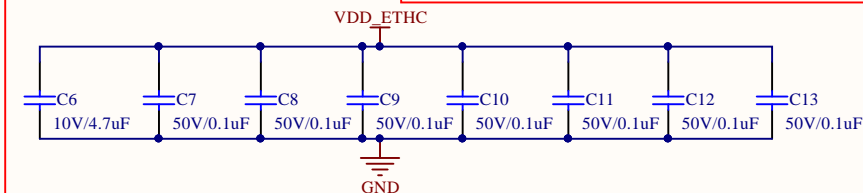


GDETHC

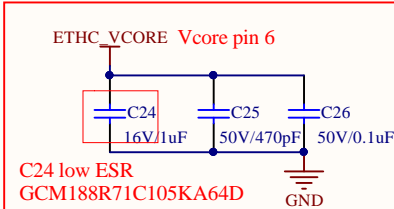
GDETHC



C6 first across VDD_ETHC NET
other cap near VDD_ETHC pin



VDD_ETHC Power Supply Filtering



ETHC_VCORE Power Supply Filtering

Company Name: GigaDevice

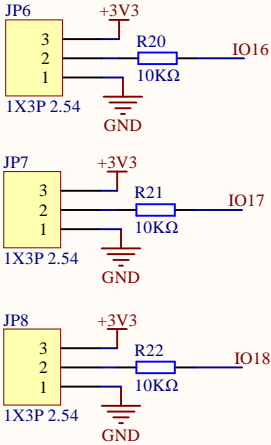
File Name: GDETHC

Revision: 1.0

Date: 2024-11

Author: jiawei.yuan

GDETHCStrap



Signal Name	Logic	Connector	Strap
IO16	0	JP6(1&2) Default	SPI Mode
	1	JP6(2&3)	EXMC Mode
IO17	0	JP7(1&2) Default	LDO no Bypass
	1	JP7(2&3)	LDO Bypass
IO18	0	JP8(1&2) Default	No Reset delay
	1	JP8(2&3)	Open Reset delay

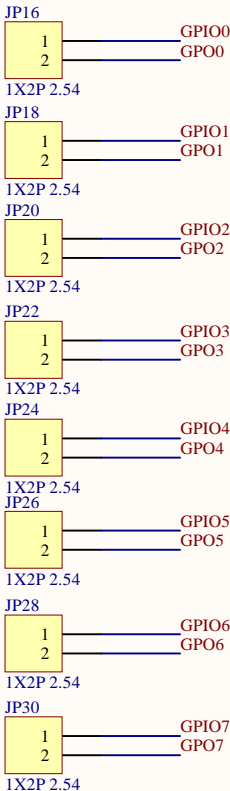
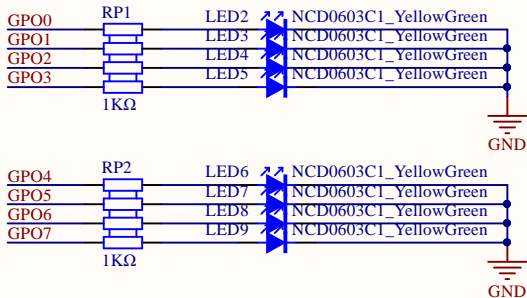
Company Name: GigaDevice

File Name: GDETHCStrap

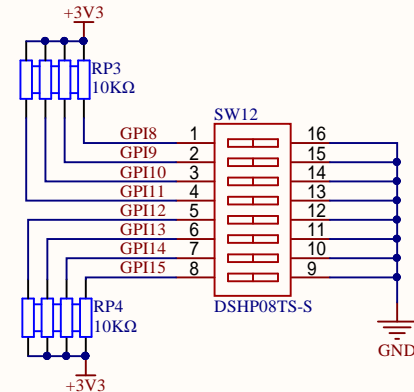
Revision: 1.0 Date: 2024-11 Author: [jiawei.yuan](#)

GPIO

Digital Outputs



Digital Inputs



Input=1(Default)
Input=0(change the Switch position)

Company Name: GigaDevice

File Name: GPIO

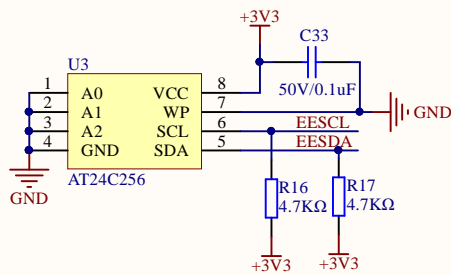
Revision: 1.0

Date: 2024-11

Author: jiawei.yuan

I2C

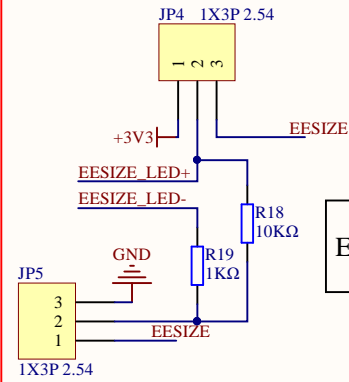
EEPROM



Different sizes can be mounted

I2C EEPROM Lower size Below
16K (2K X 8)
I2C EEPROM Higher size Above
16K (2K X 8)

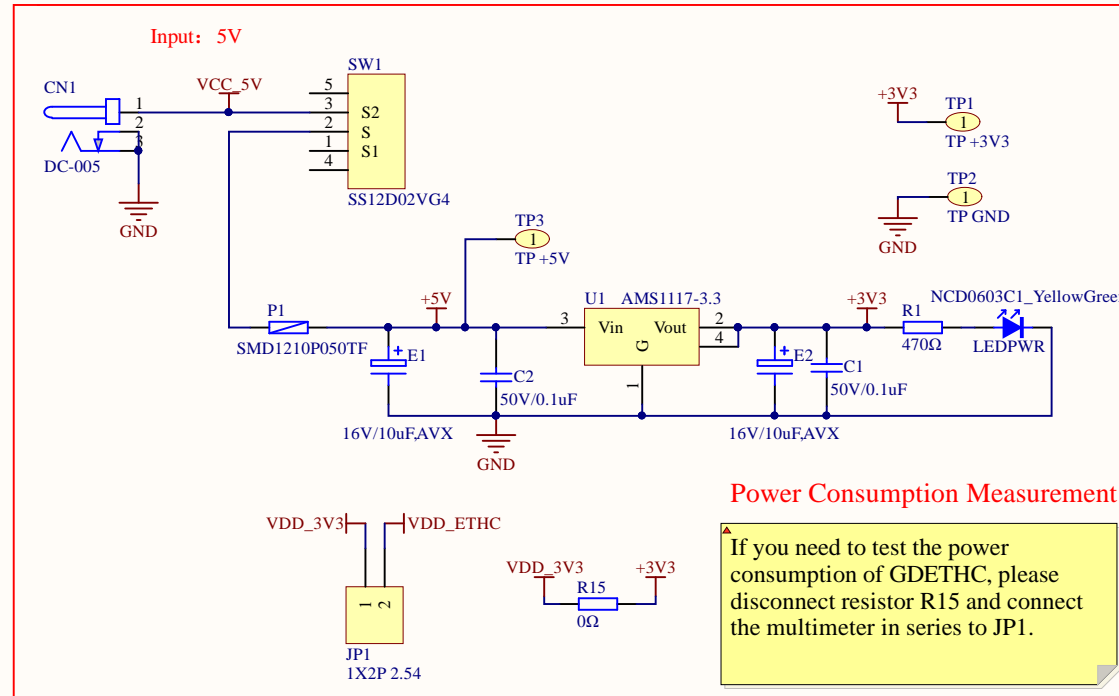
EEPROM



EESIZE	0	JP4,JP5(2&3)	EEPROM Size=1KB through 16KB
	1	JP4,JP5(1&2) Default	EEPROM Size=32KB through 512KB

Company Name: GigaDevice		
File Name: I2C		
Revision: 1.0	Date: 2024-11	Author: jiawei.yuan

Power



Company Name: GigaDevice		
File Name: Power		
Revision: 1.0	Date: 2024-11	Author: jiawei.yuan

