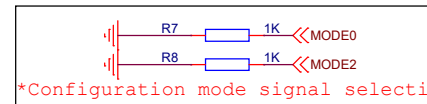
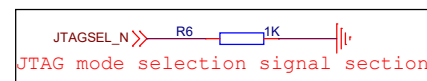
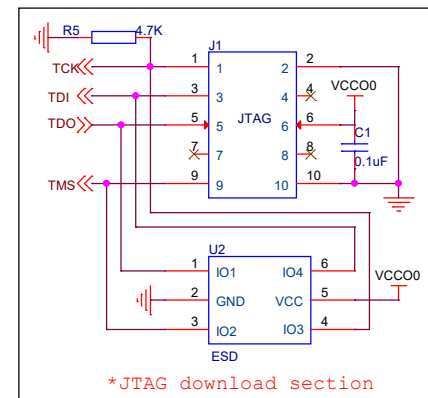
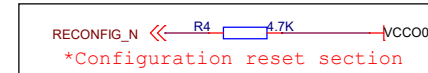
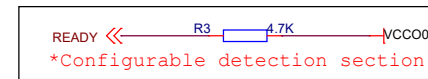
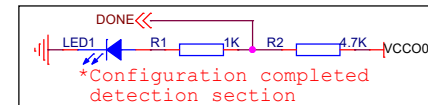
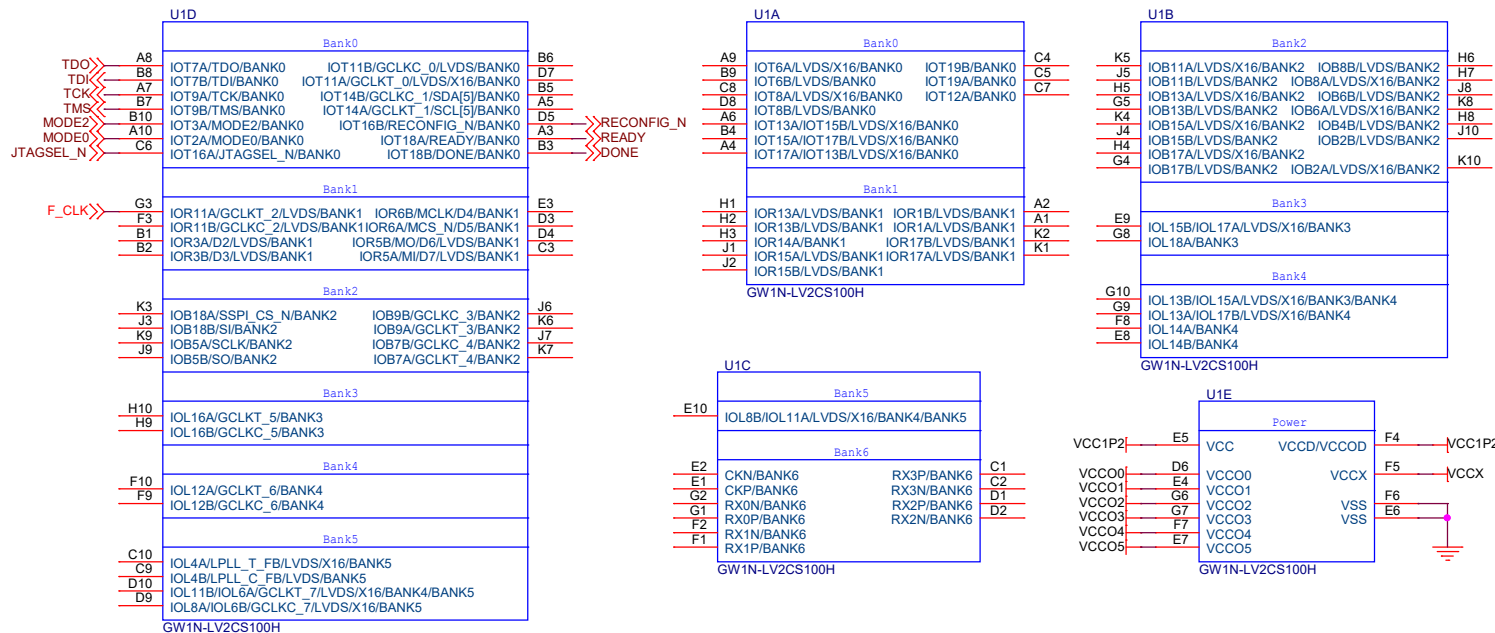


GW1N-LV2CS100H

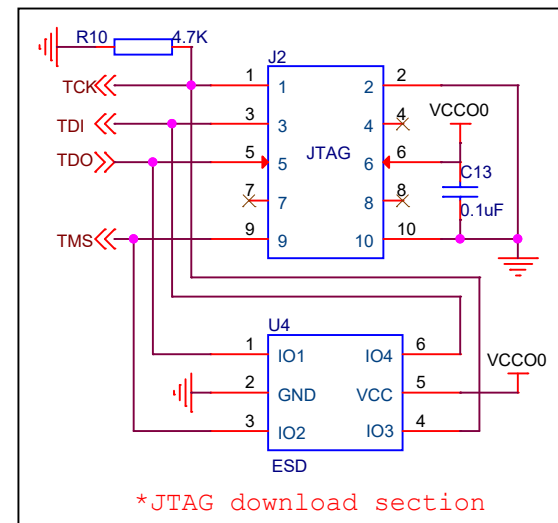
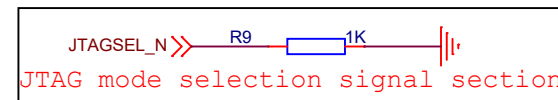
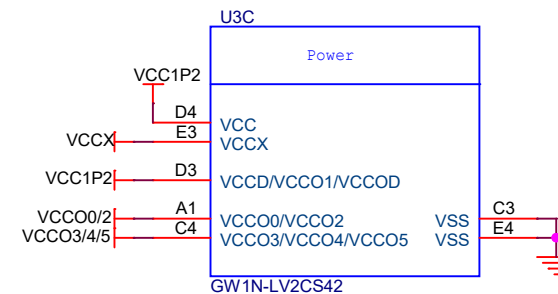
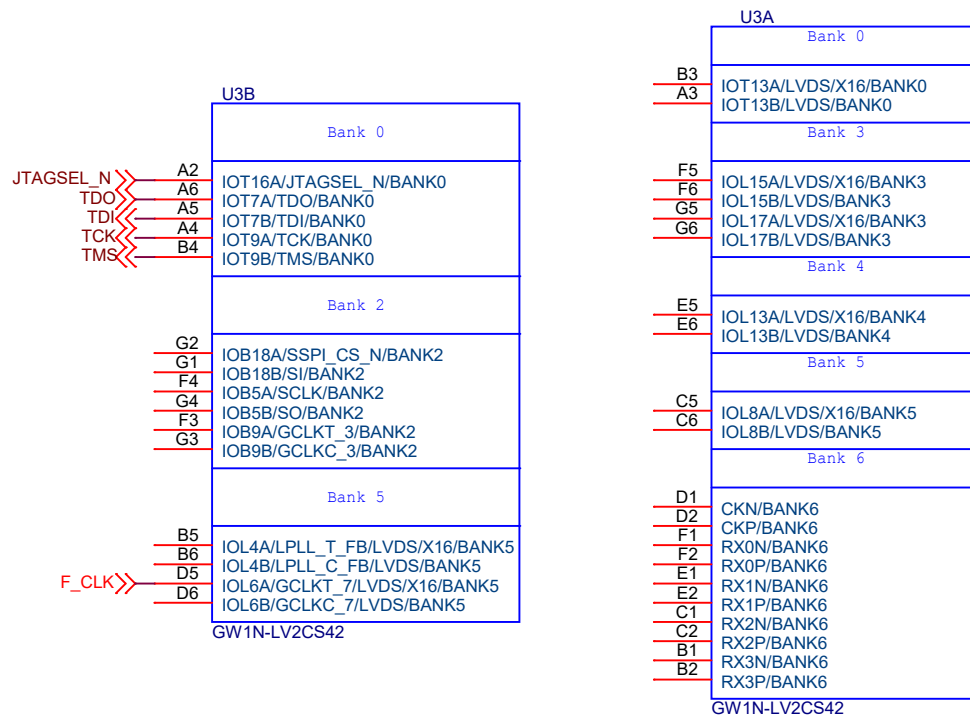


Notes:

- 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		
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GW1N-LV2CS42



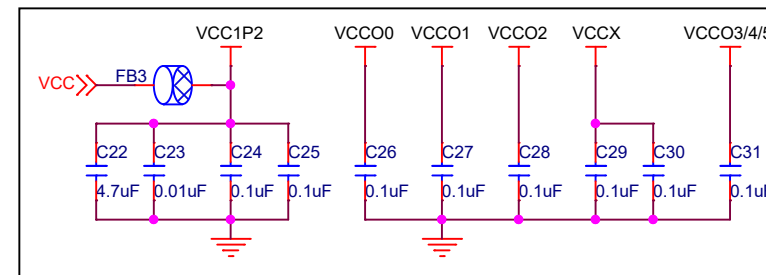
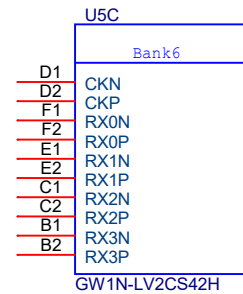
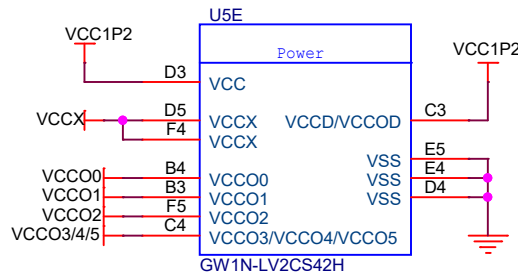
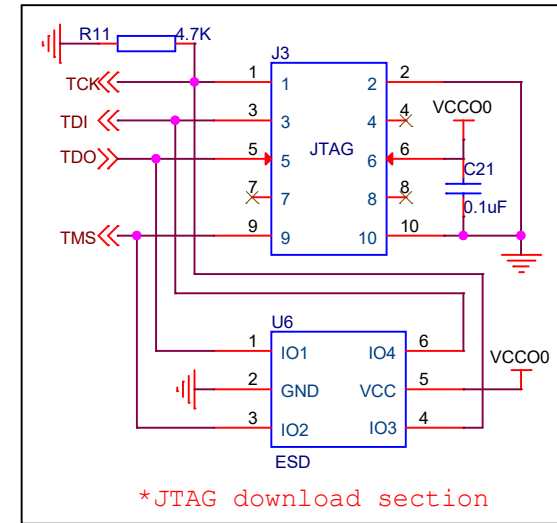
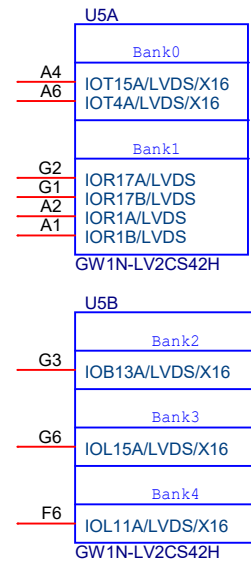
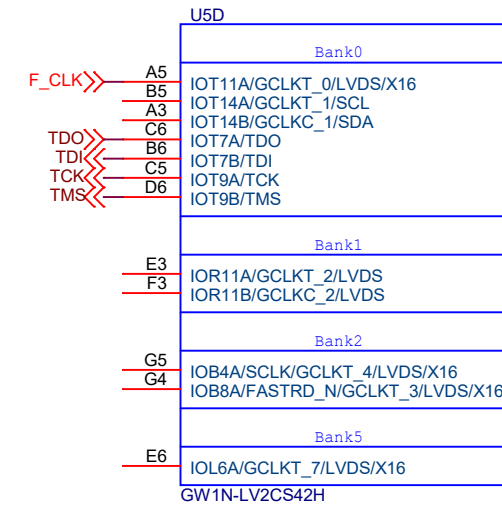
Notes:

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.

GW1N-LV2CS42H



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.

D

C

B

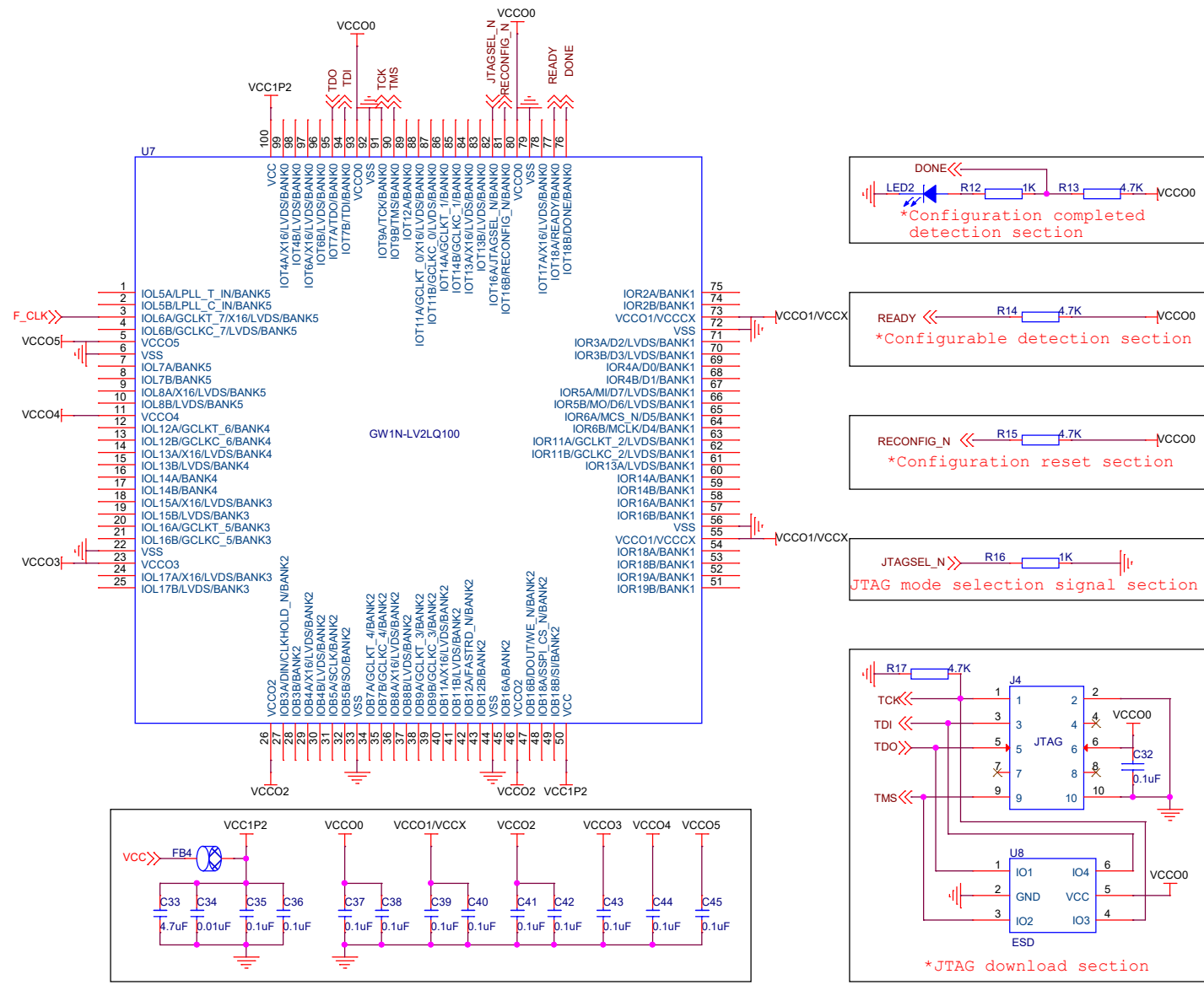
A

D

C

B

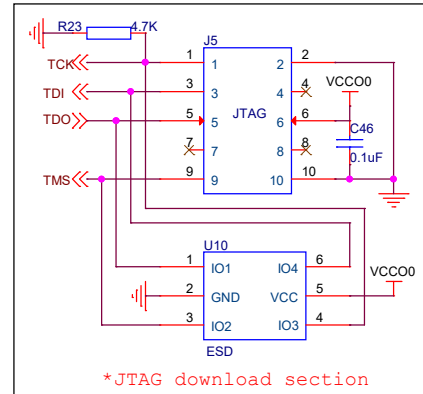
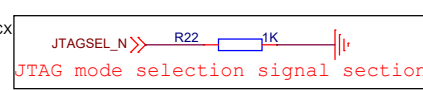
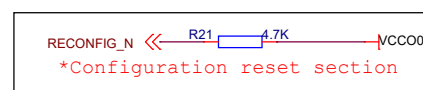
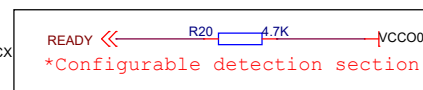
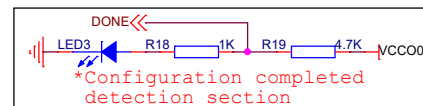
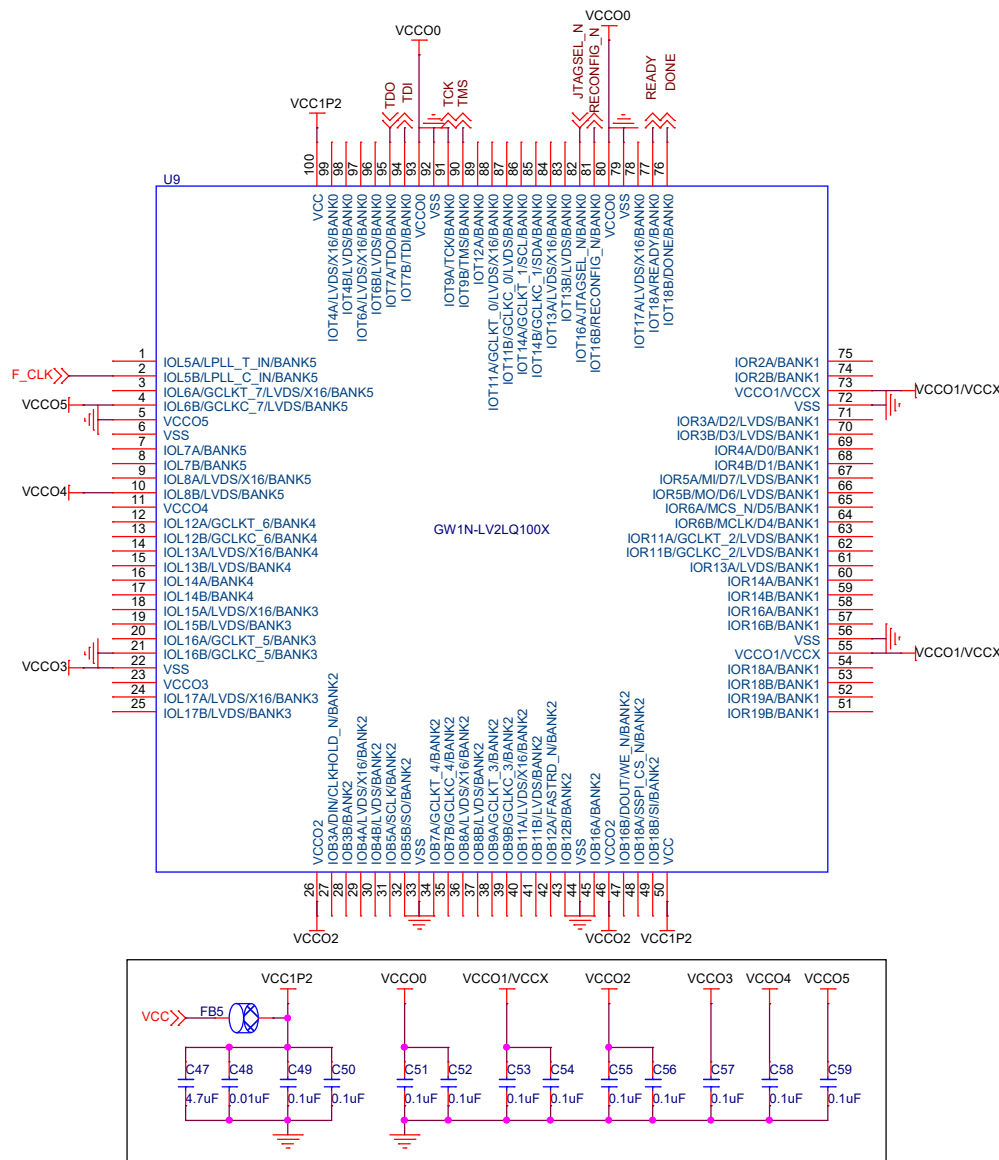
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Notes:

- 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.

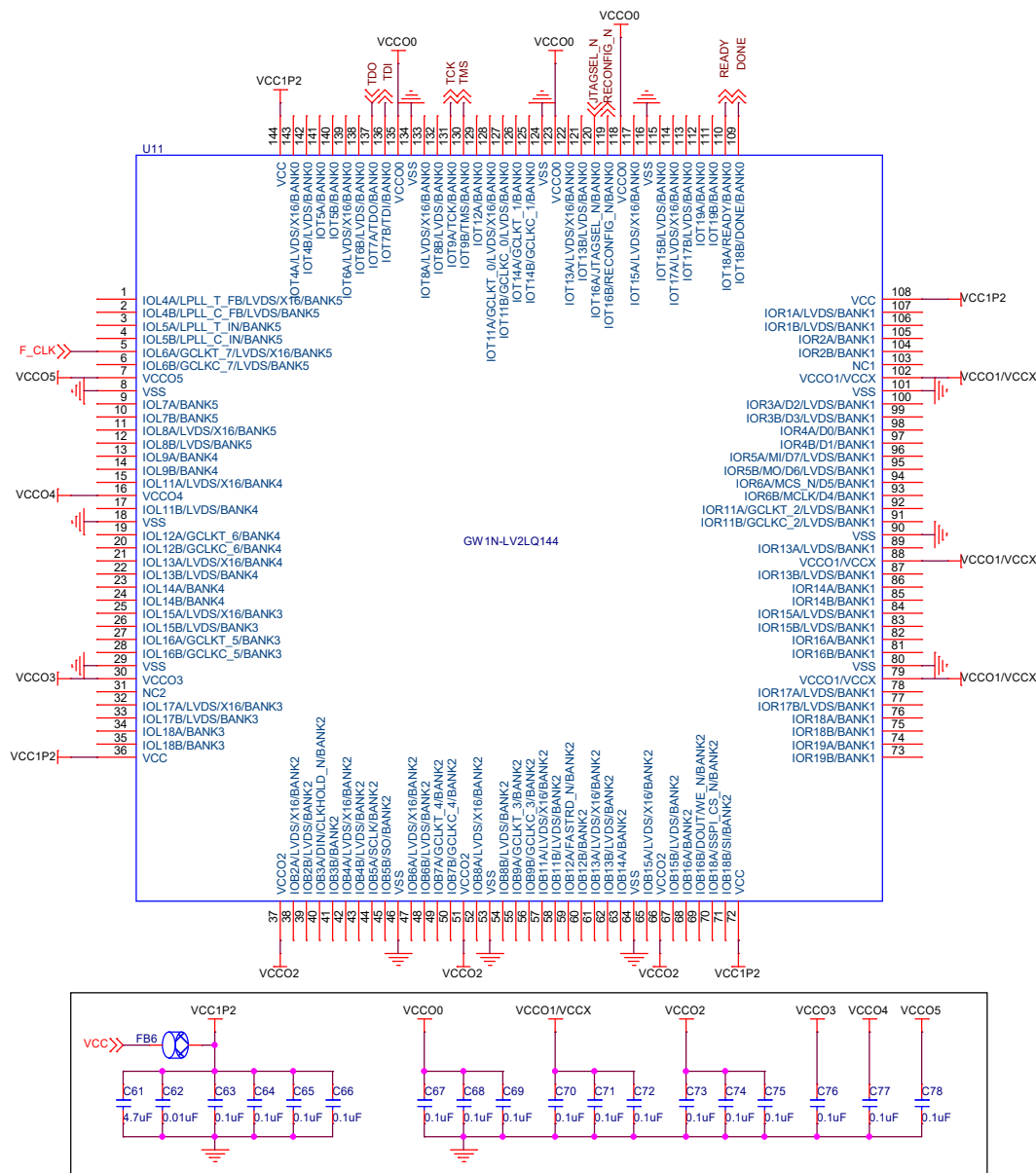
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GOWIN Minimum System Diagram		
Size	Document Number	Rev
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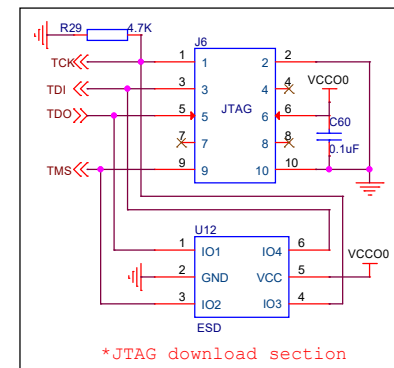
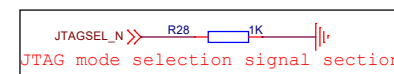
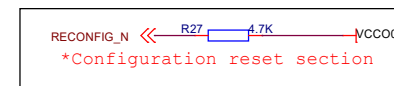
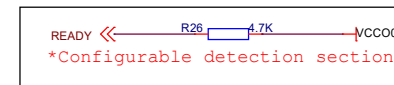
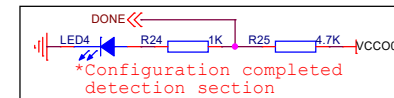
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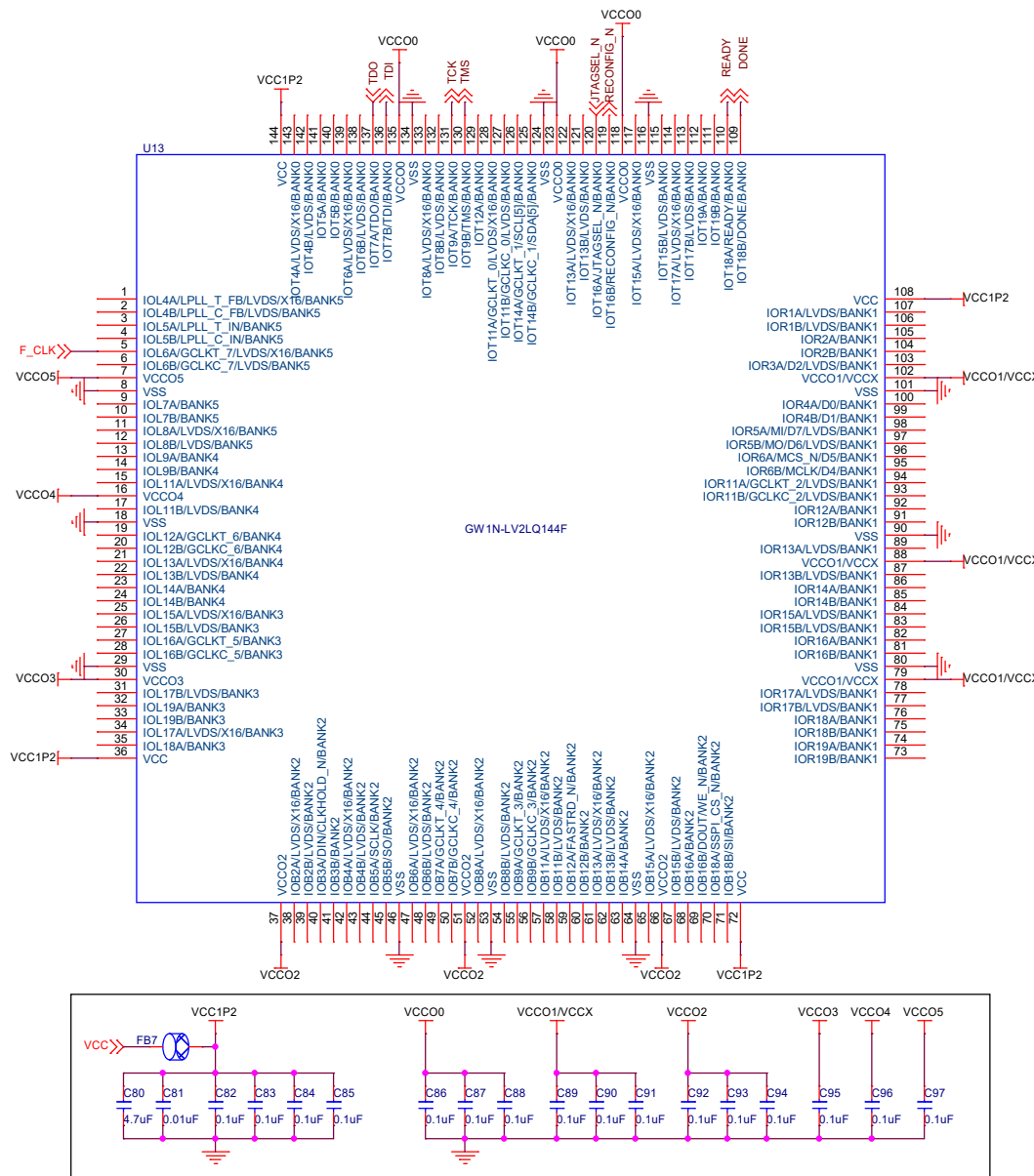
- 1.F CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal.
- 2.It is recommended that add an ESD protection to the JTAG download circuit.

Title		
GOWIN Minimum System Diagram		
Size B	Document Number GW1N-LV2LQ100X	Rev 2.0
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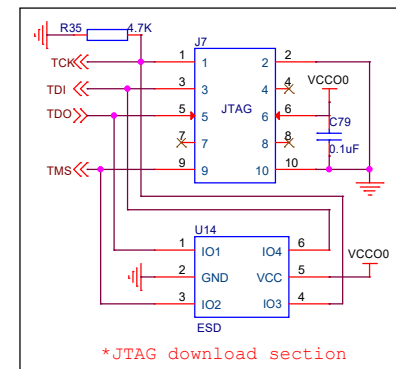
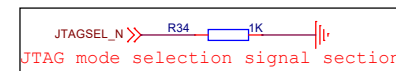
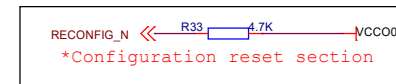
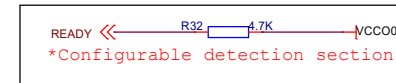
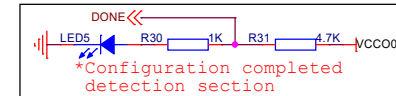


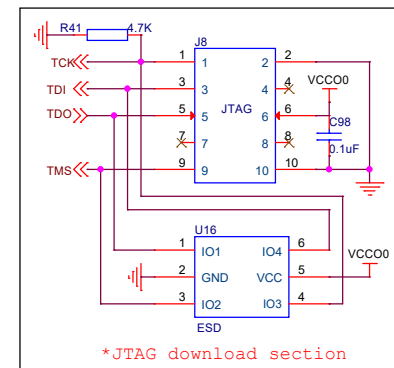
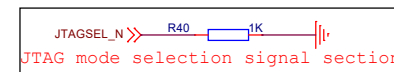
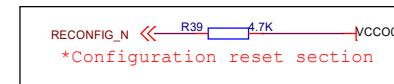
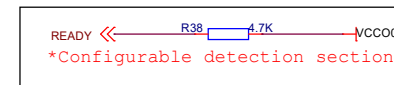
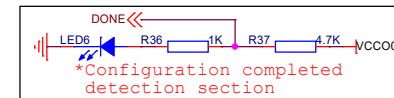
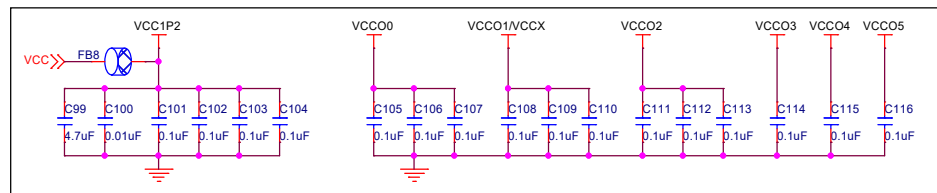
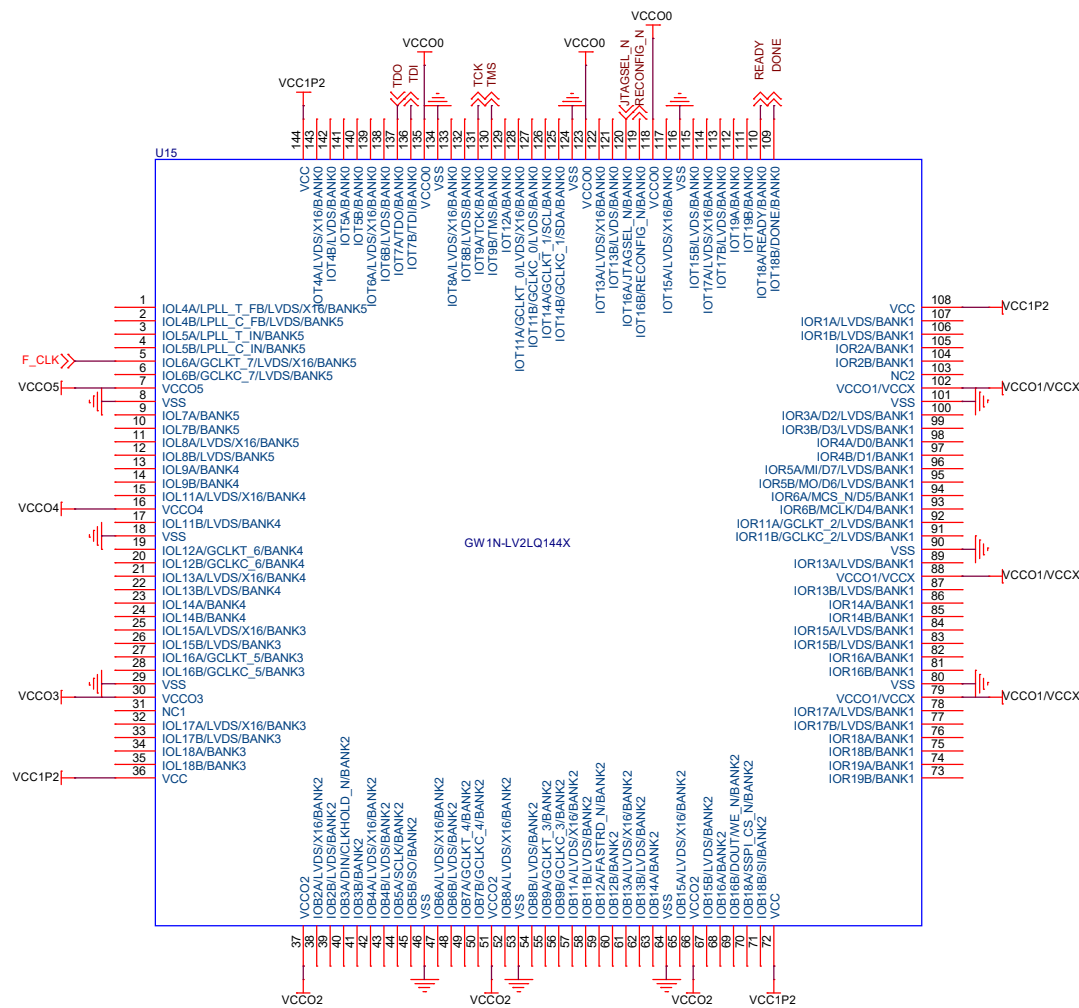
Notes:
 1.F_CLK signal is an external input clock signal.
 It is recommended that F_CLK signal be provided through an active oscillator crystal.
 2.It is recommended that add an ESD protection chip to the JTAG download circuit.



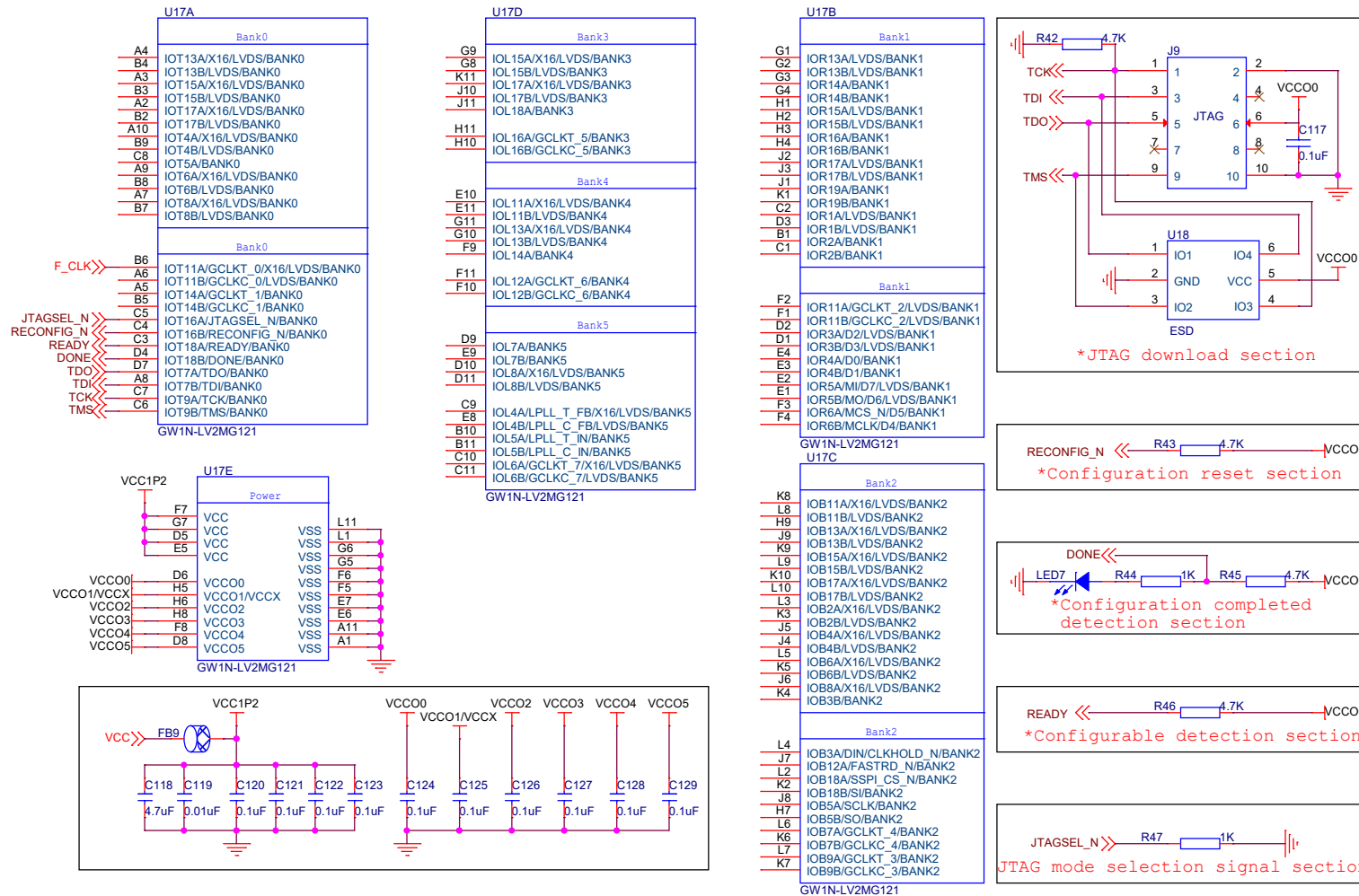


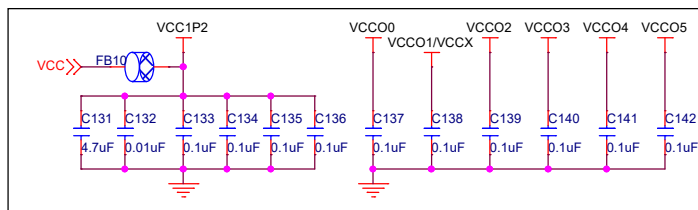
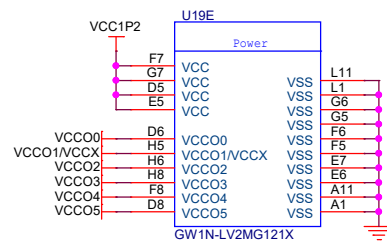
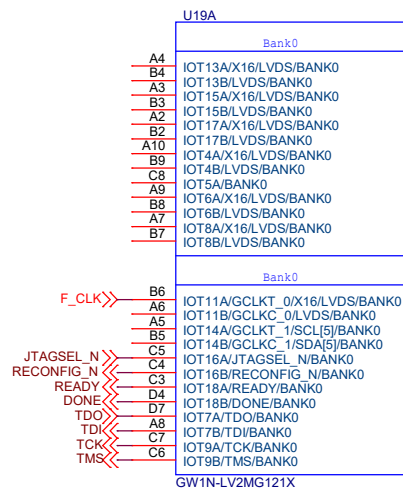
Notes:
 1.F_CLK signal is an external input clock signal.
 It is recommended that F_CLK signal be provided through an active oscillator crystal.
 2.It is recommended that add an ESD protection chip to the JTAG download circuit.





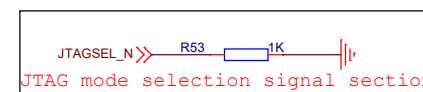
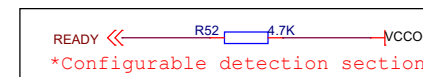
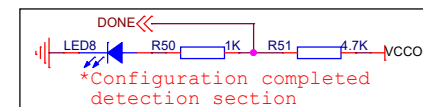
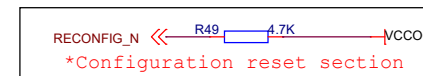
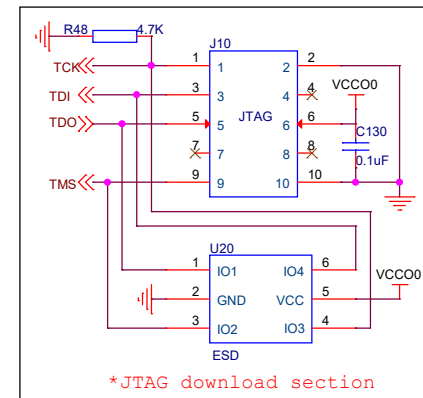
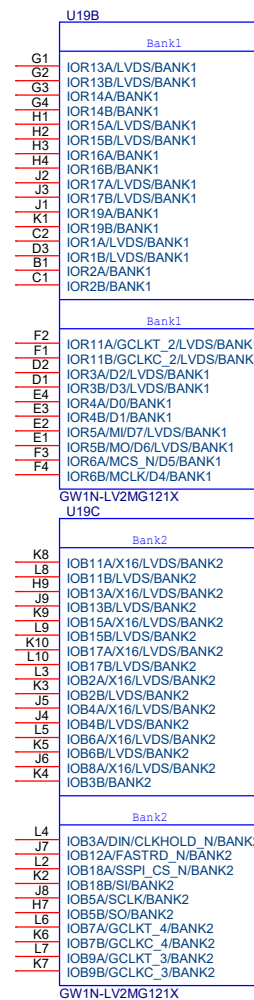
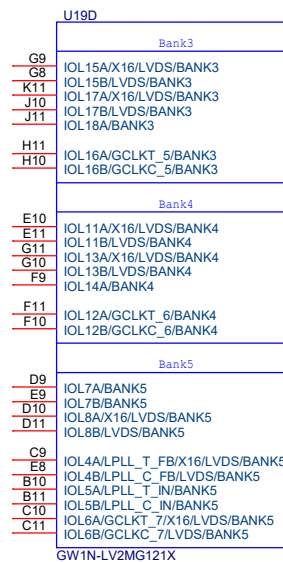
- Notes:
- 1.F_CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal.
 - 2.It is recommended that add an ESD protection chip to the JTAG download circuit.



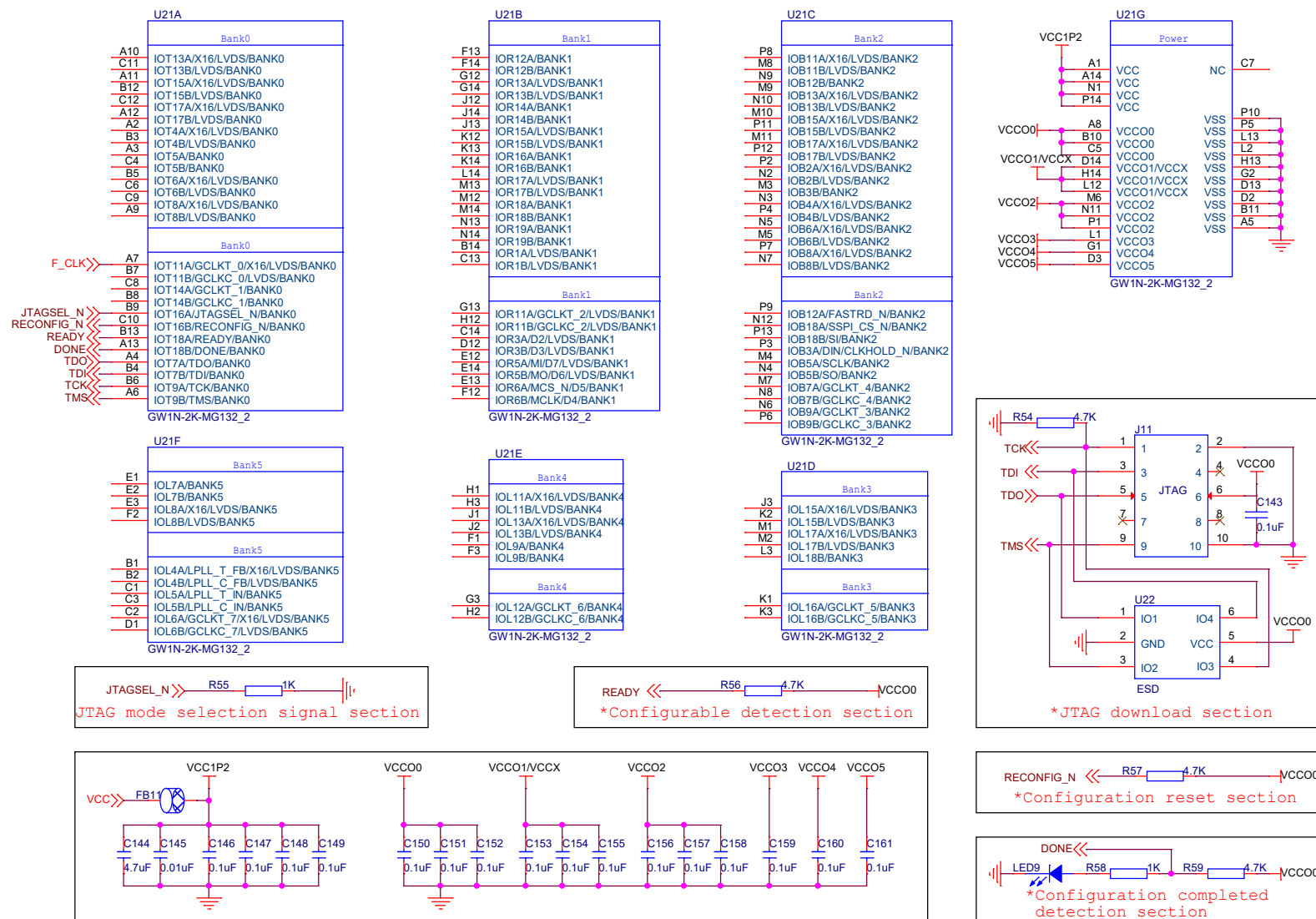


Notes:

- 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.



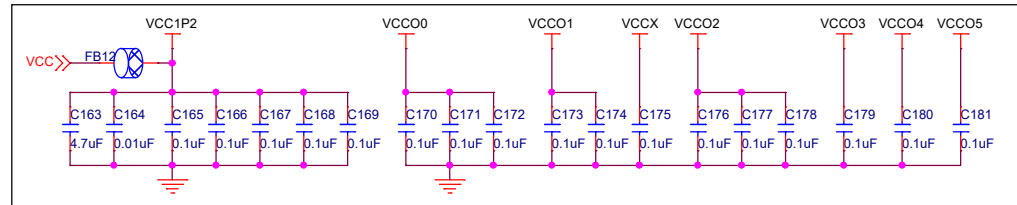
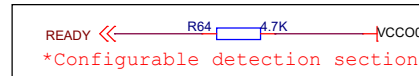
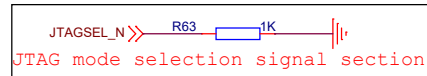
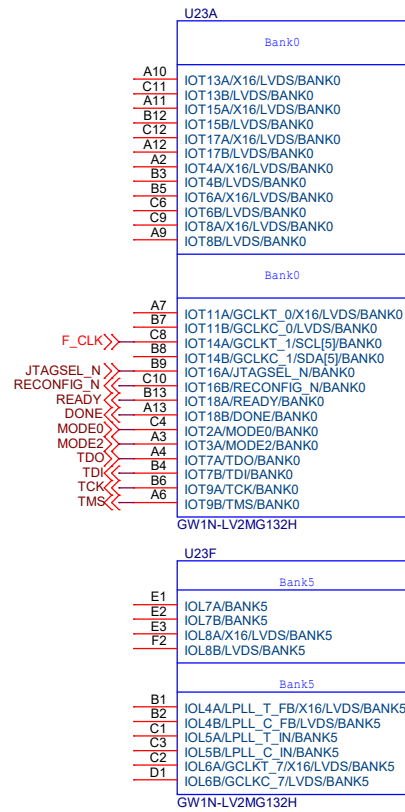
Title			
GOWIN Minimum System Diagram			
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Notes:

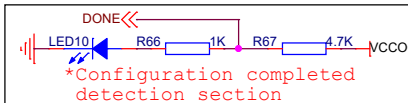
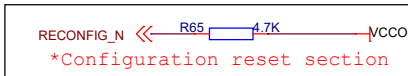
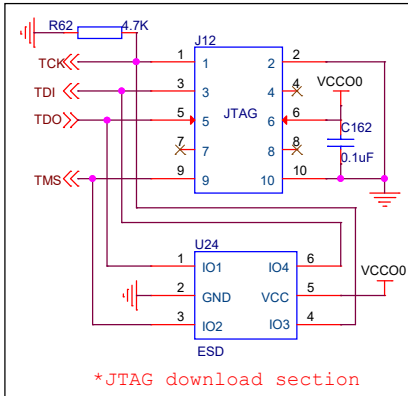
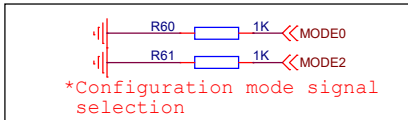
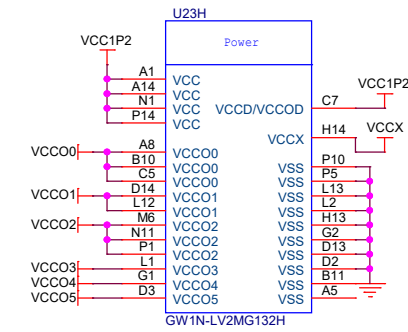
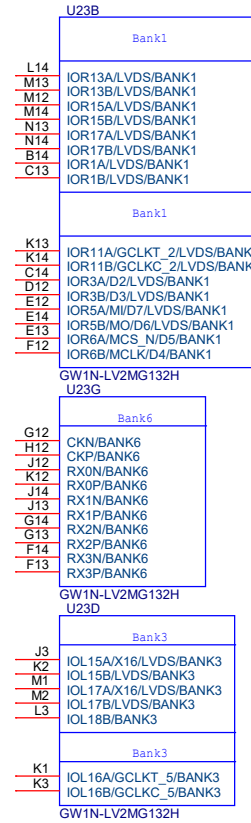
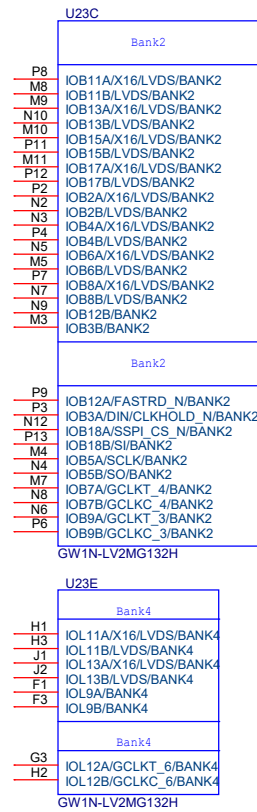
- 1.F CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal.
- 2.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title		
GOWIN Minimum System Diagram		
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B	GW1N-LV2MG132	2.0
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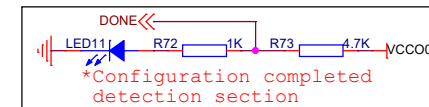
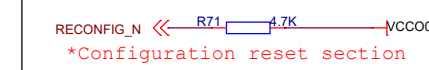
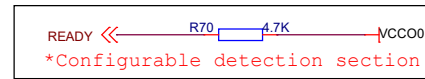
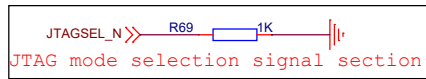
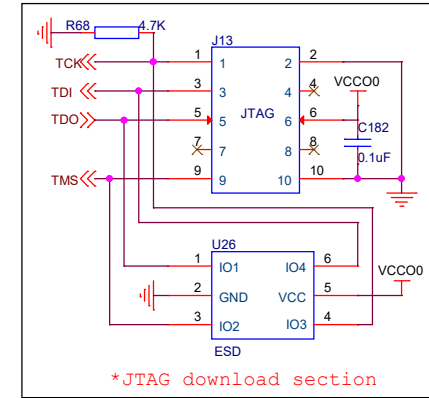
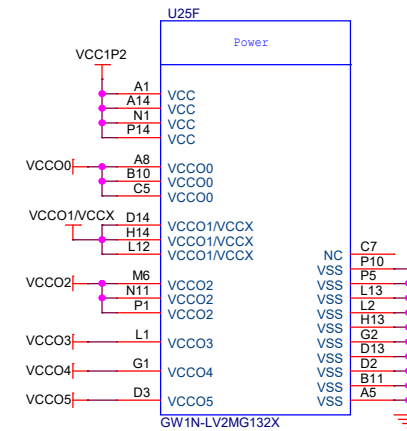
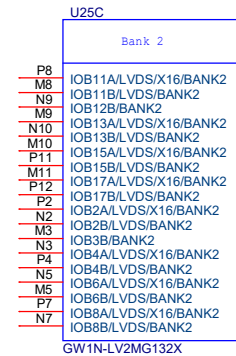
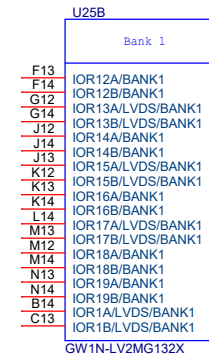
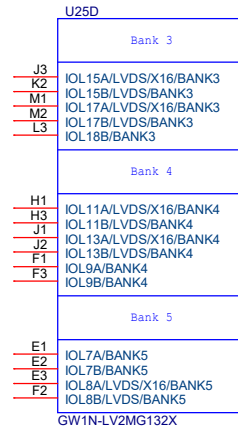
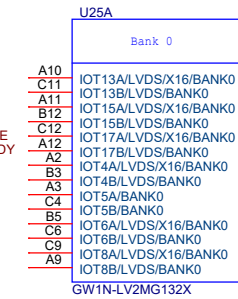
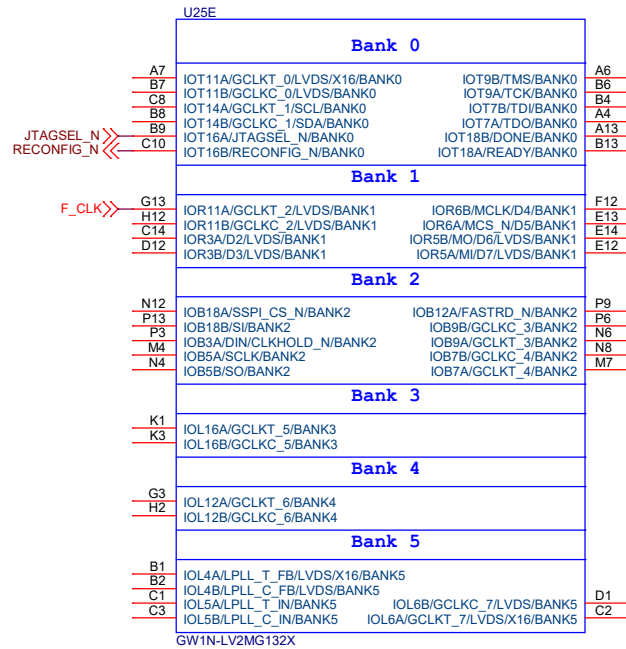


Notes:

- 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.



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GOWIN Minimum System Diagram		
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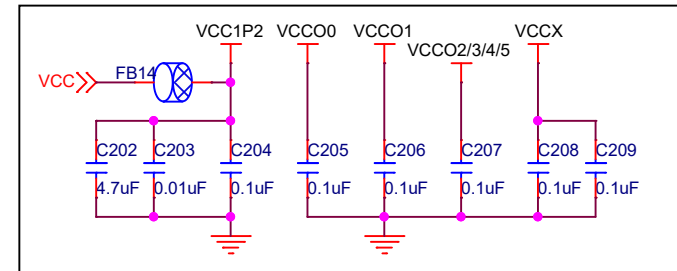
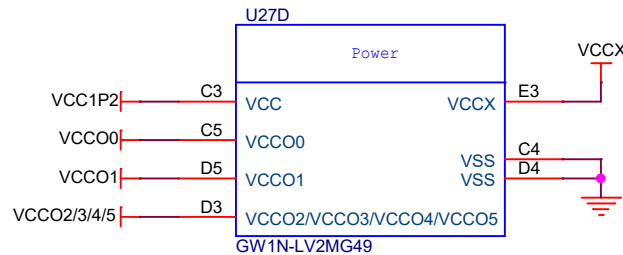
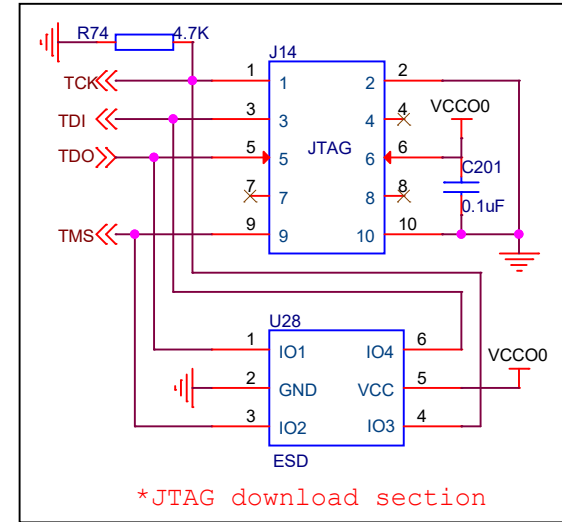
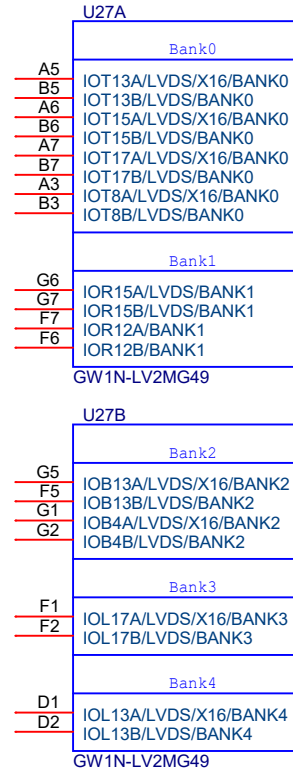
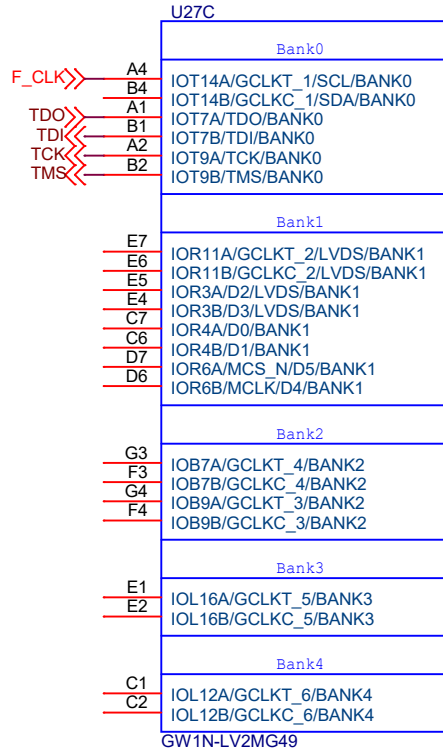


Notes:

- 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-LV2MG132X	2.0
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GW1N-LV2MG49



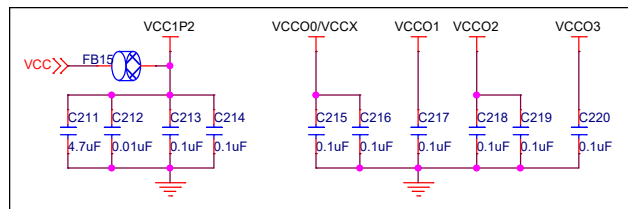
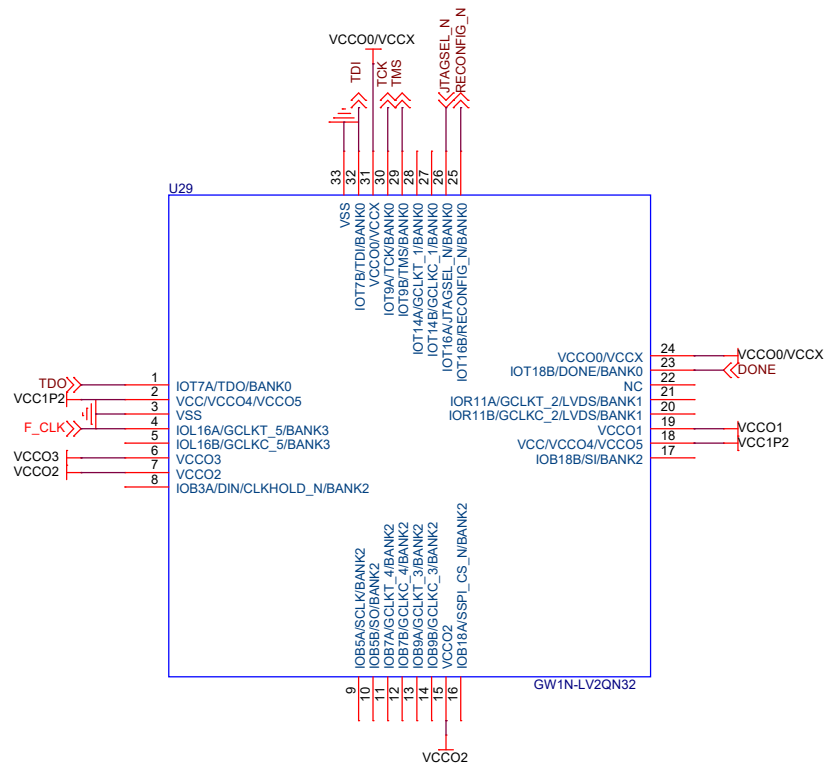
Notes:

1.F_CLK signal is an external input clock signal.

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

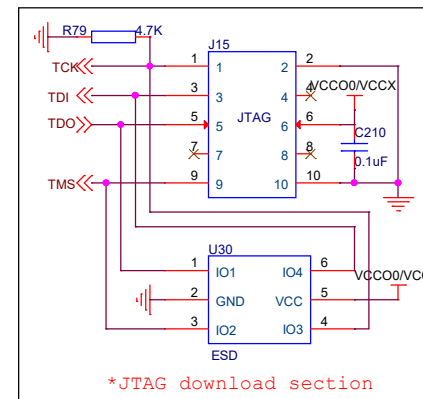
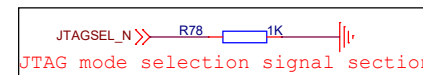
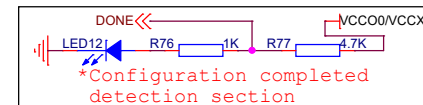
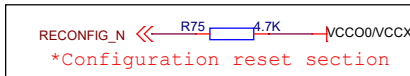
2.It is recommended that add an ESD protection chip to the JTAG download circuit.

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GOWIN Minimum System Diagram		
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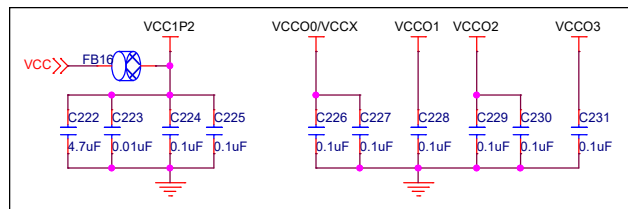
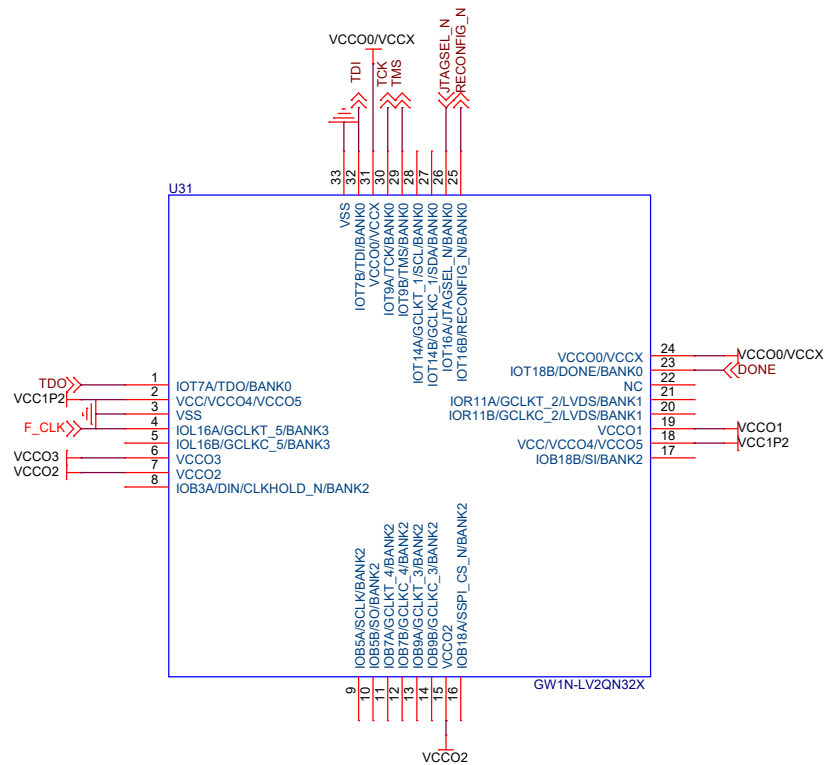
Notes:

- 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.



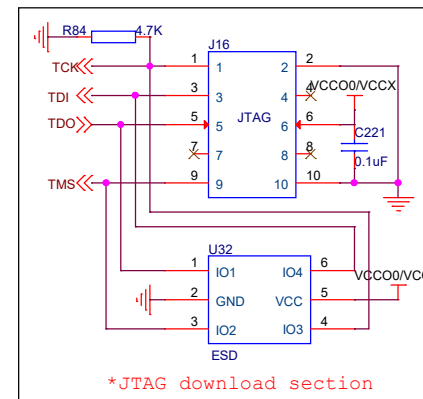
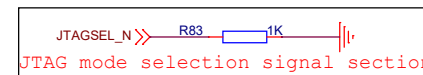
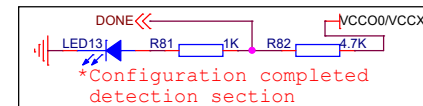
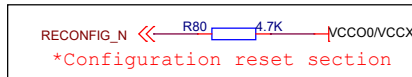
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GOWIN Minimum System Diagram		
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GW1N-LV2QN32X



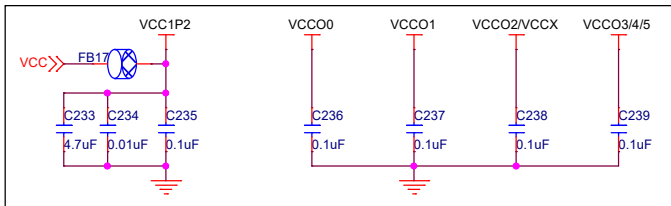
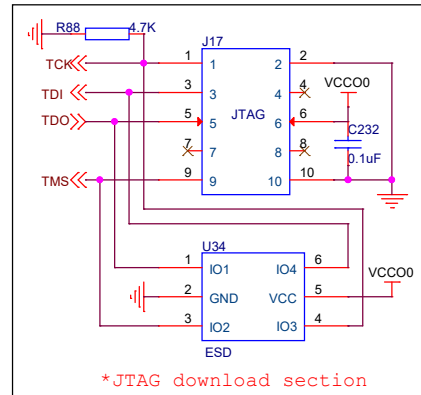
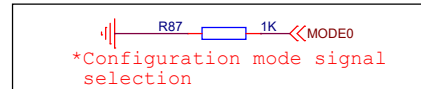
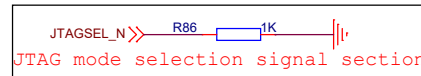
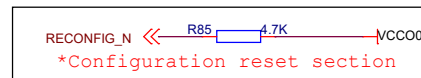
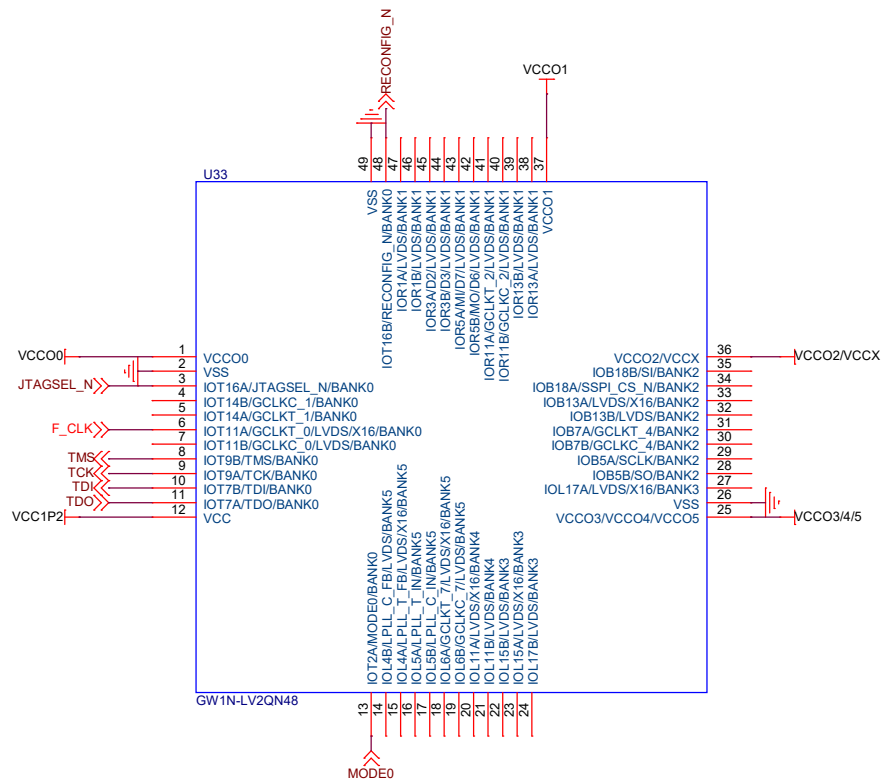
Notes:

- 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		
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B	GW1N-LV2QN32X	2.0
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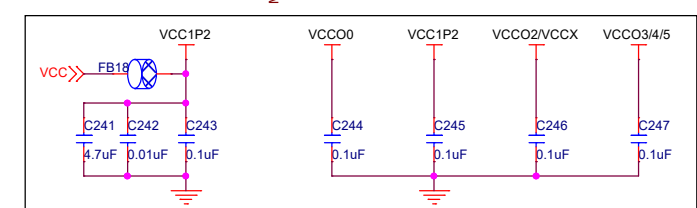
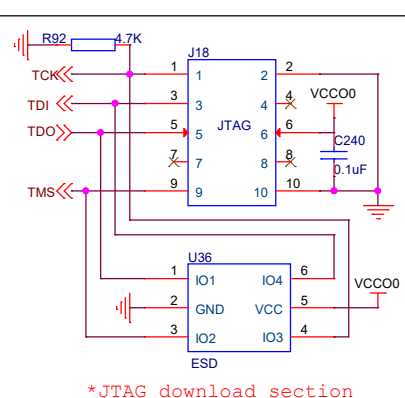
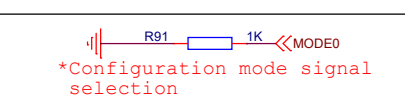
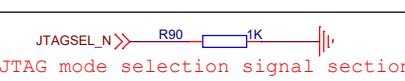
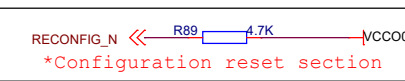
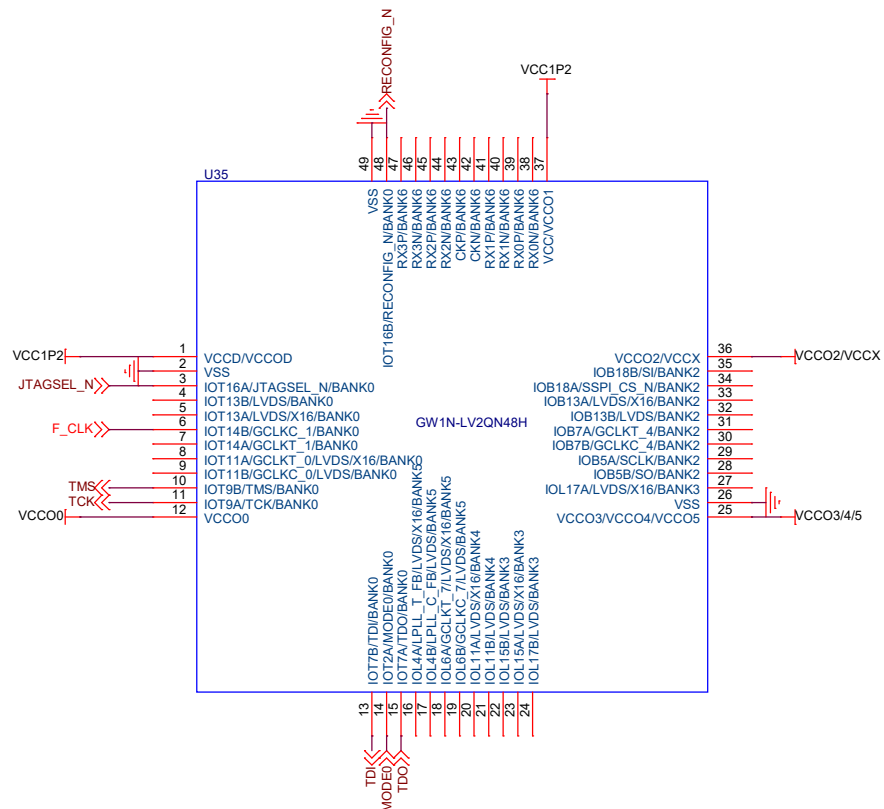
GW1N-LV2QN48



- 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.

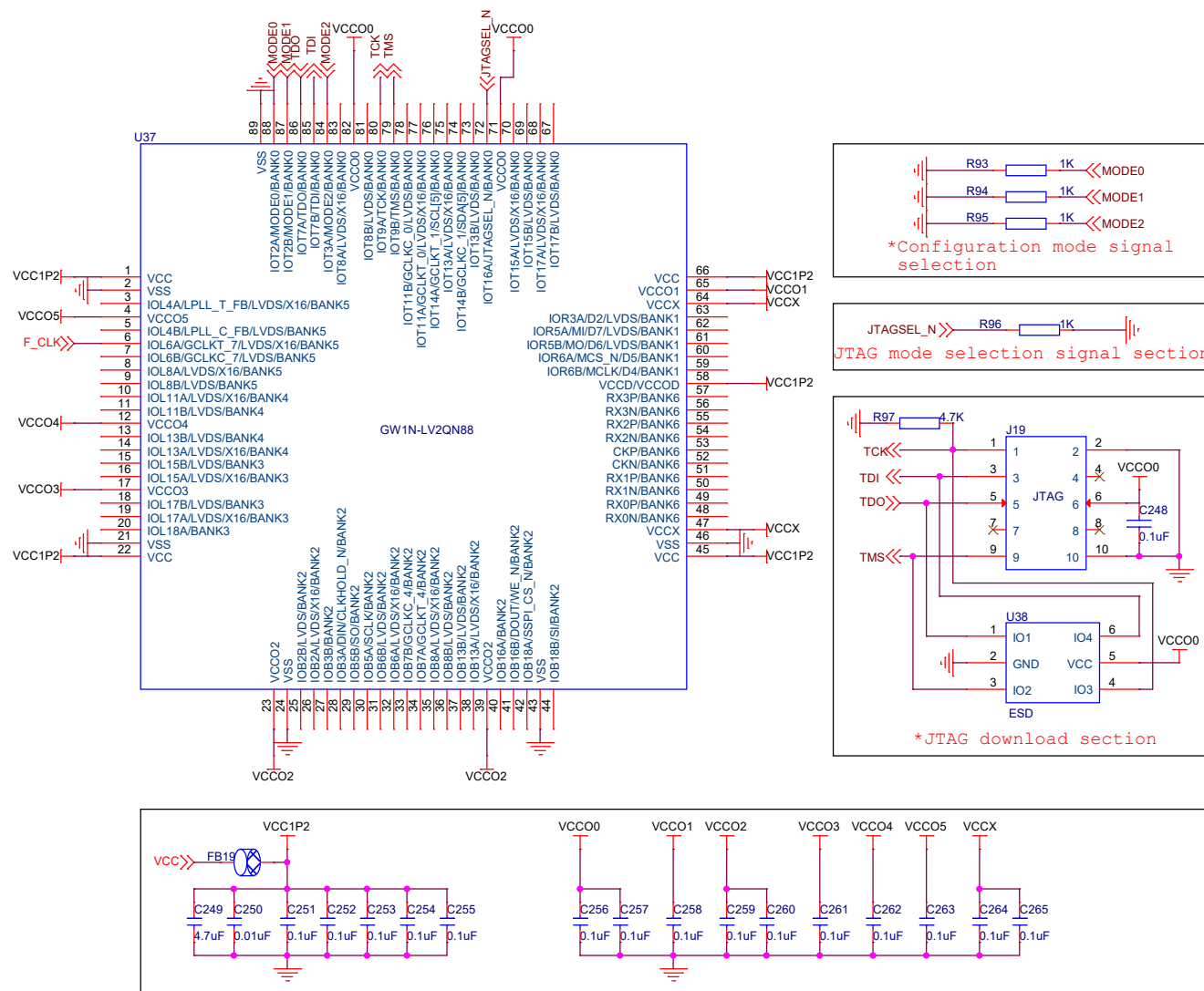
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GOWIN Minimum System Diagram		
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B	GW1N-LV2QN48	2.0
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GW1N-LV2QN48H



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.

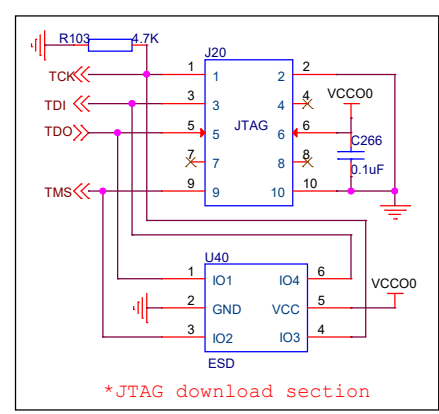
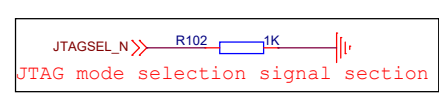
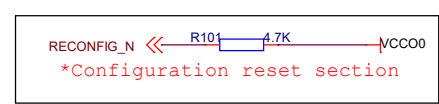
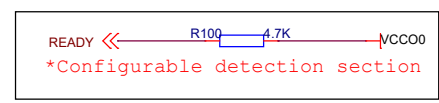
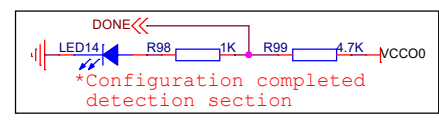
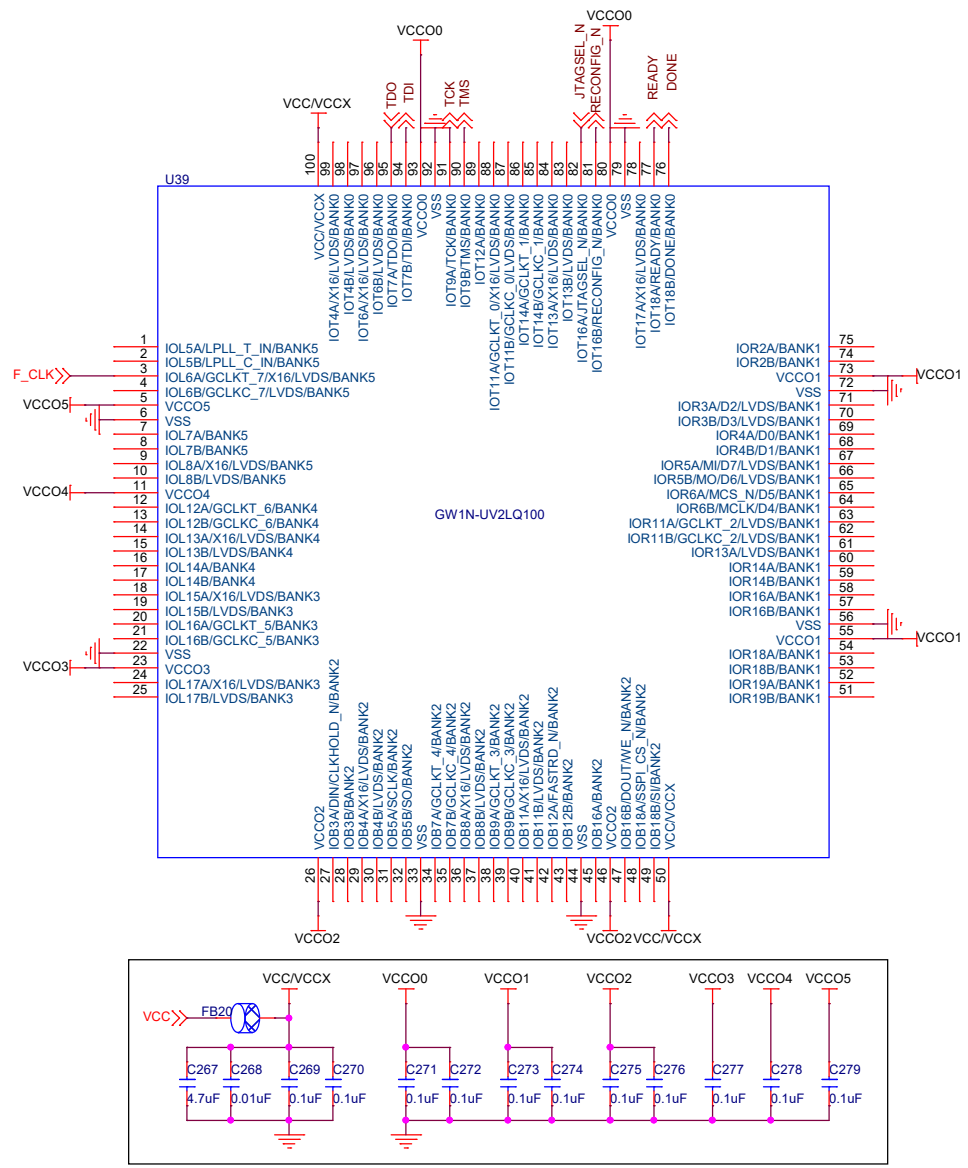
Title		
GOWIN Minimum System Diagram		
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B	GW1N-LV2QN48H	2.0
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Notes:

- 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.

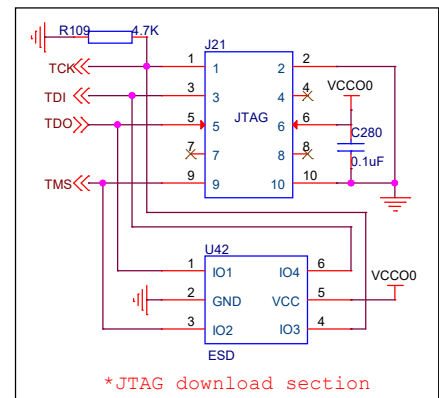
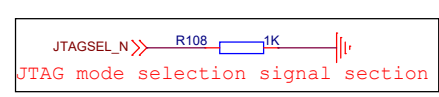
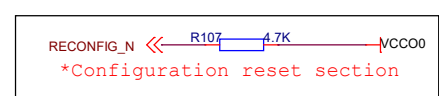
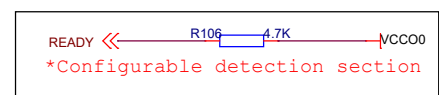
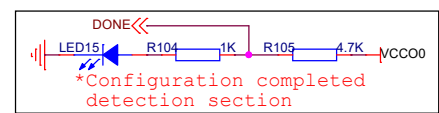
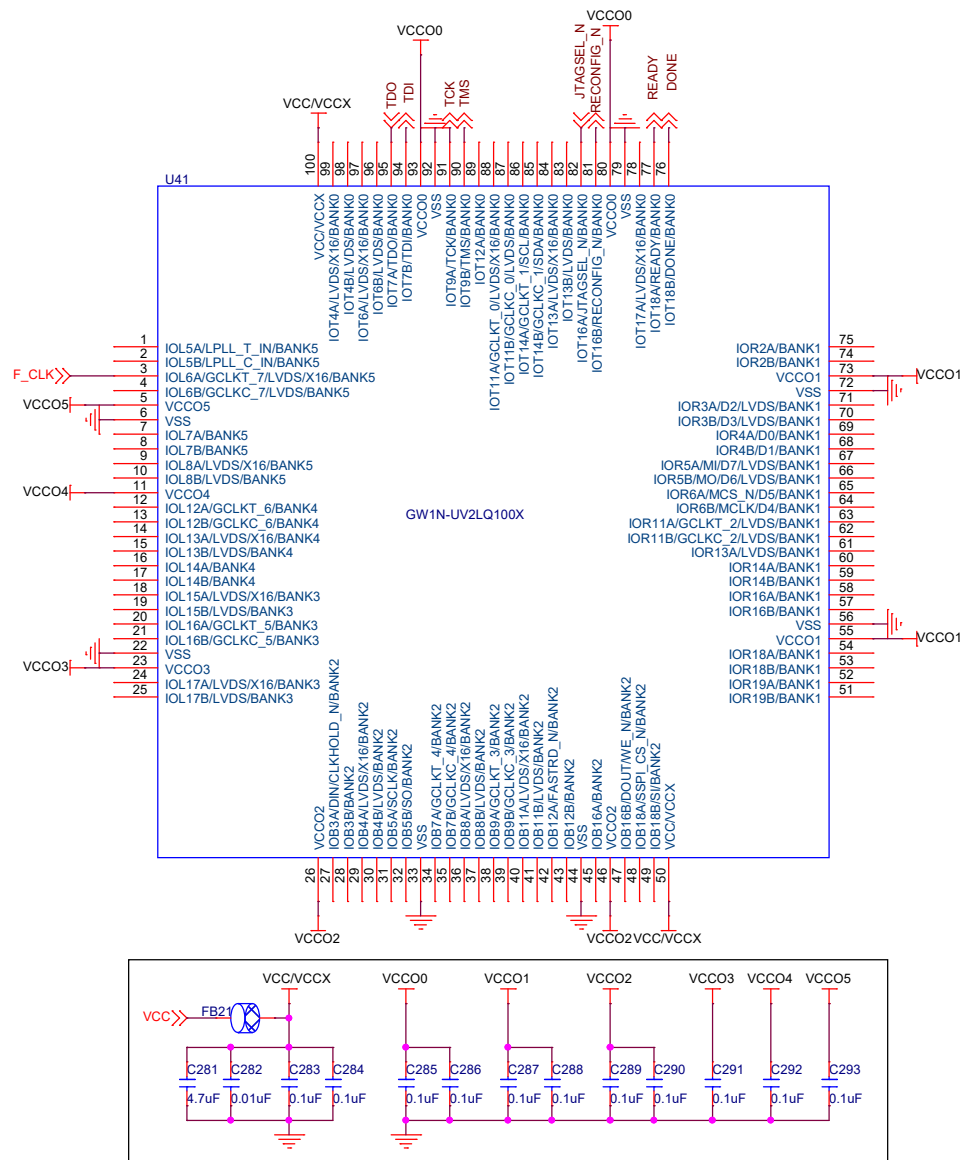
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Notes:

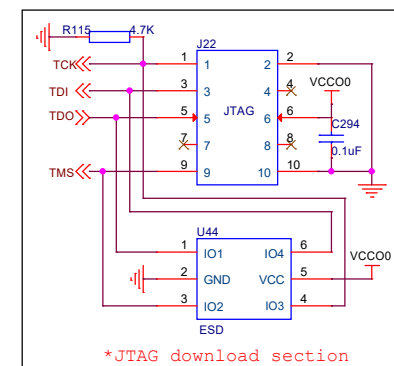
- 1.F CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal.
- 2.It is recommended that add an ESD protection to the JTAG download circuit.

Title		
GOWIN Minimum System Diagram		
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B	GW1N-UV2LQ100	2.0
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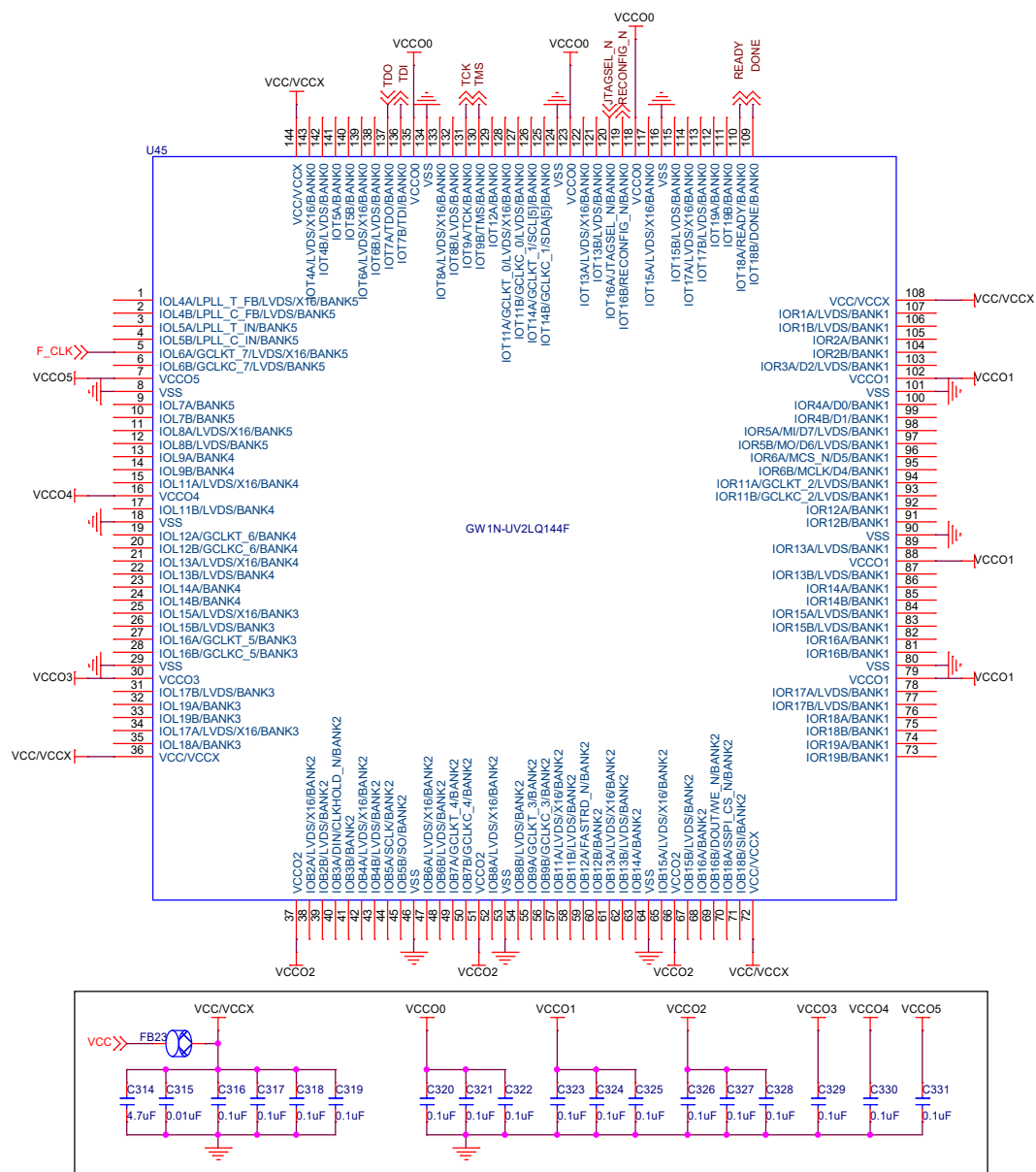


Notes:
 1.F CLK signal is an external input clock signal.
 It is recommended that F_CLK signal be provided through an active oscillator crystal.
 2.It is recommended that add an ESD protection chip to the JTAG download circuit.

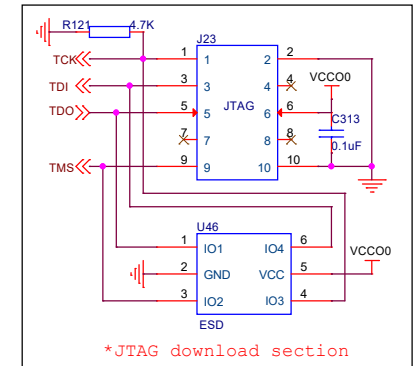
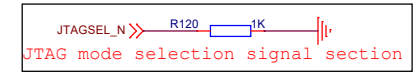
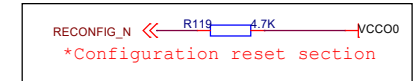
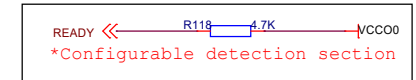
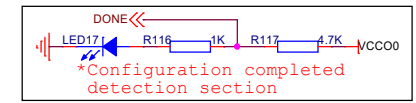
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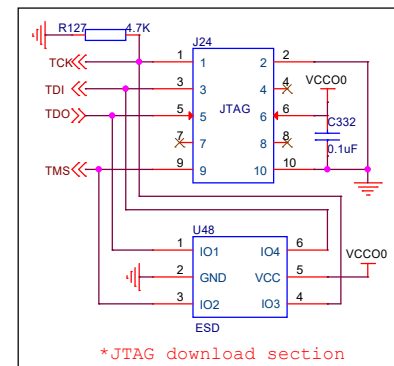


2. It is recommended that add an ESD protection chip to the JTAG download circuit.

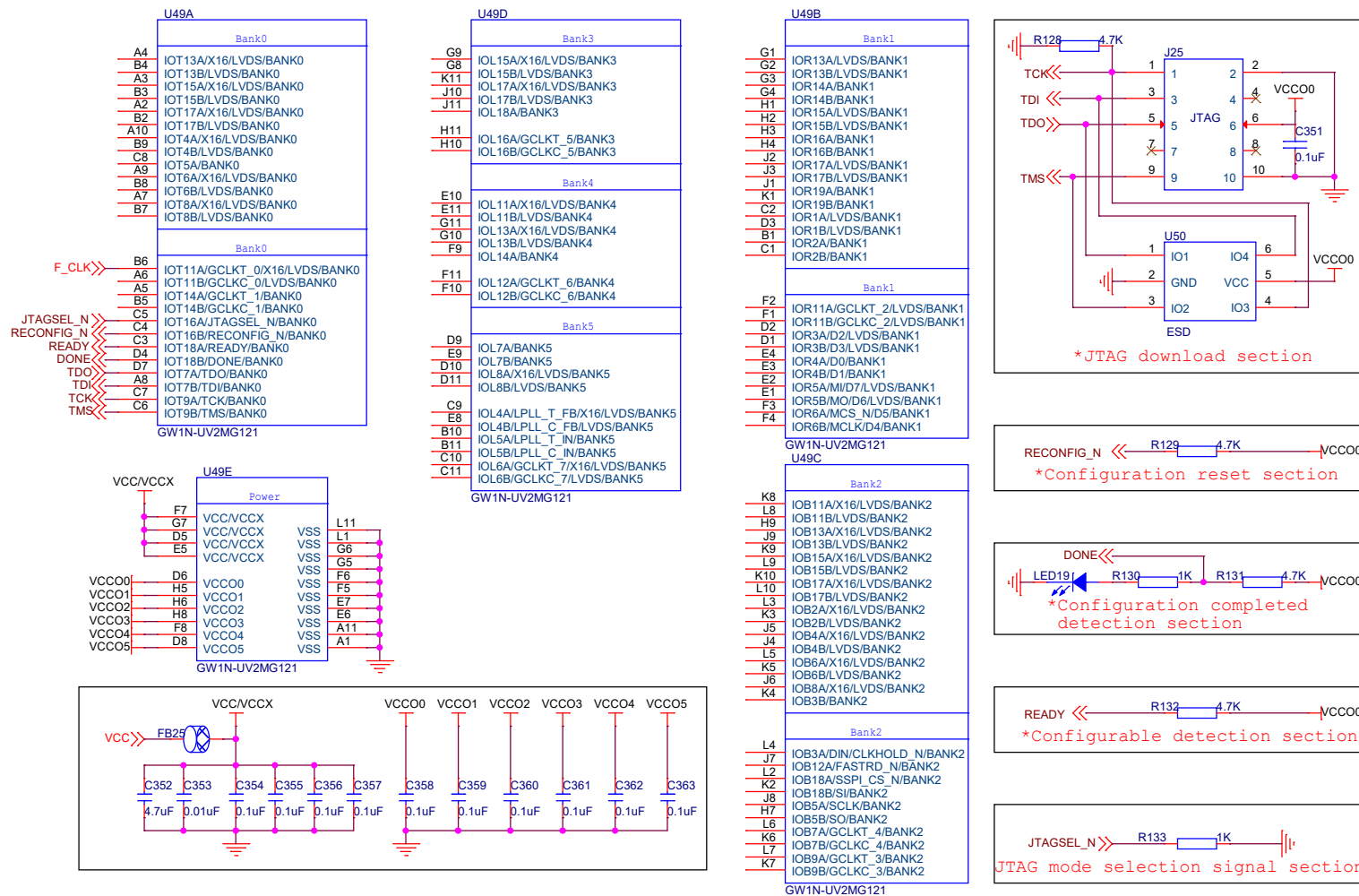


Notes:
 1.F CLK signal is an external input clock signal.
 It is recommended that F CLK signal be provided through an active oscillator crystal.
 2.It is recommended that add an ESD protection chip to the JTAG download circuit.





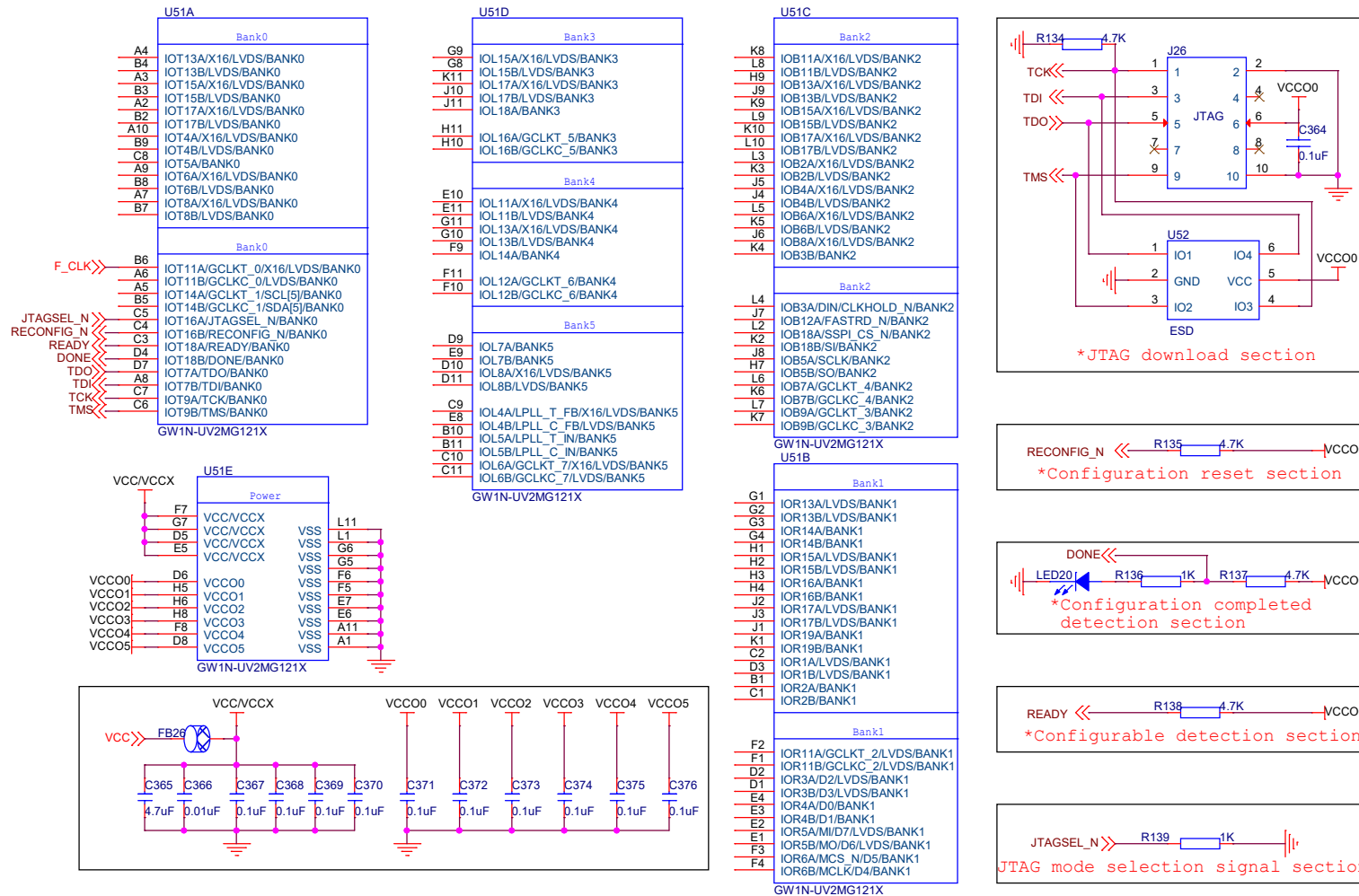
2. It is recommended that add an ESD protection chip to the JTAG download circuit.



Notes:

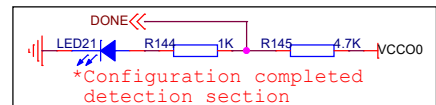
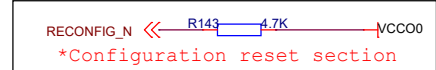
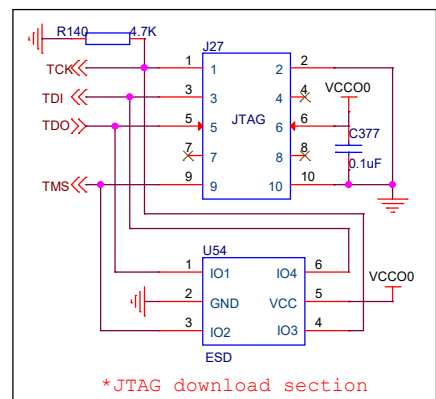
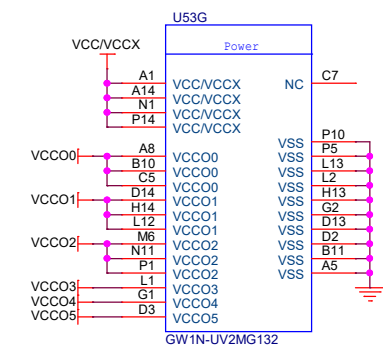
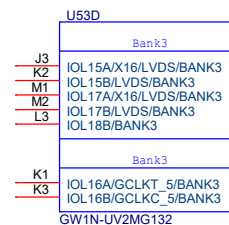
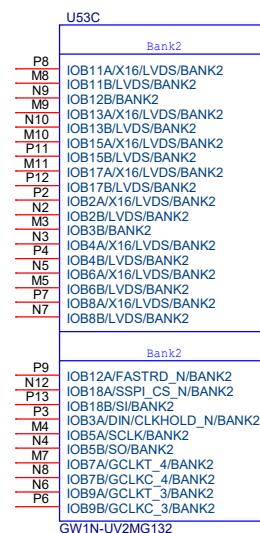
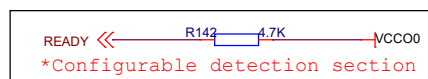
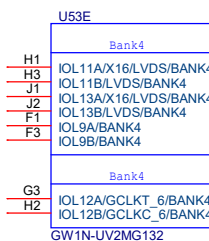
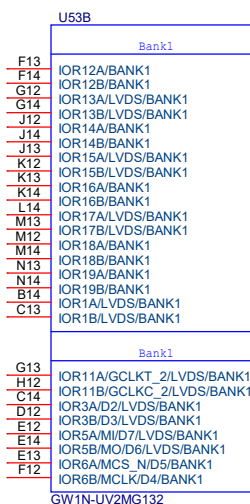
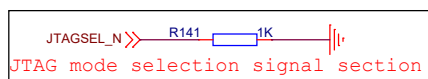
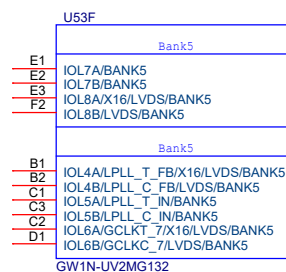
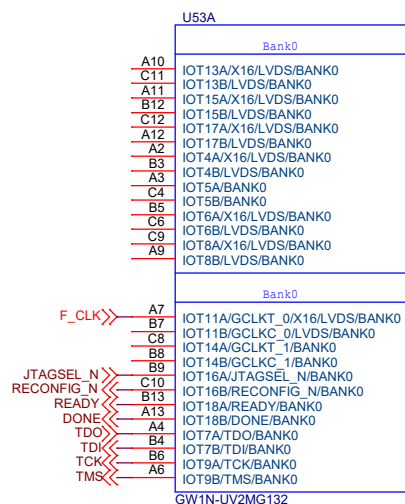
- 1.F_CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal.
- 2.It is recommended that add an ESD protection chip to the JTAG download circuit.

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GOWIN Minimum System Diagram		
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**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.

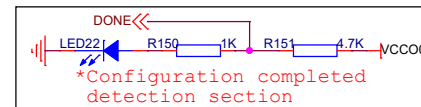
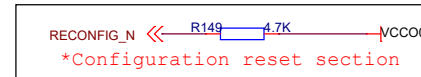
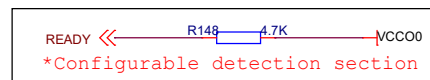
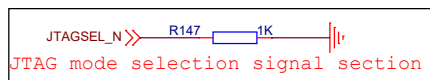
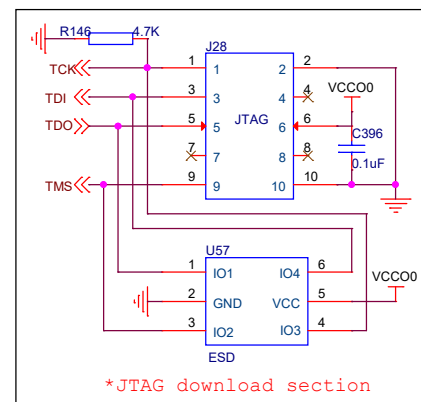
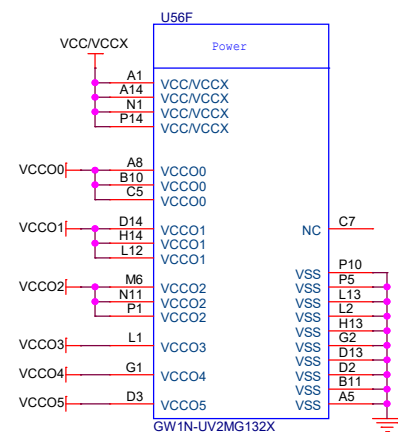
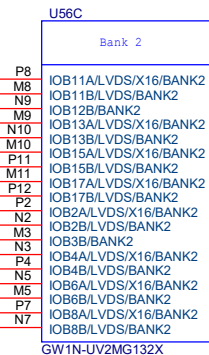
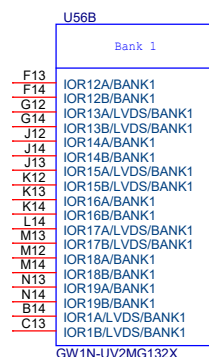
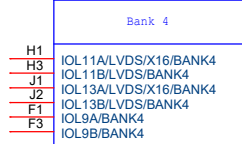
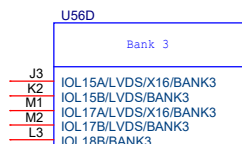
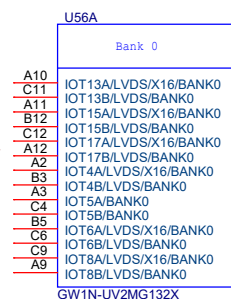
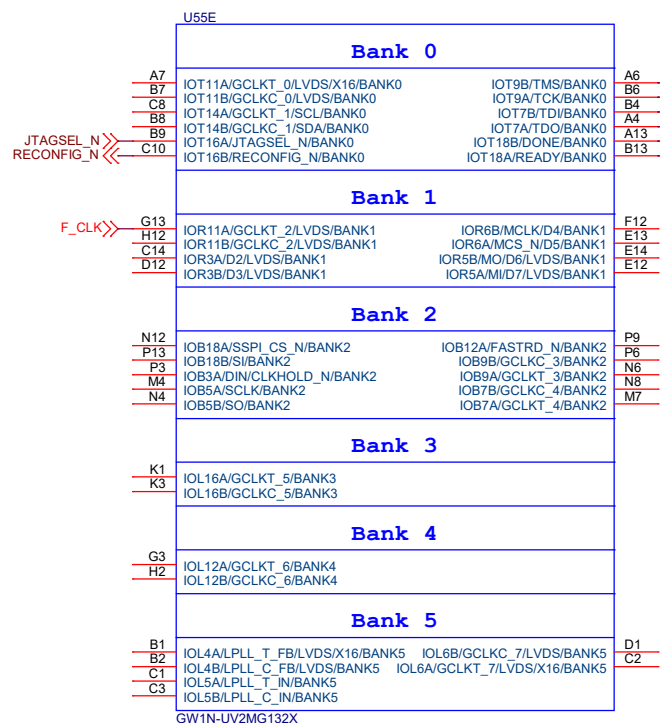
Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-UV2MG121X	2.0
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Notes:

- 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.

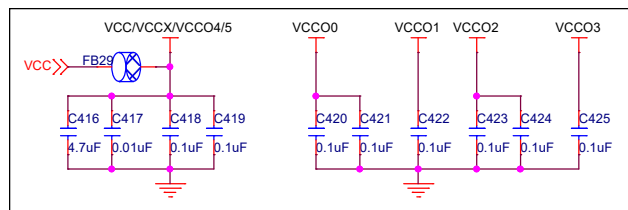
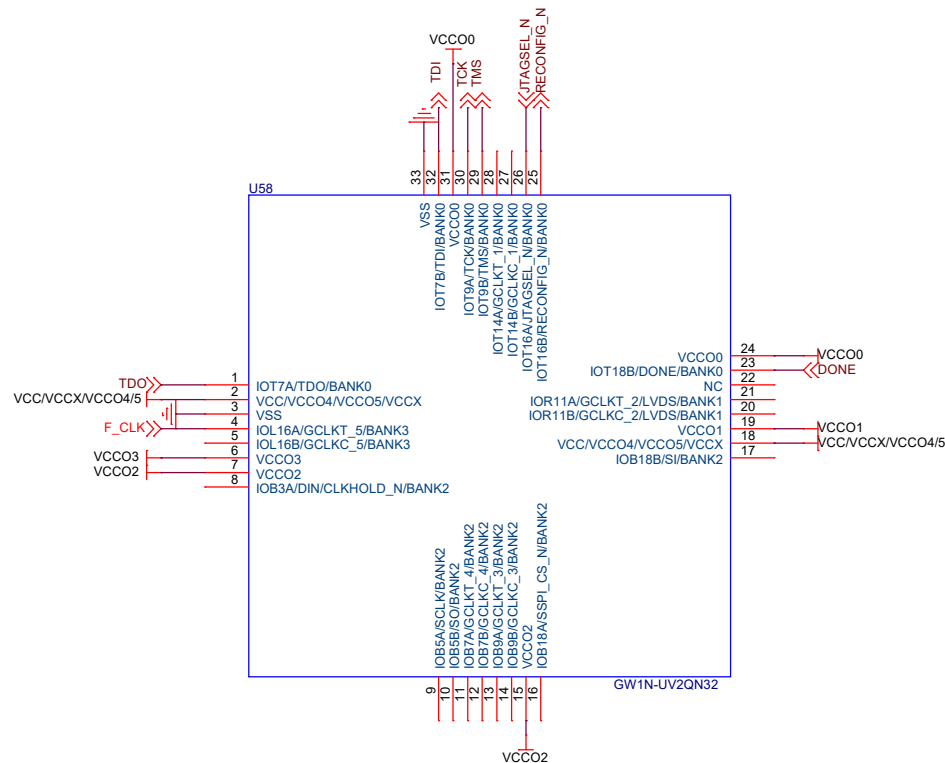
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Notes:

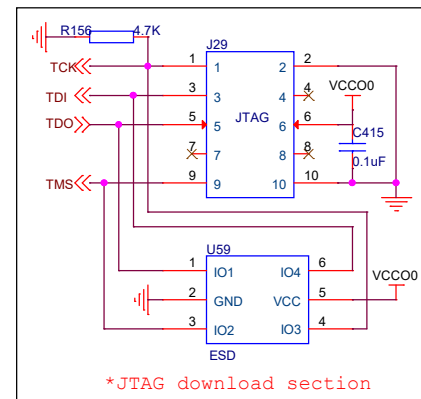
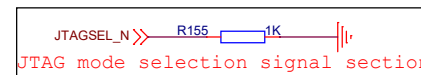
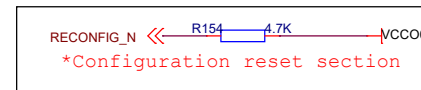
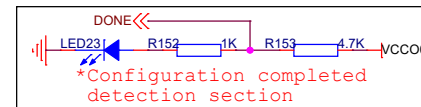
- 1.F_CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal.
- 2.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title			
GOWIN Minimum System Diagram			
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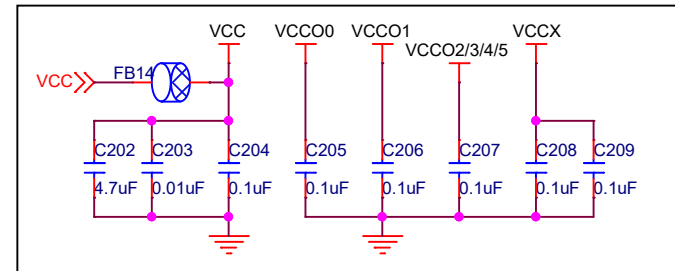
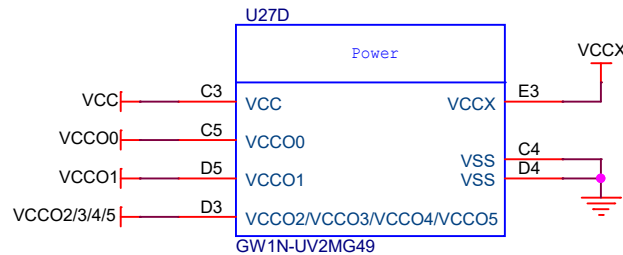
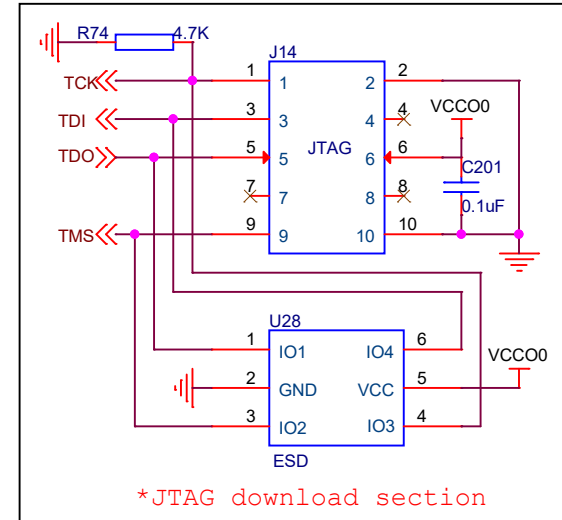
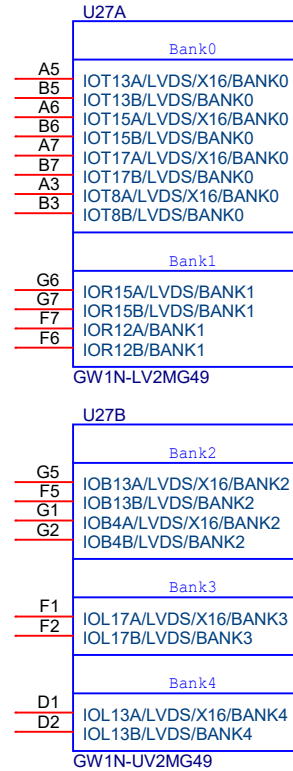
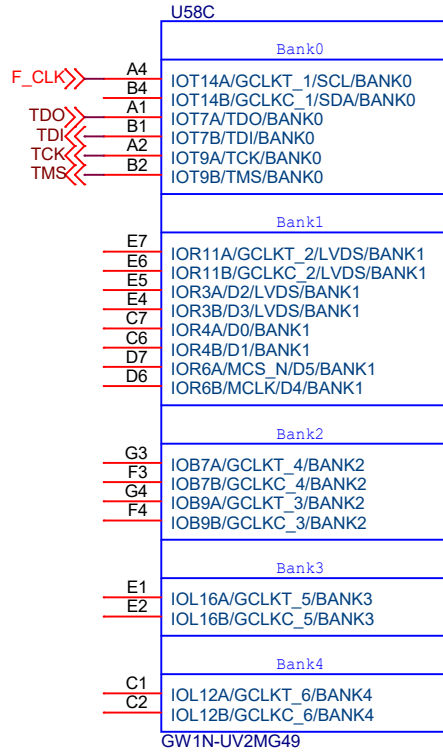
Notes:

- 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		
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GW1N-UV2MG49



Notes:

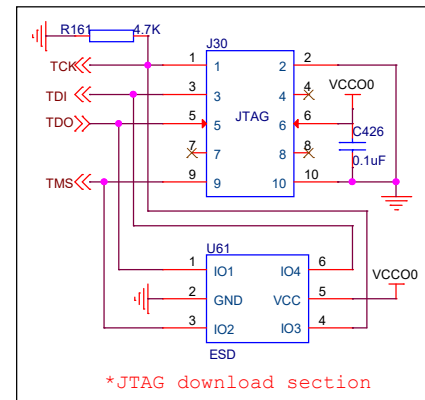
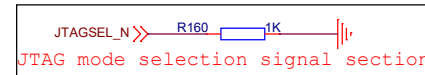
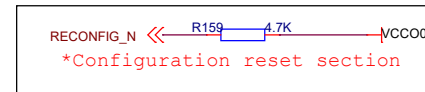
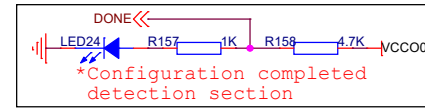
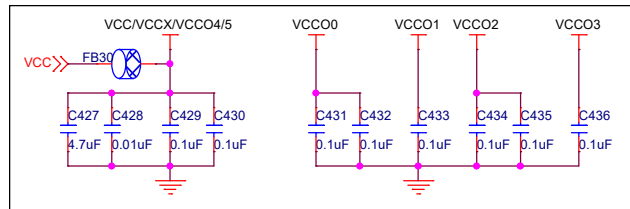
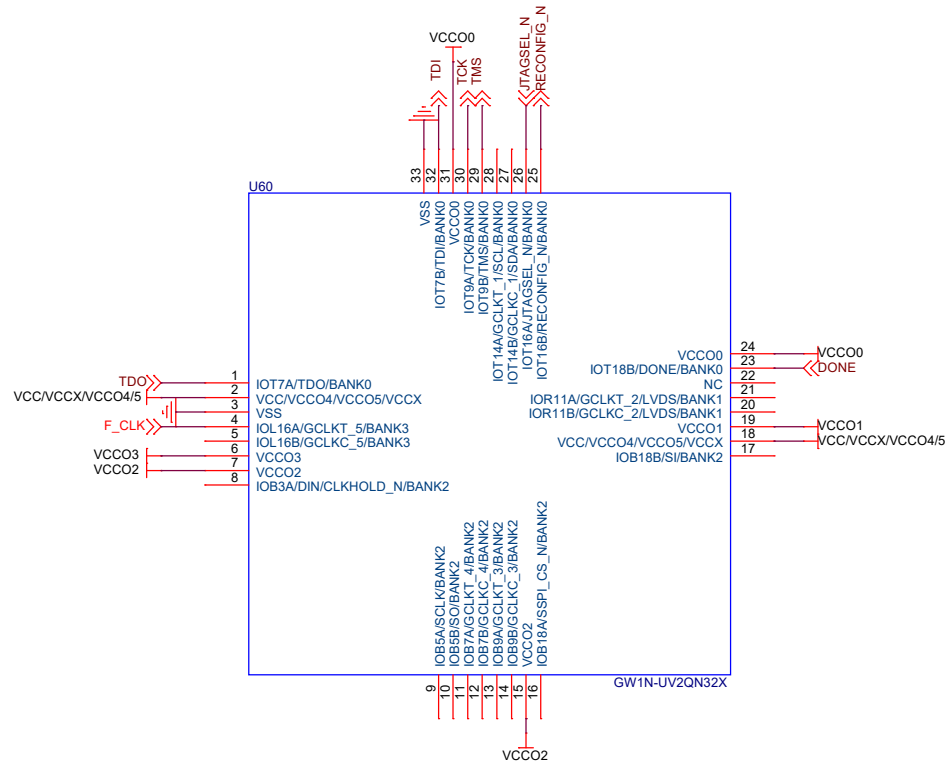
1.F_CLK signal is an external input clock signal.

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.

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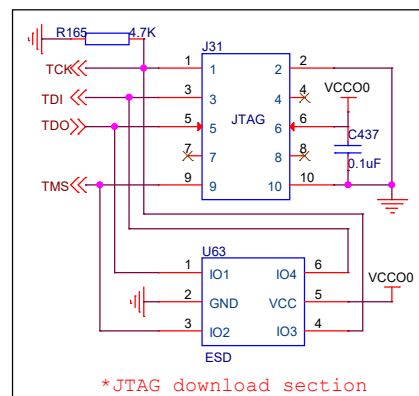
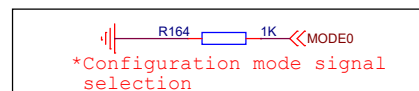
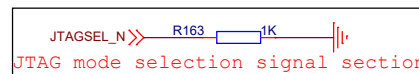
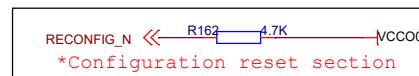
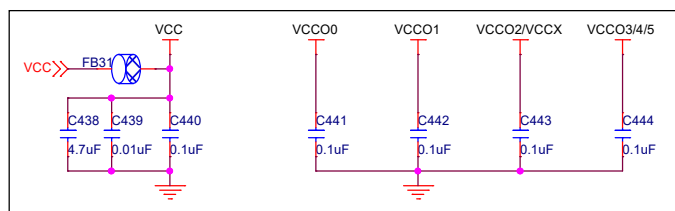
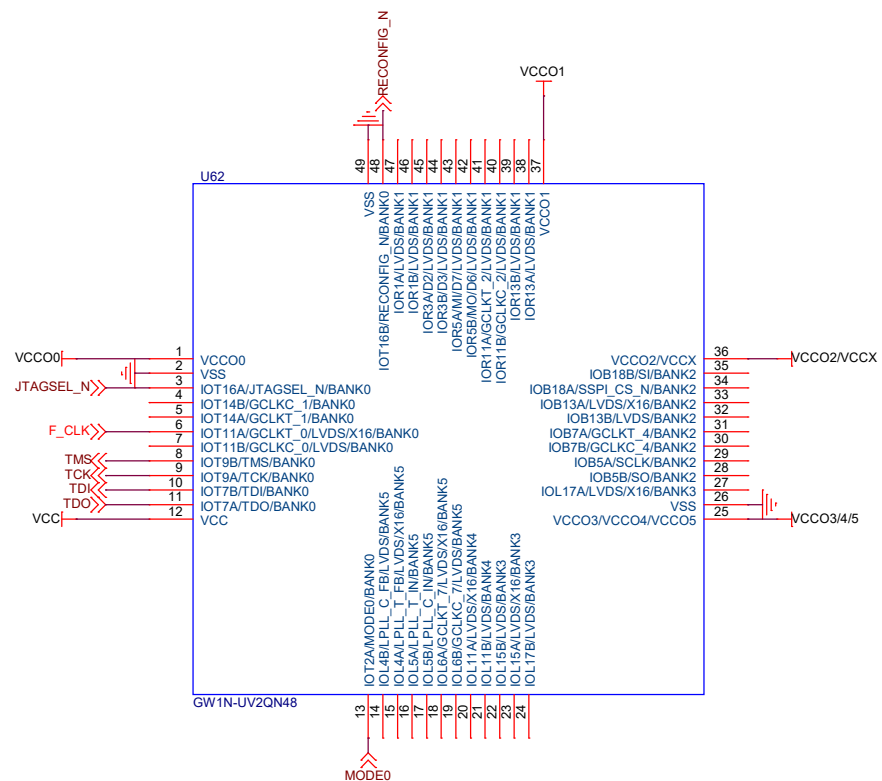


Notes:

- 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.

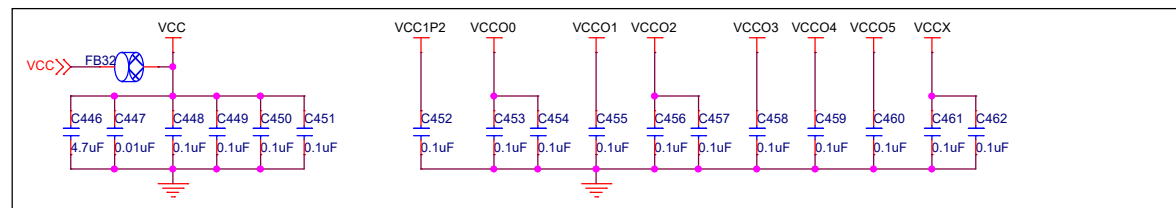
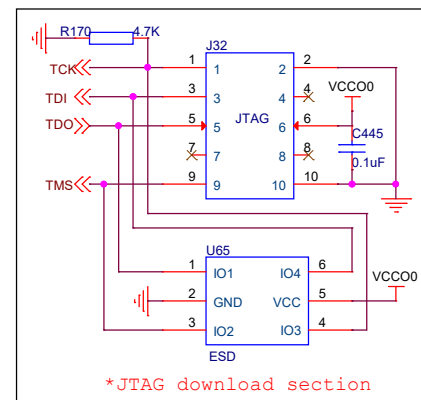
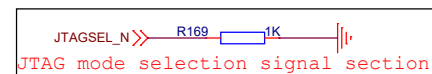
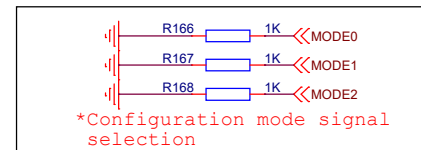
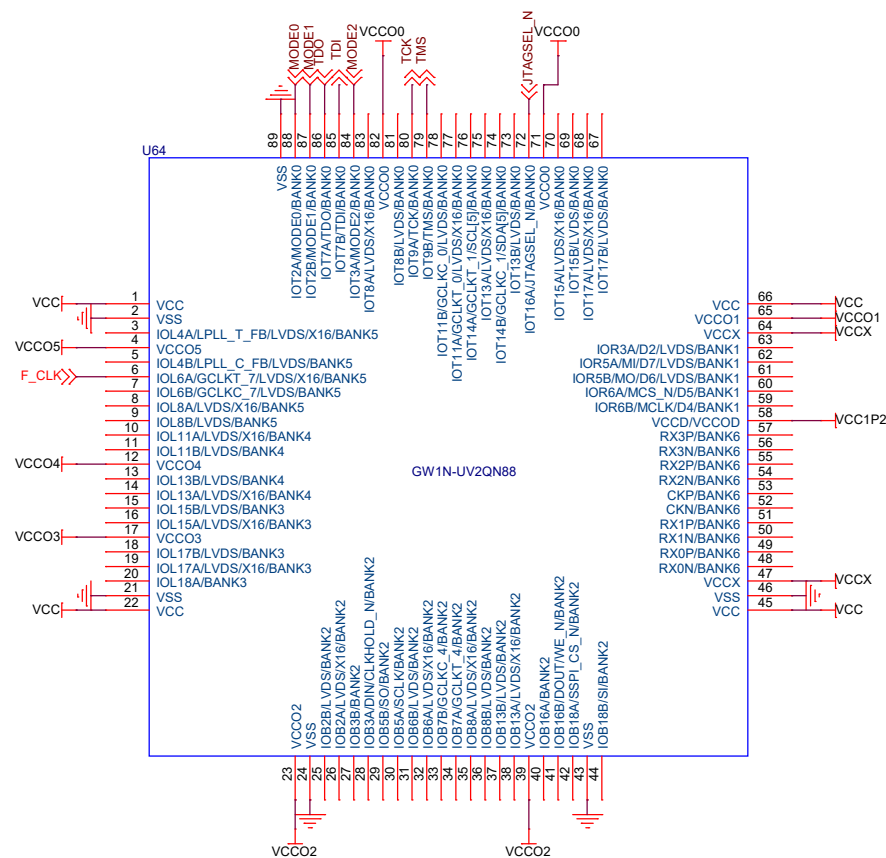
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Notes:

- 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.



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			
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