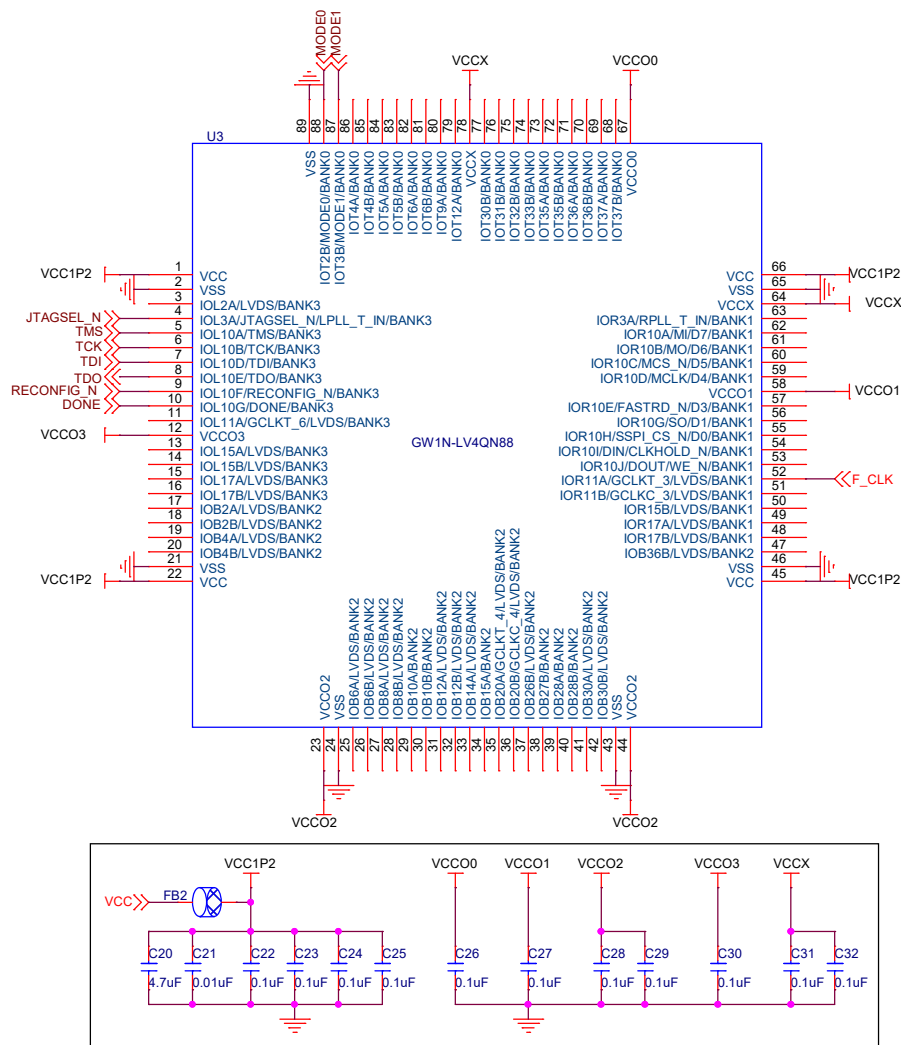


Notes:

- 1.F_CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal.
- 2.It is recommended that add an ESD protection chip to the JTAG download circuit.

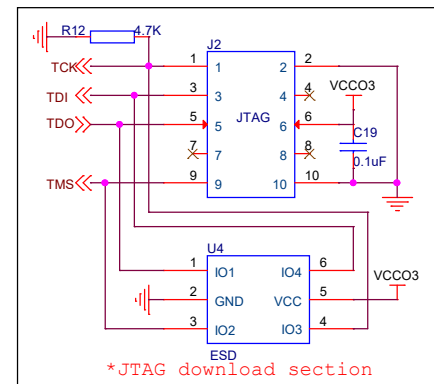
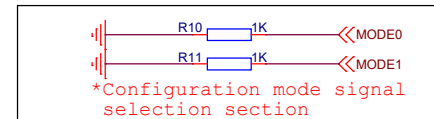
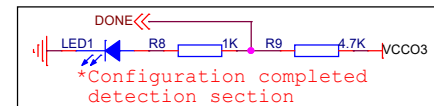
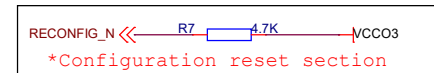
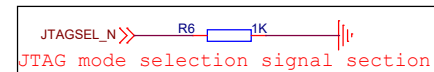
Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2QN88	2.0
Date:	Wednesday, April 26, 2023	Sheet 1 of 5

GW1N-LV4QN88



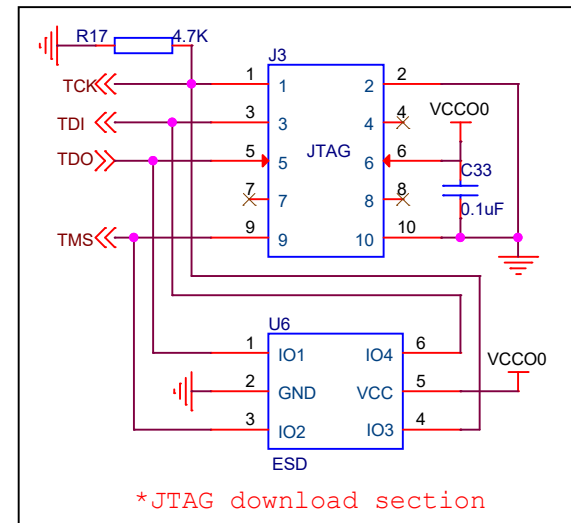
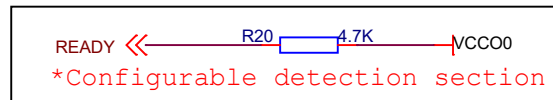
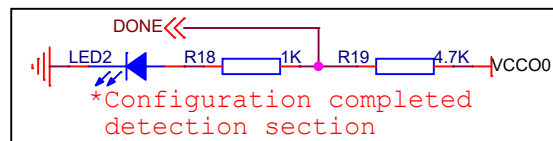
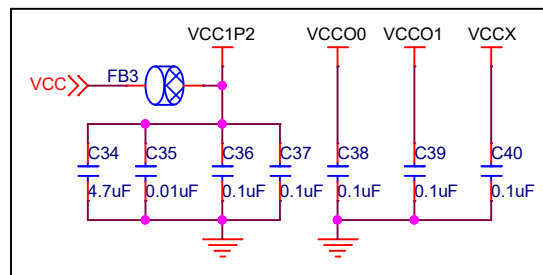
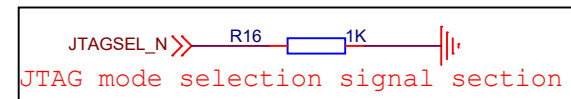
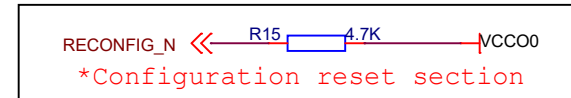
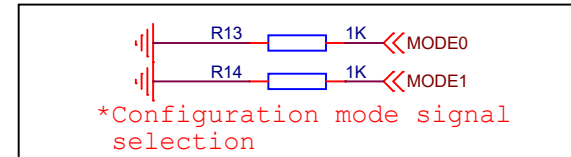
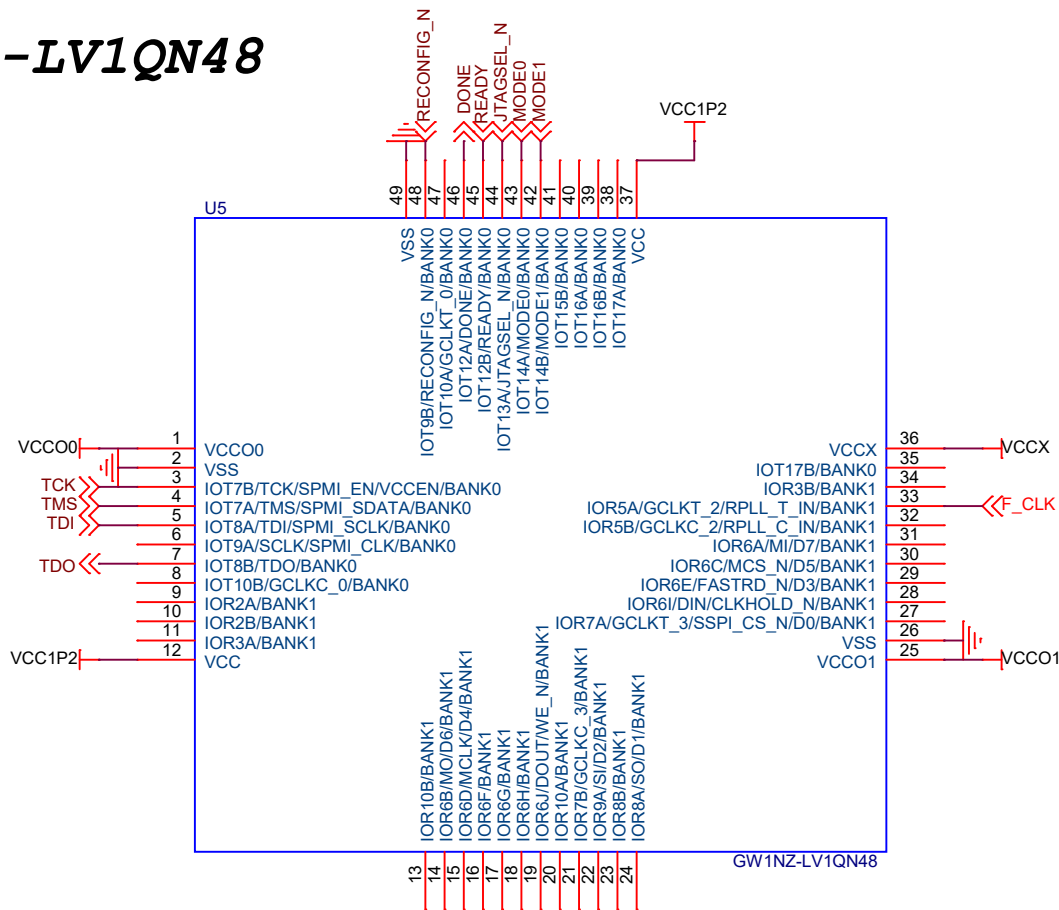
Notes:

- 1.F CLK signal is an external input clock signal.
It is recommended that F CLK signal be provided through an active oscillator crystal.
- 2.It is recommended that add an ESD protection chip to the JTAG download circuit.



Title			
Gowin FPGA-AOTOMOTIVE Minimum System Diagram			
Size B	Document Number		Rev
	GW1N-LV4QN88		2.0
Date:	Wednesday, April 26, 2023	Sheet	2 of 5

GW1NZ-LV1QN48



Notes:

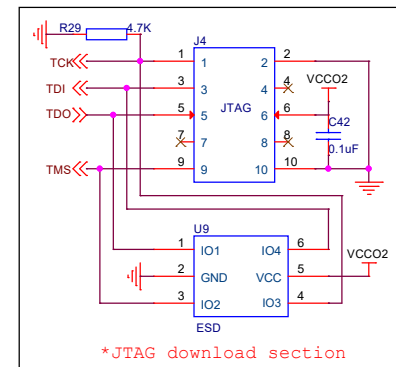
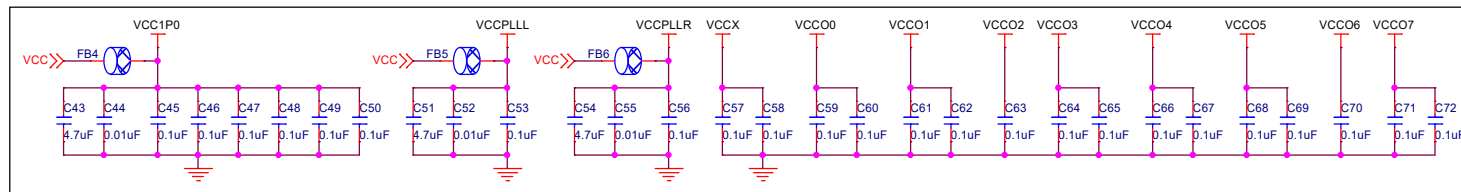
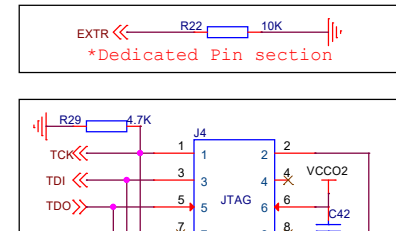
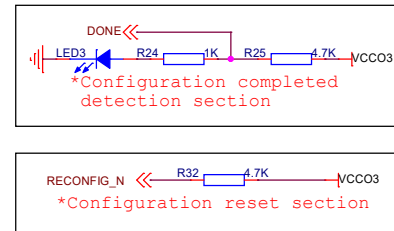
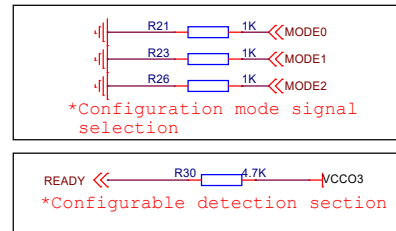
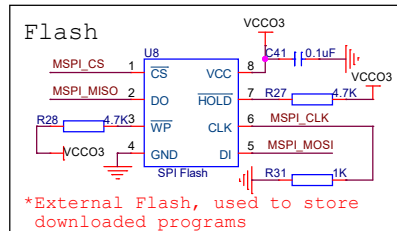
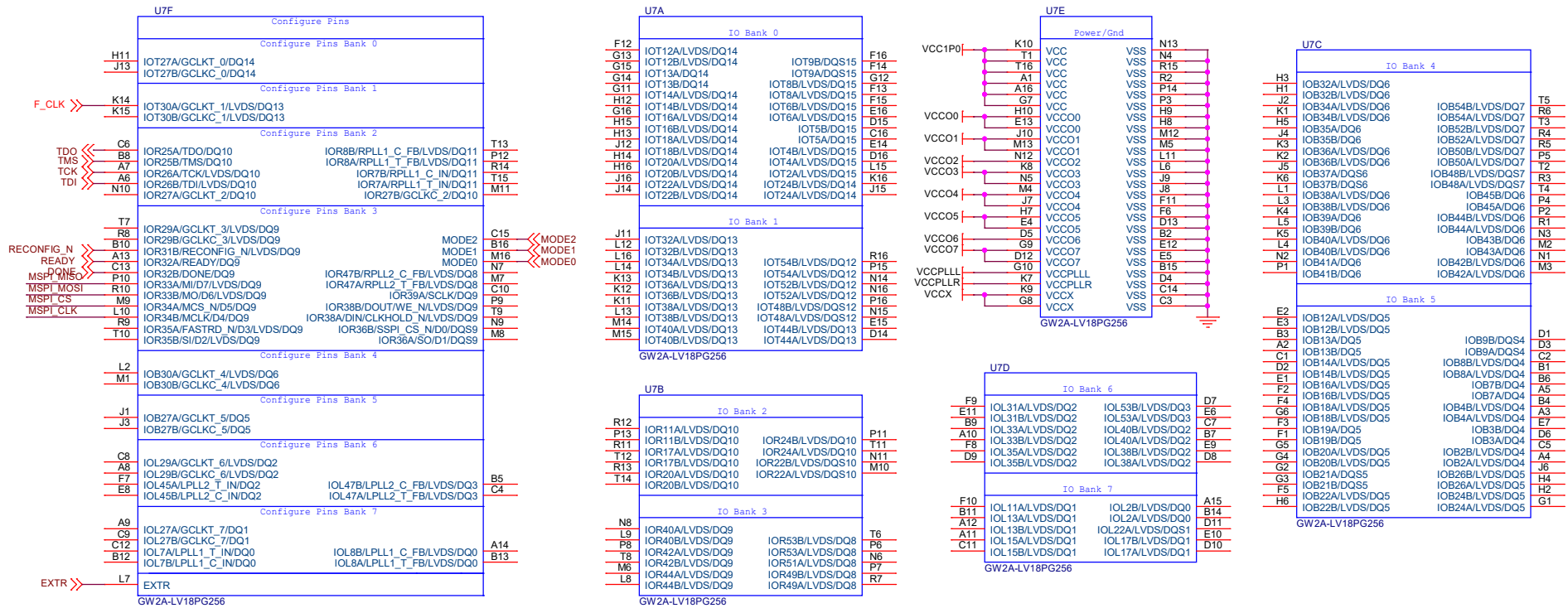
1.F_CLK signal is an external input clock signal.

It is recommended that F_CLK signal be provided through an active oscillator crystal.

2.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title		
Gowin FPGA-AOTOMOTIVE Minimum System Diagram		
Size	Document Number	Rev
A4	GW1NZ-LV1QN48	2.0
Date:	Wednesday, April 26, 2023	Sheet 3 of 5

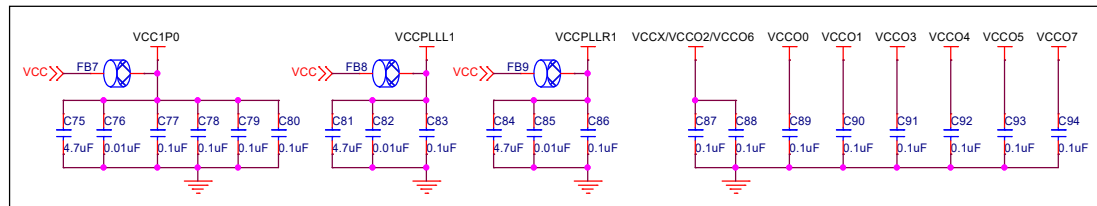
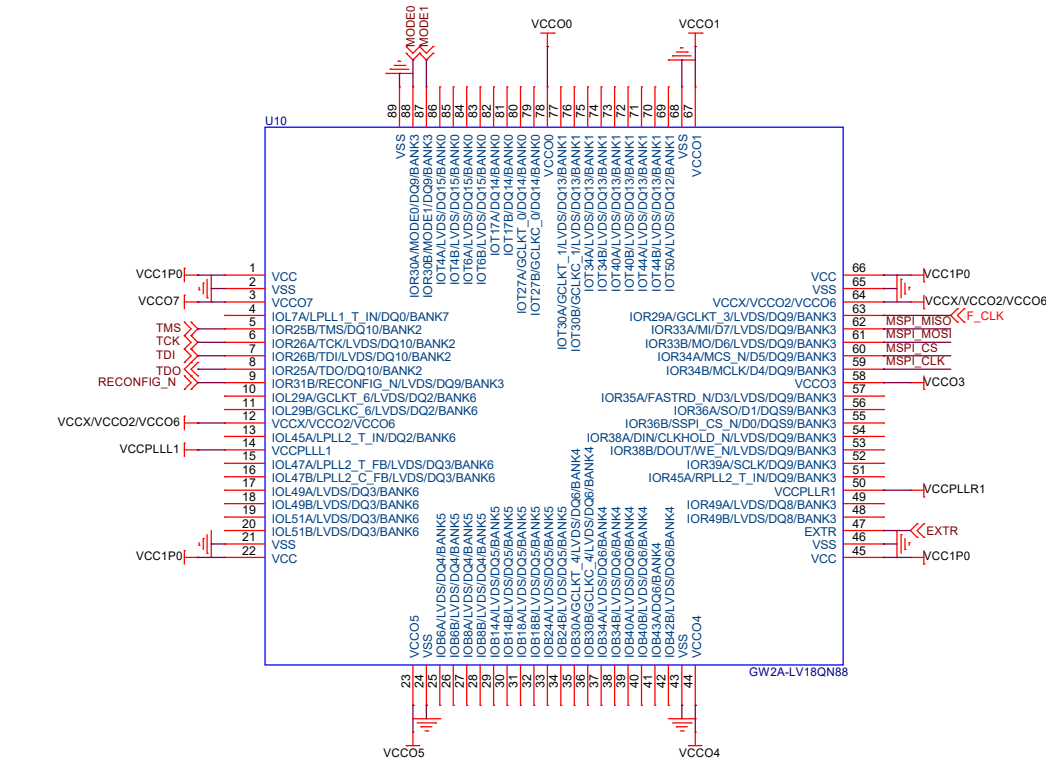
GW2A-LV18PG256



Notes:

- 1.F CLK signal is an external input clock signal. It is recommended that F_CLK signal be provided through an active oscillator crystal.
- 2.External Flash memory is used to store downloaded programs. For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
- 3.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title			Gowin FPGA-AOTOMTIVE Minimum System Diagram
Size	Document Number	Rev	
A3	GW2A-LV18PG256	2.0	
Date:	Wednesday, April 26, 2023	Sheet	4 of 5



- Notes:
- 1.F_CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal.
 - 2.External Flash memory is used to store downloaded programs.
For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
 - 3.It is recommended that add an ESD protection chip to the JTAG download circuit.

