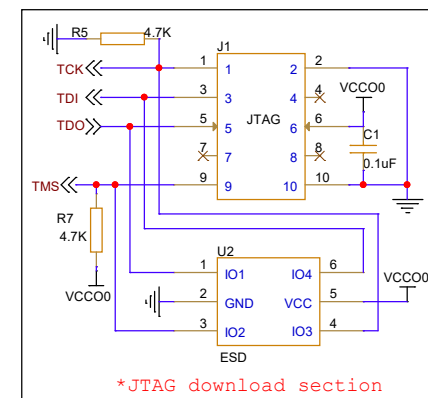
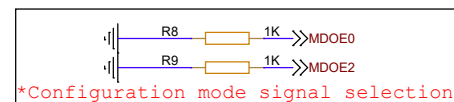
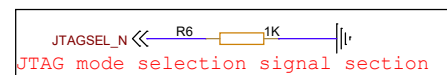
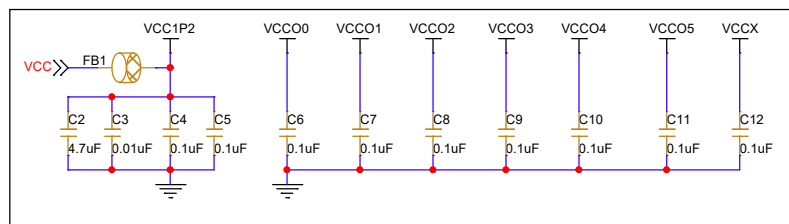
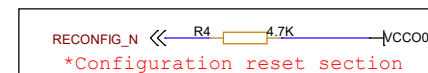
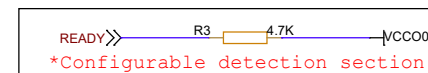
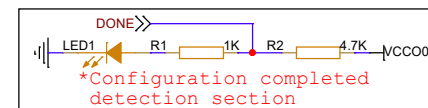
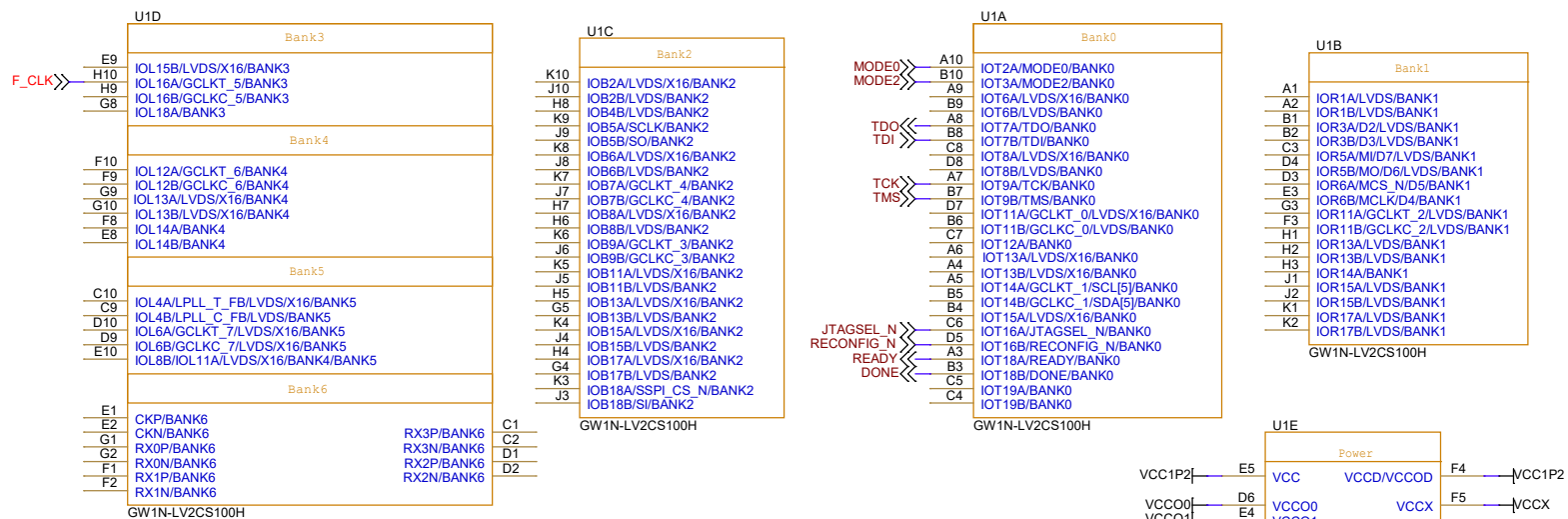


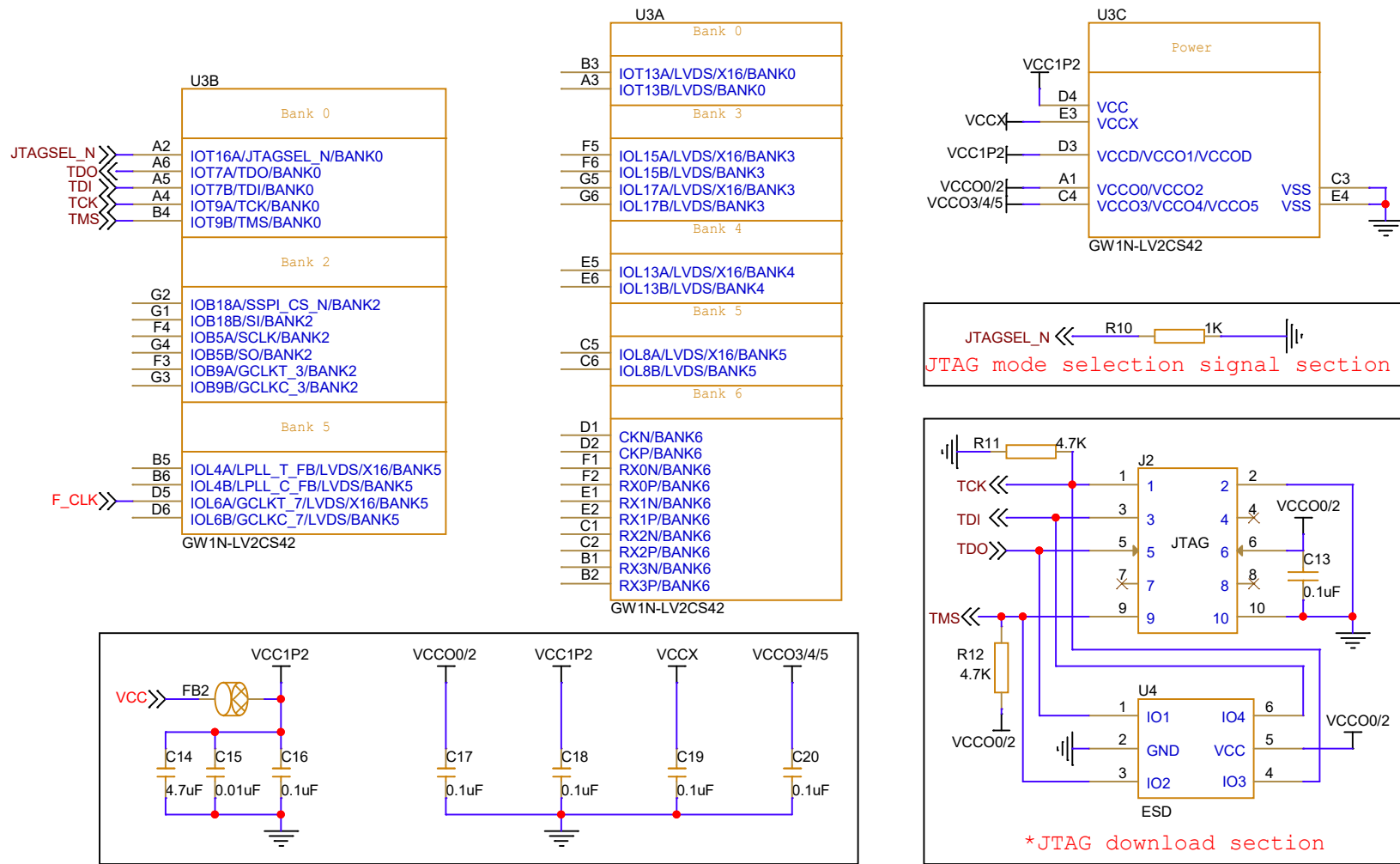
5
GW1N-LV2CS100H



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.

GW1N-LV2CS42

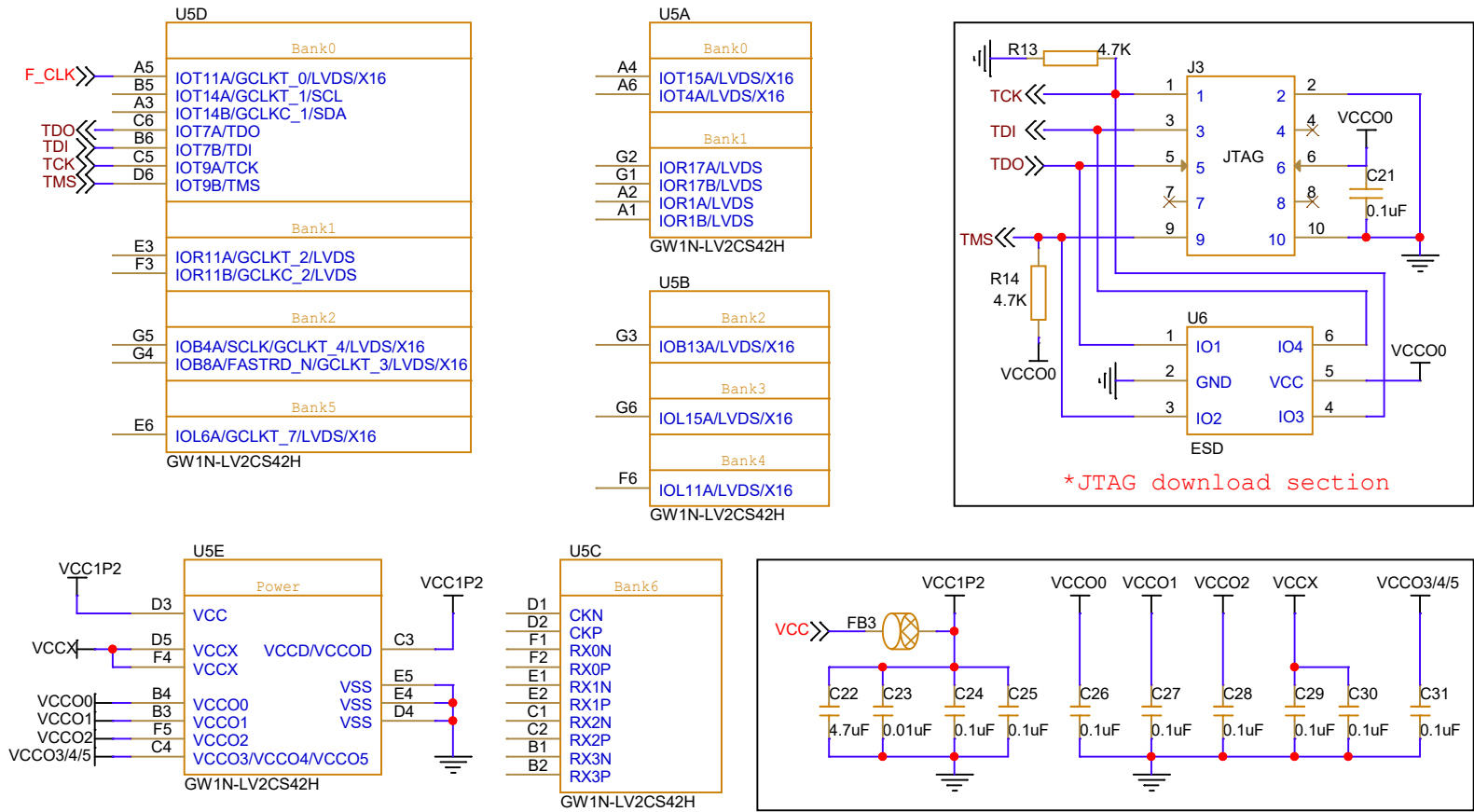


Notes:

- 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.

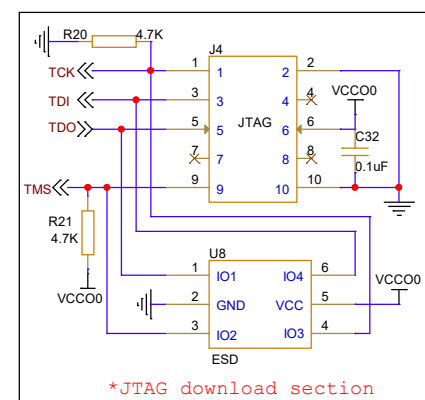
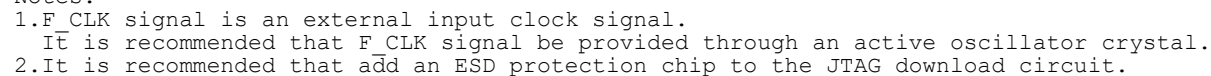
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GOWIN Minimum System Diagram		
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A4	GW1N-LV2CS42	2.2
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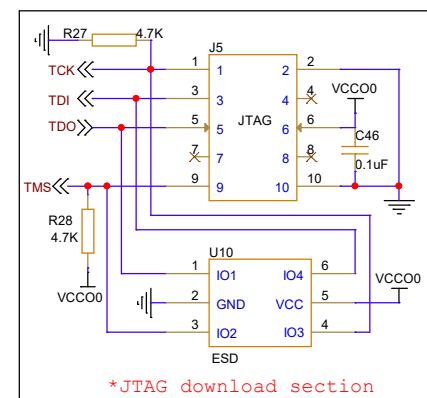
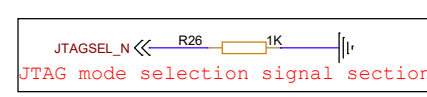
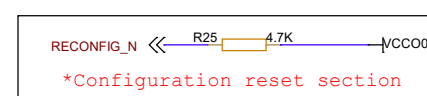
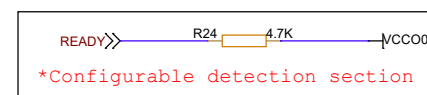
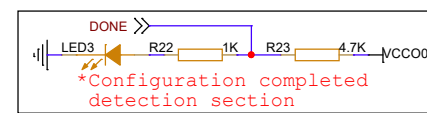
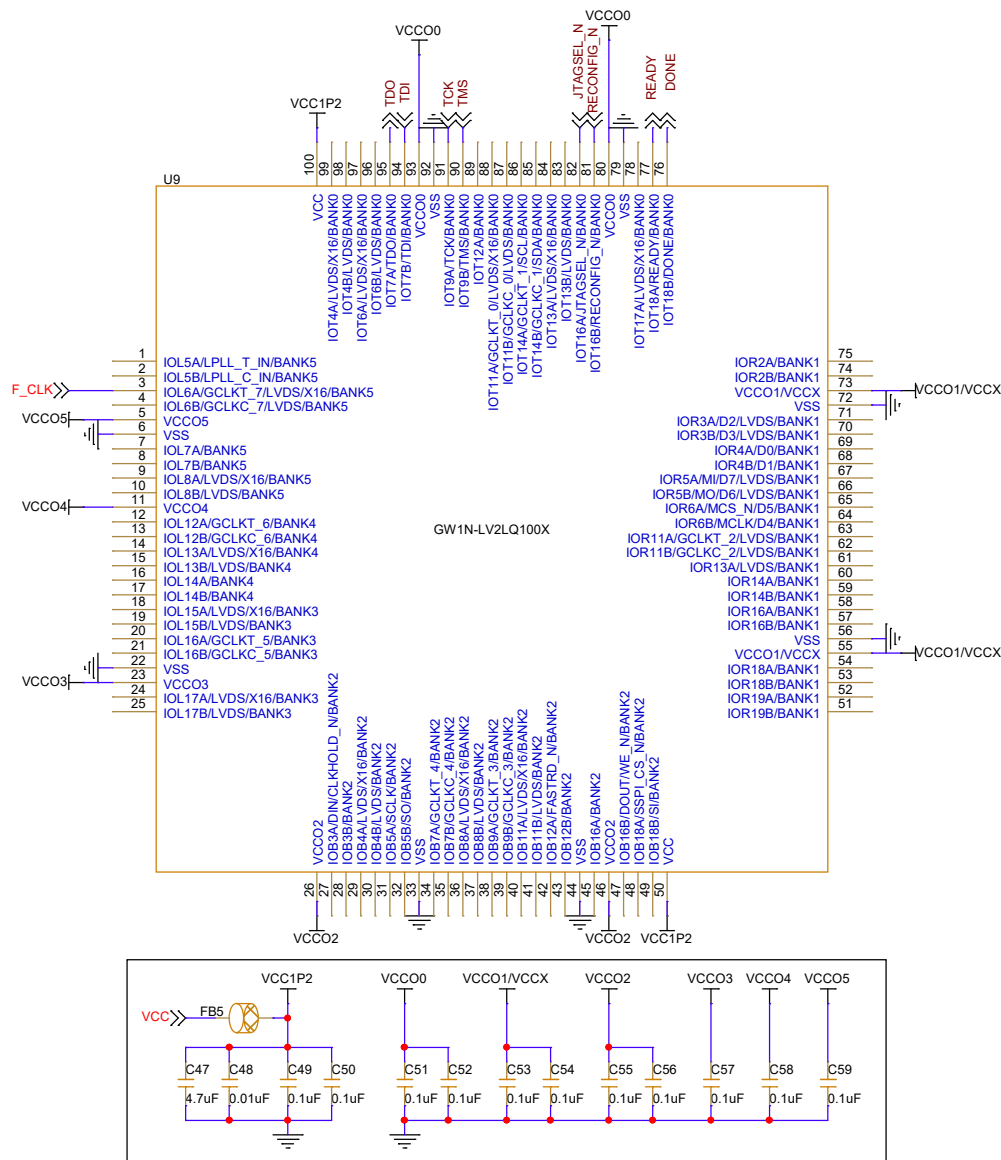
GW1N-LV2CS42H



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.

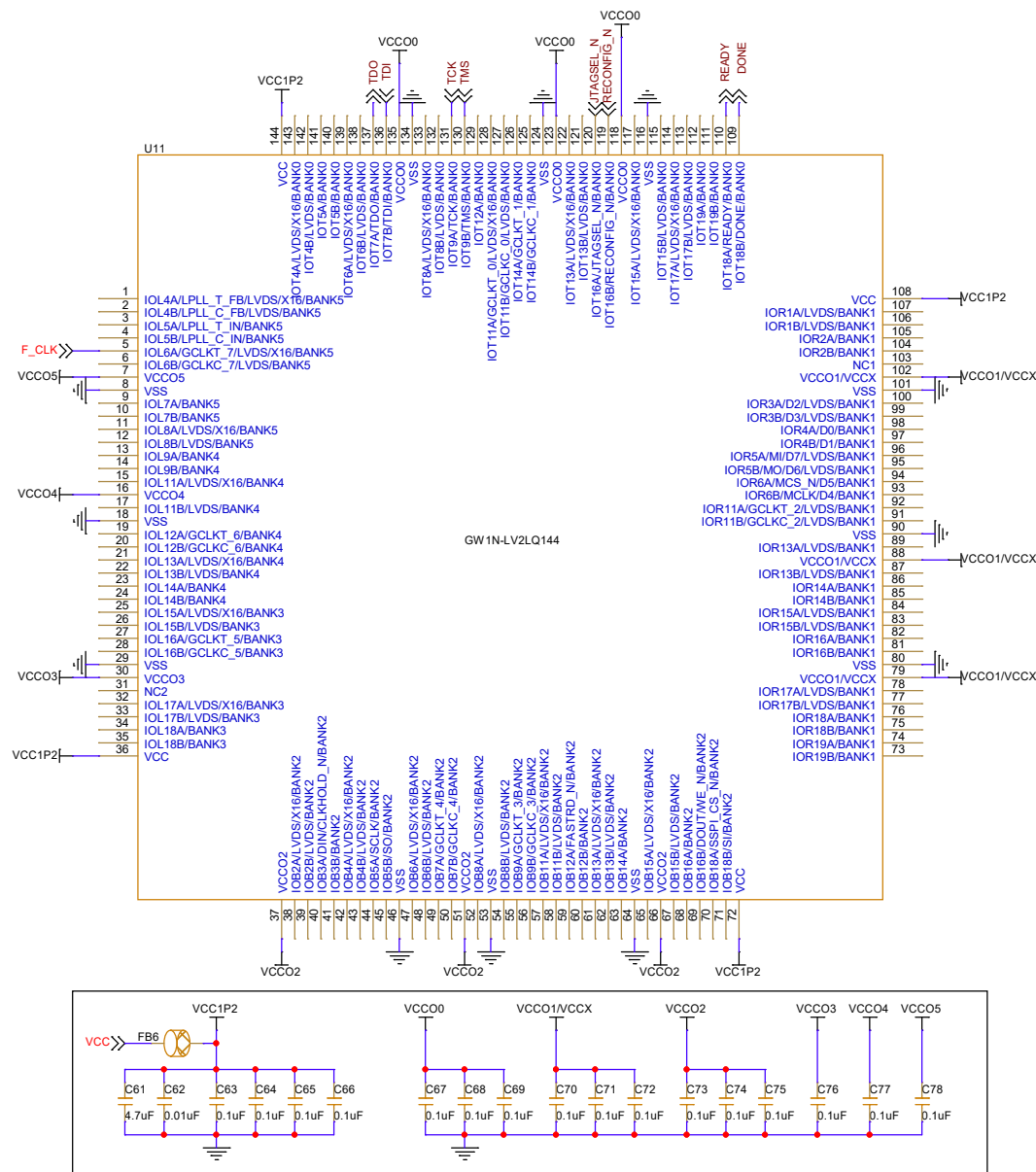
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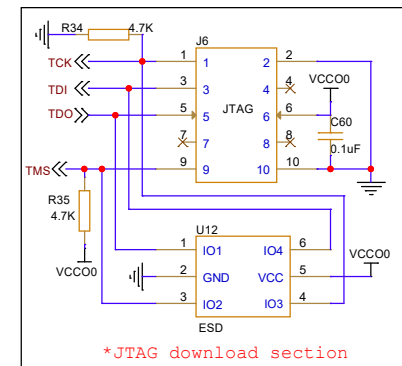
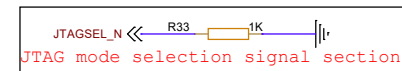
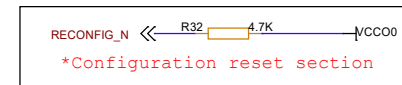
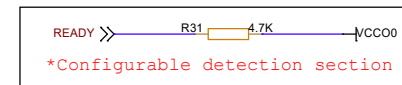
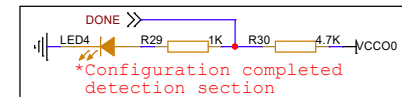
Notes:

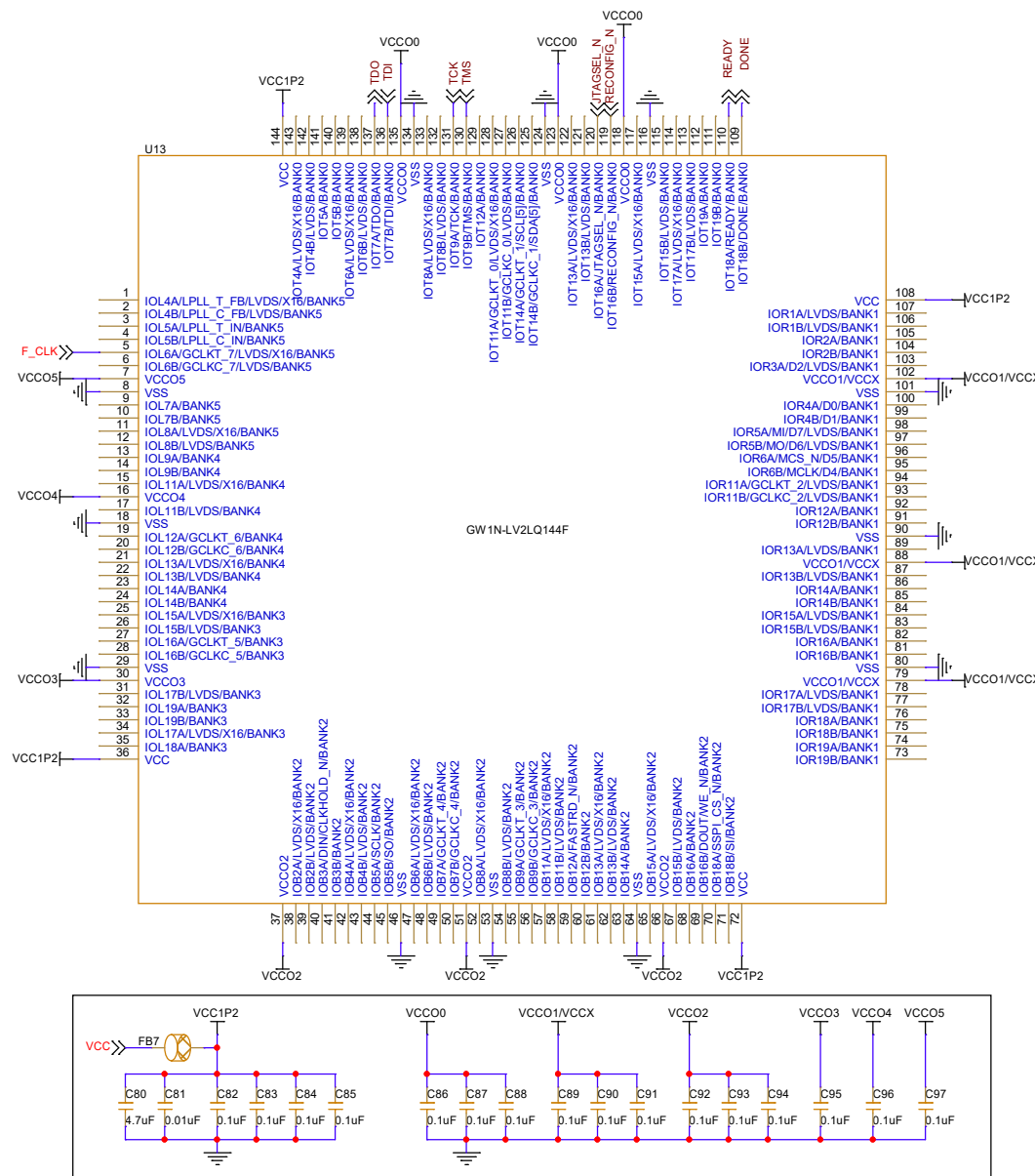
- 1.F CLK signal is an external input clock signal. It is recommended that F_CLK signal be provided through an active oscillator crystal.
- 2.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2LQ100X	2.2
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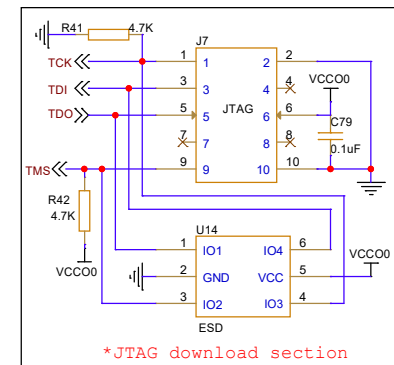
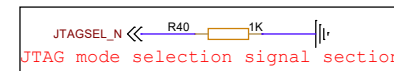
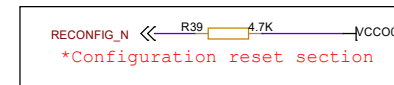
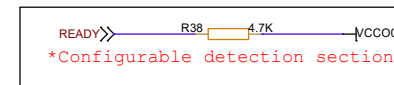
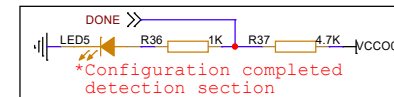


Notes:
 1.F_CLK signal is an external input clock signal.
 It is recommended that F_CLK signal be provided through an active oscillator crystal.
 2.It is recommended that add an ESD protection chip to the JTAG download circuit.





- 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.

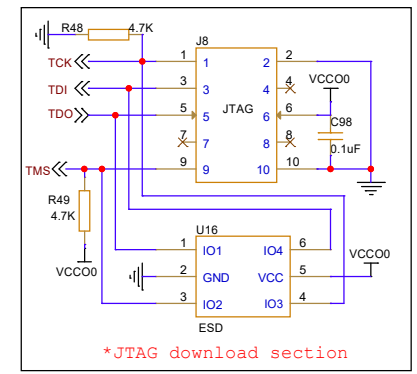
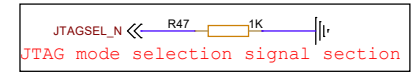
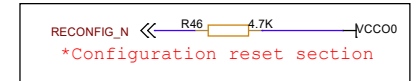
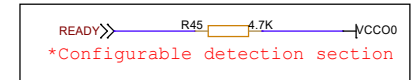
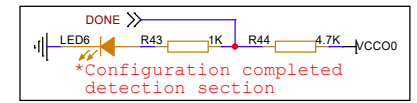
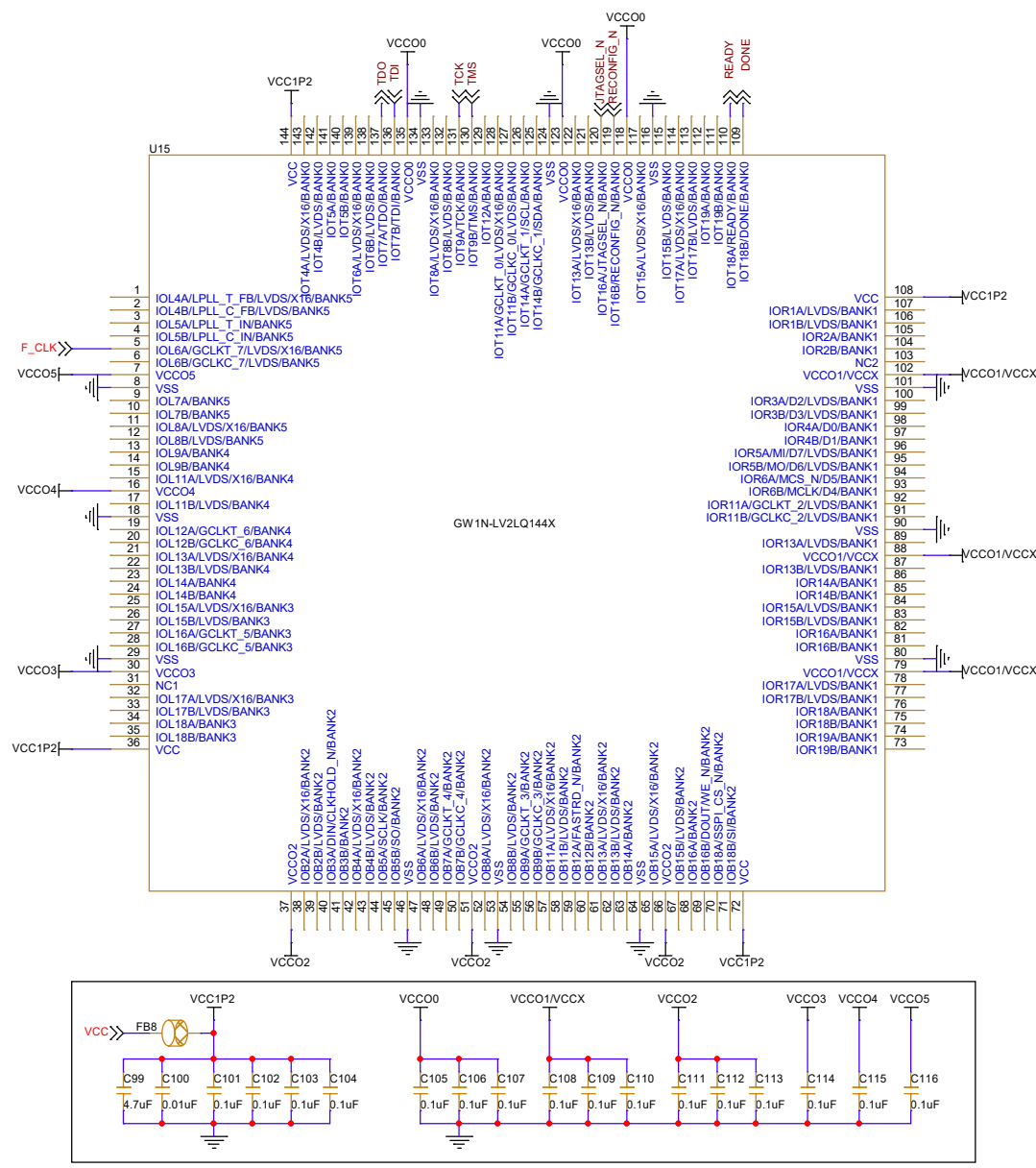


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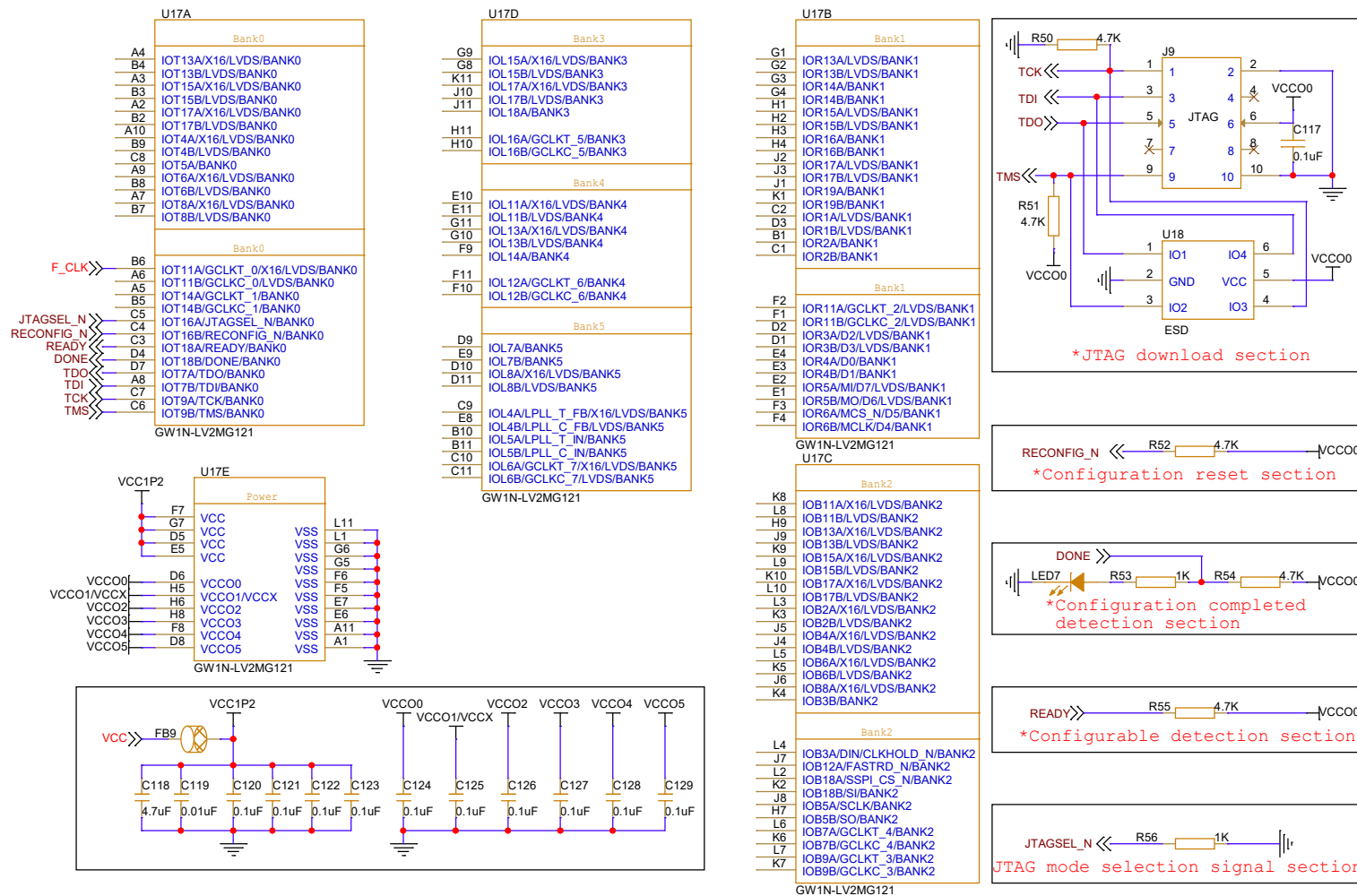
C

B

A



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.



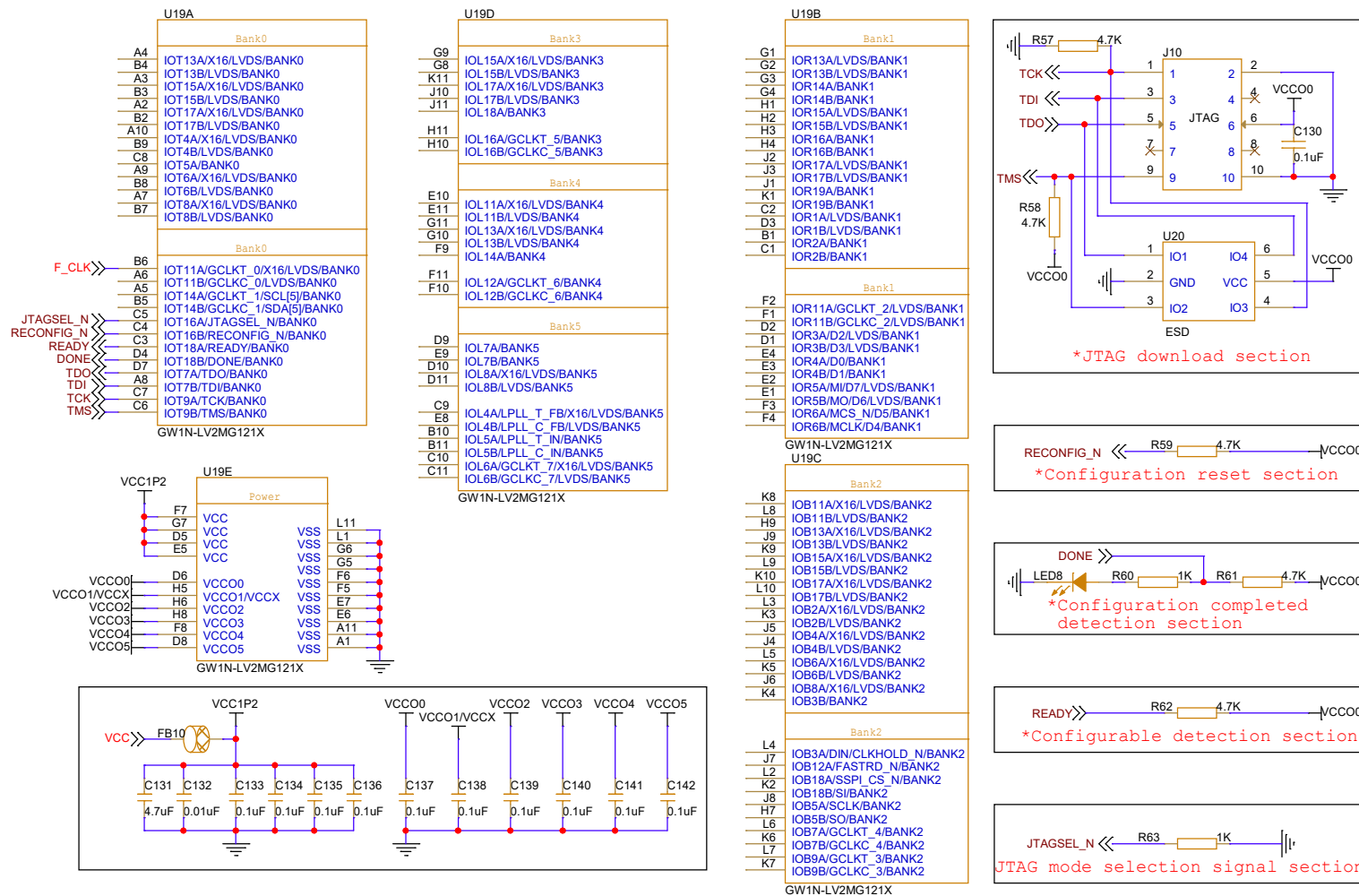
Notes:

1.F_CLK signal is an external input clock signal.

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

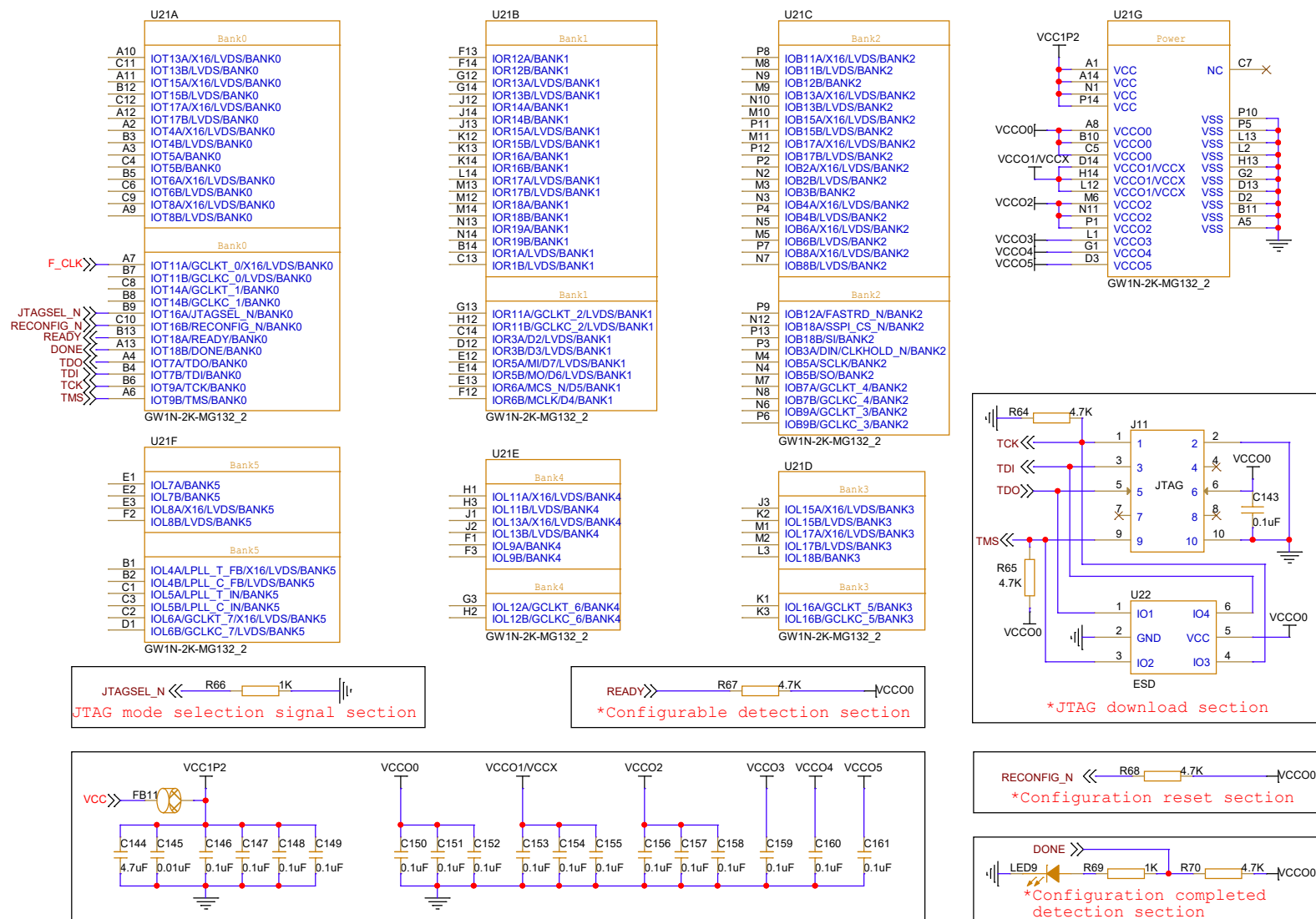
2.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2MG121	2.2
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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.

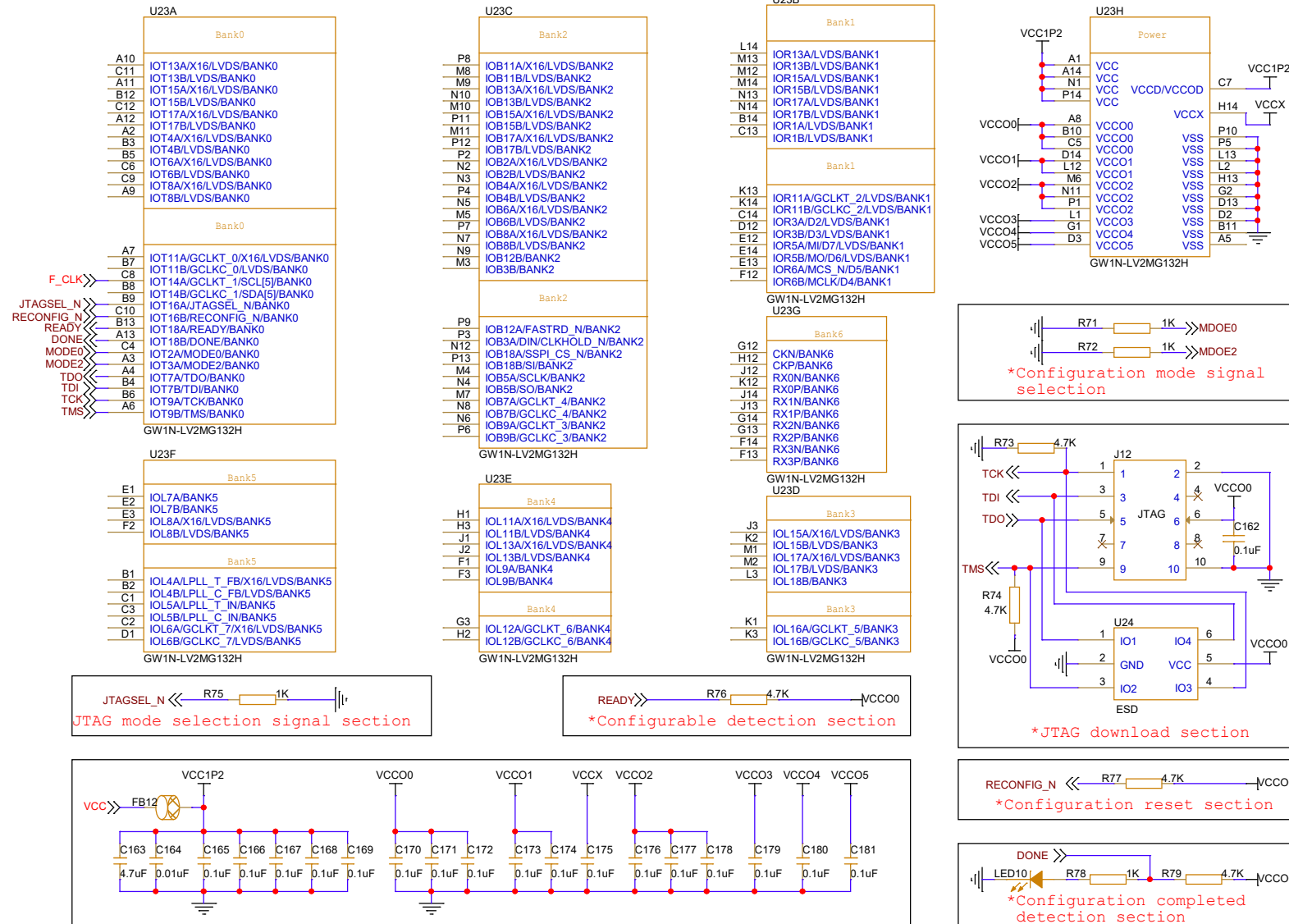
Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2MG121X	2.2
Date:	Thursday, July 04, 2024	Sheet 10 of 33



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.

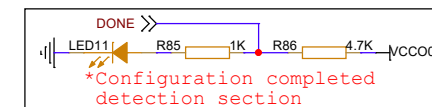
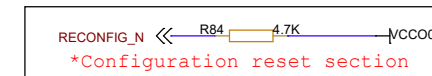
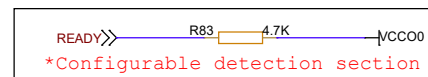
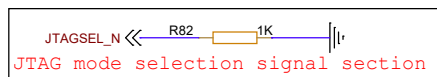
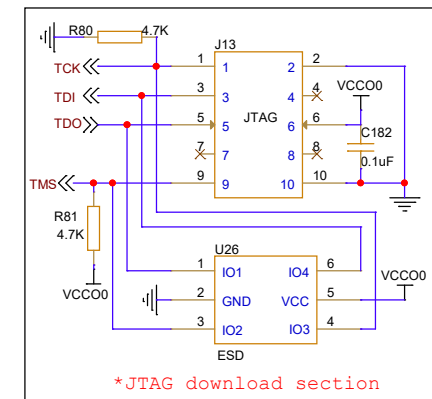
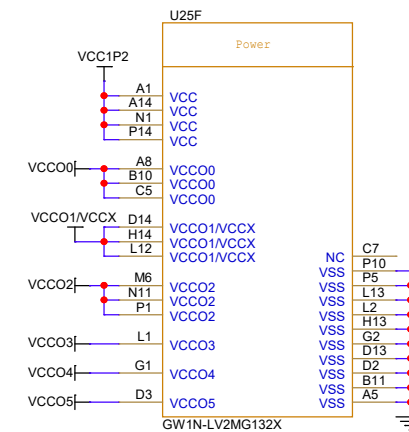
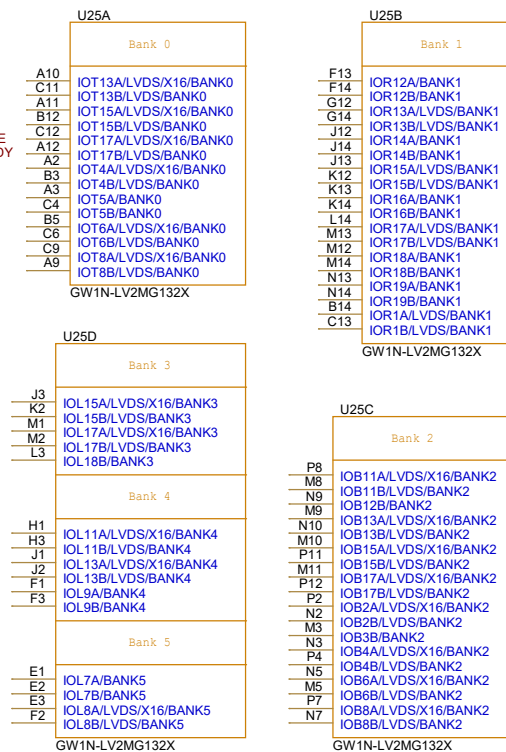
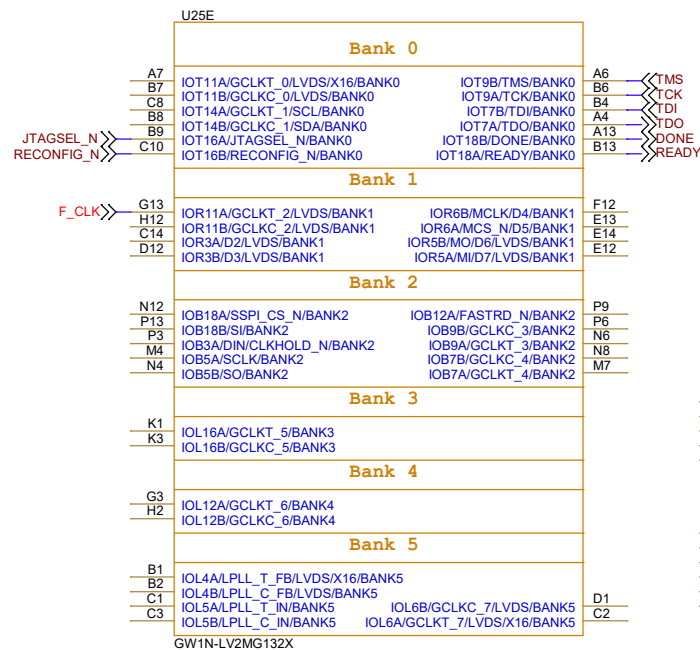
Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2MG132	2.2
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Notes:

- 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-LV2MG132H	2.2
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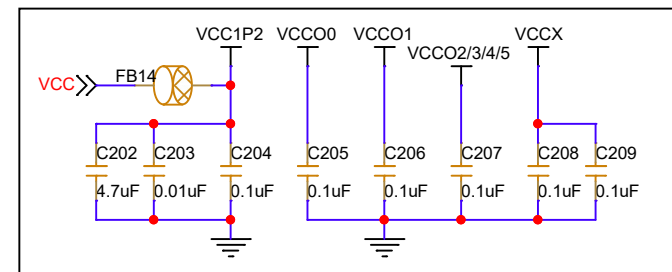
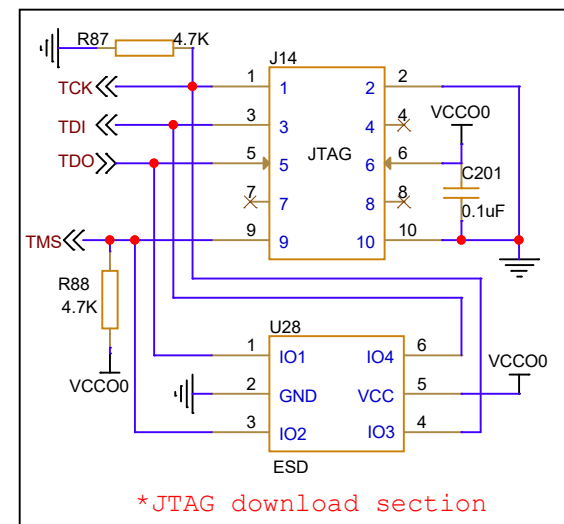
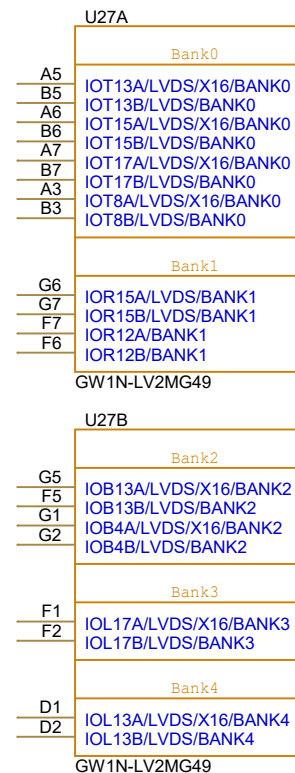
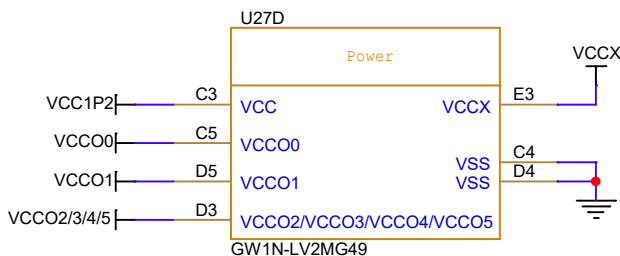


Notes:

- 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.

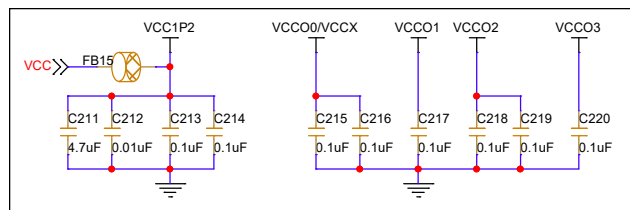
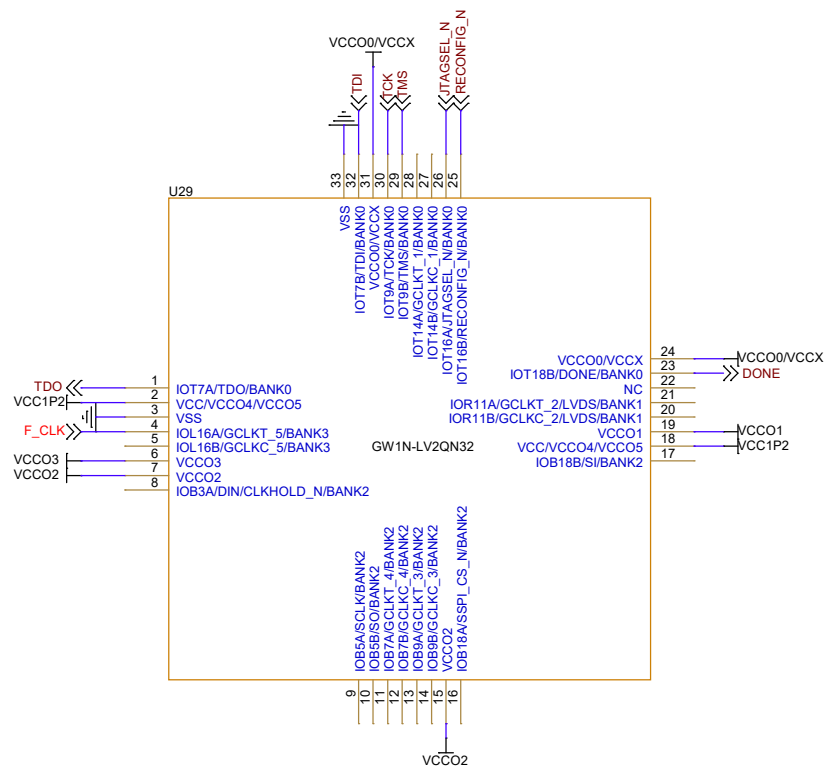
Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2MG132X	2.2
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Notes:

- 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.



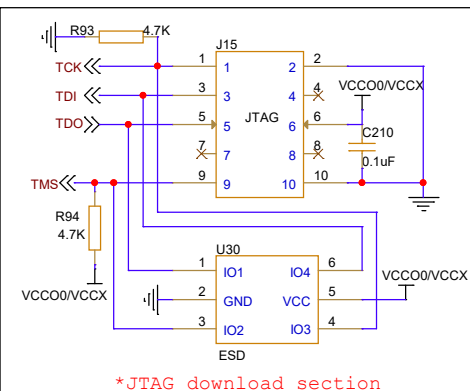
Notes:

- 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.

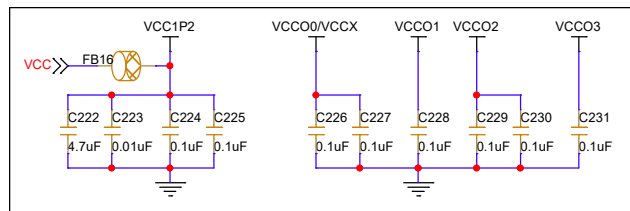
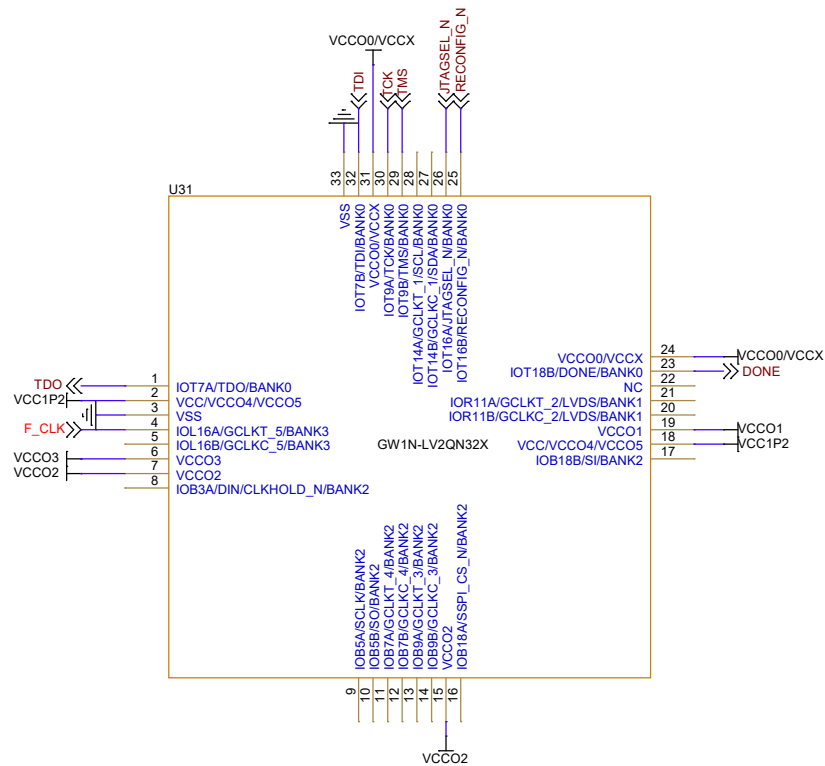
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DONE >> LED12 R90 1K R91 4.7K VCC00/VCCX
*Configuration completed detection section

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JTAG mode selection signal section

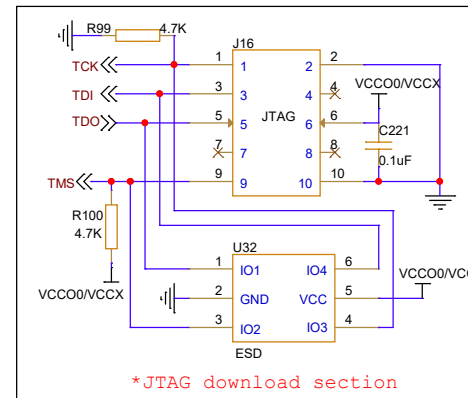
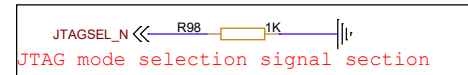
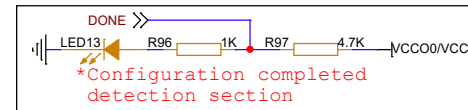
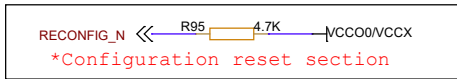


Title		
GOWIN Minimum System Diagram		
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B	GW1N-LV2QN32	2.2
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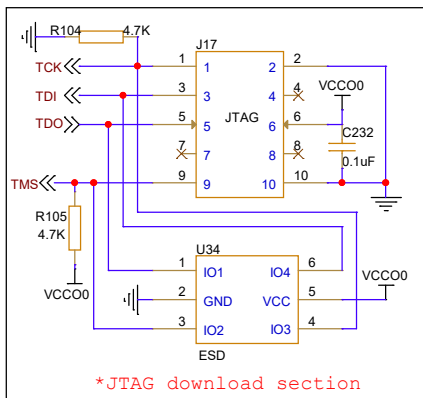
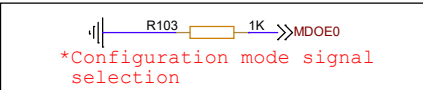
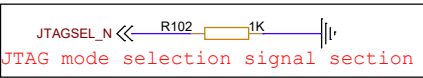
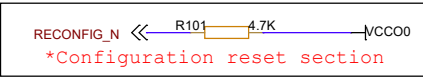
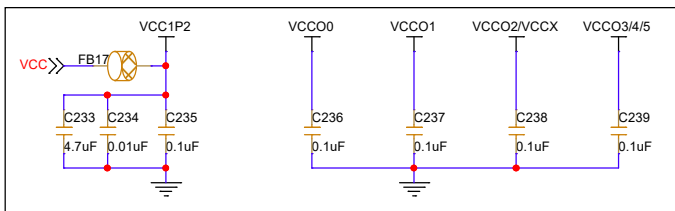
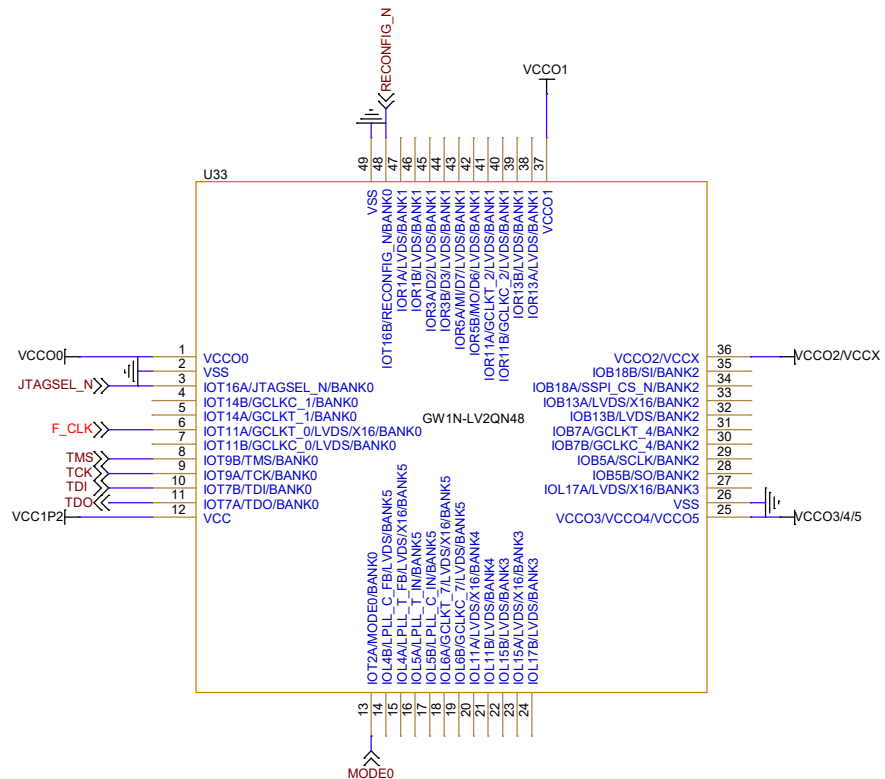


Notes:

- 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-LV2QN32X	2.2
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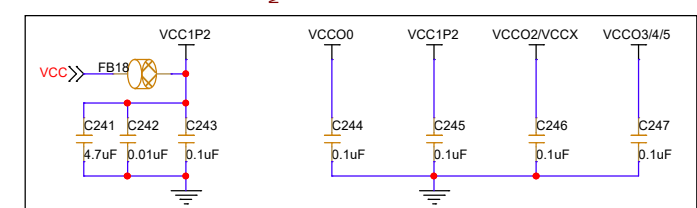
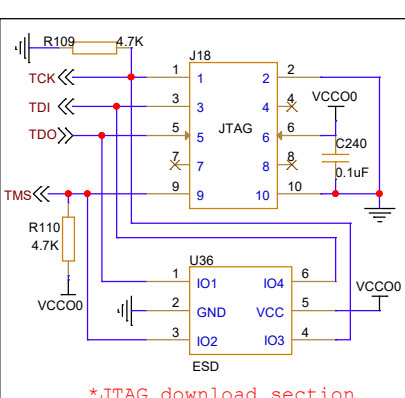
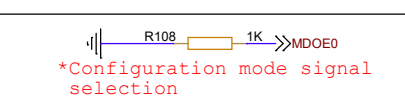
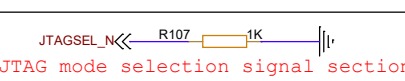
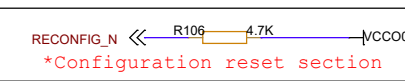
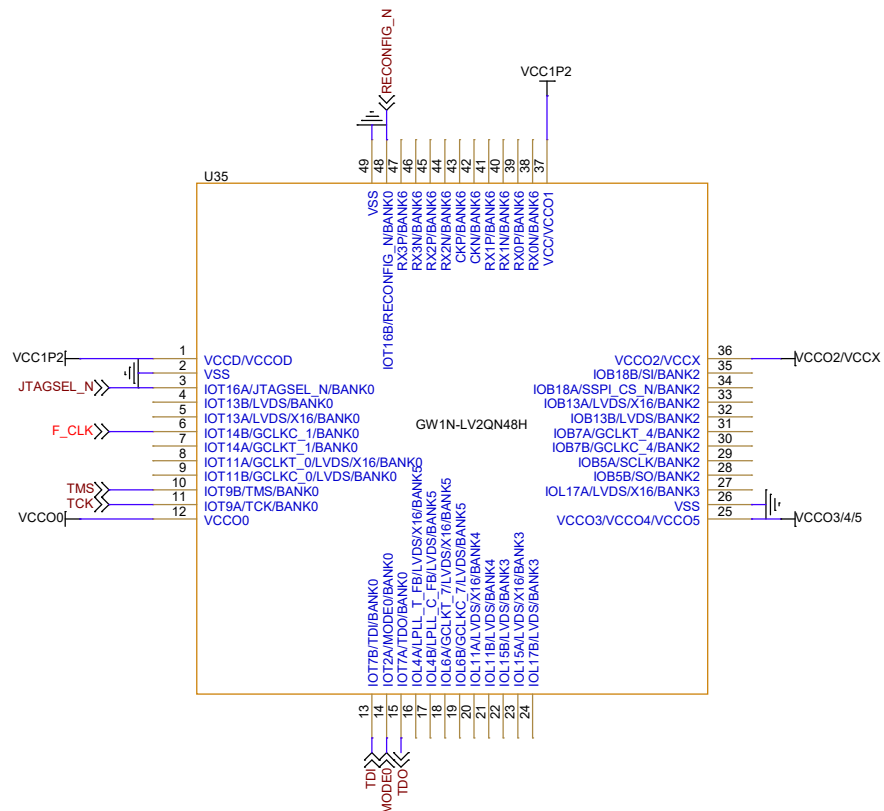


Notes:

- 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-LV2QN48	2.2
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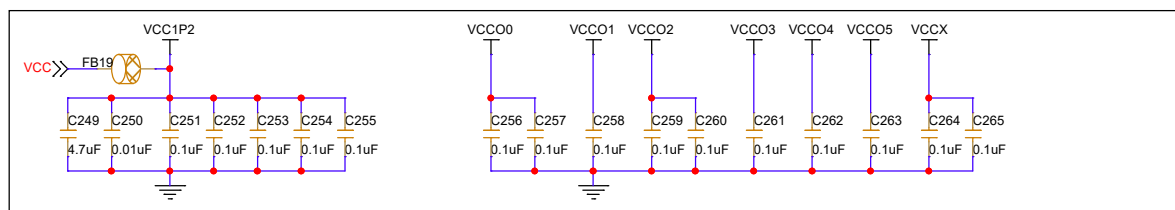
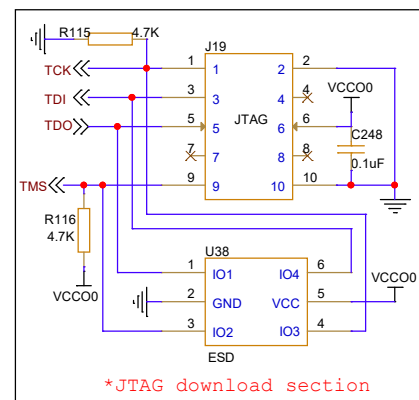
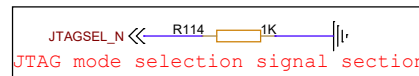
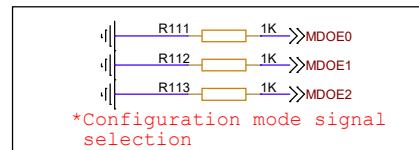
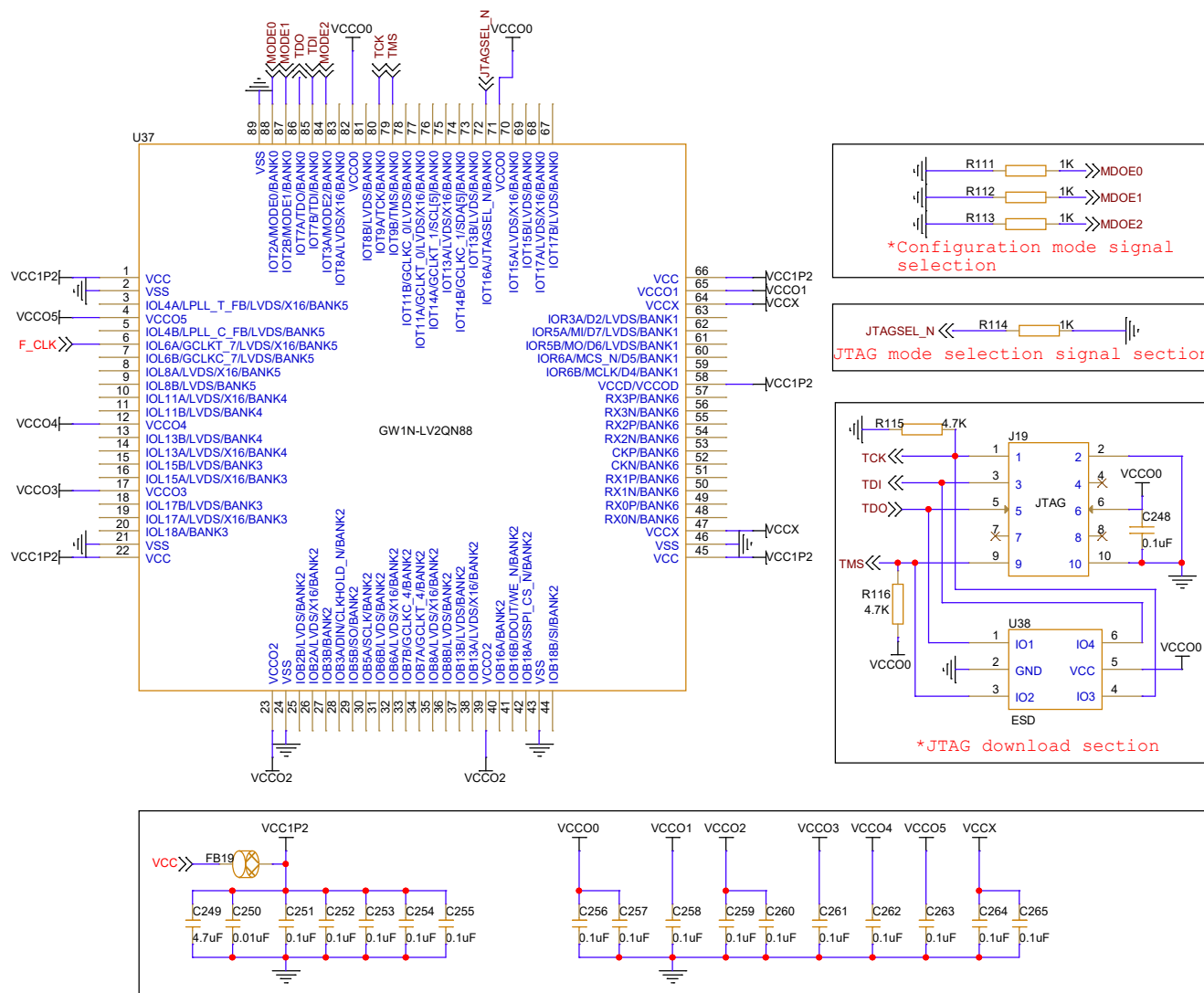
GW1N-LV2QN48H



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		
Size	Document Number	Rev
B	GW1N-LV2QN48H	2.2
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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.

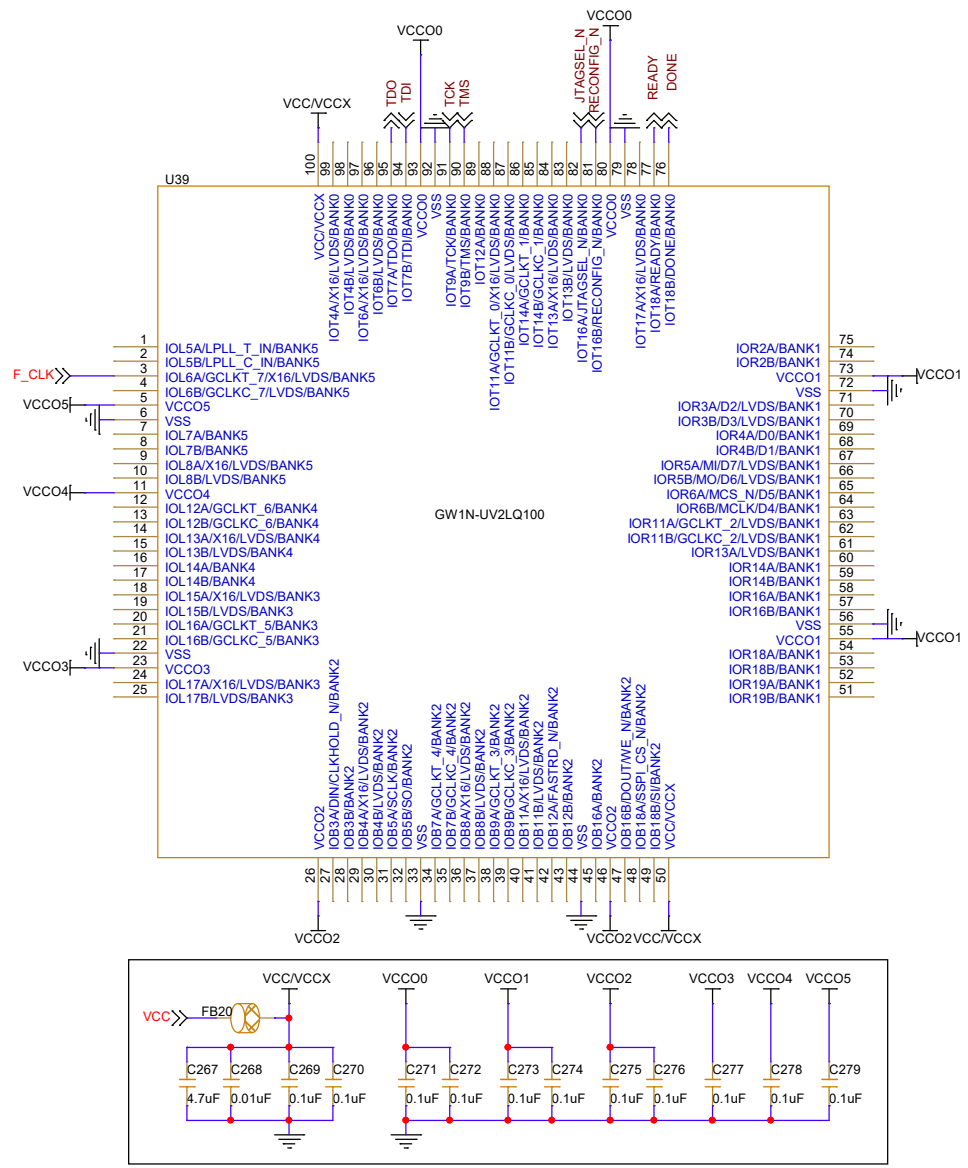
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GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2QN88	2.2
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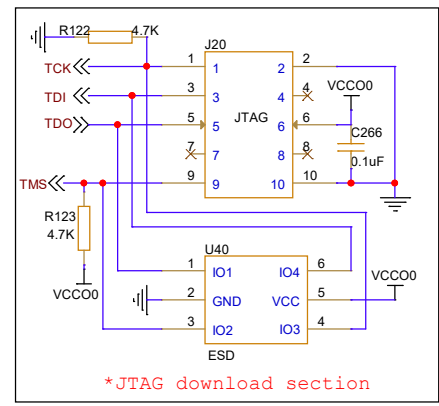
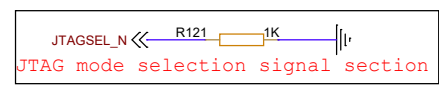
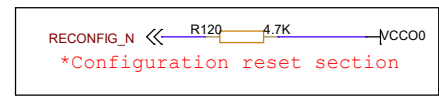
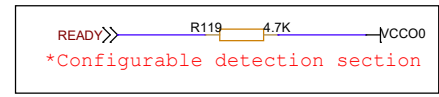
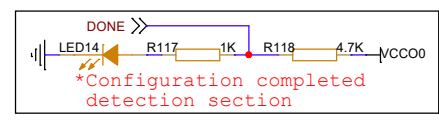
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Notes:
 1.F CLK signal is an external input clock signal.
 It is recommended that F_CLK signal be provided through an active oscillator crystal.
 2.It is recommended that add an ESD protection chip to the JTAG download circuit.



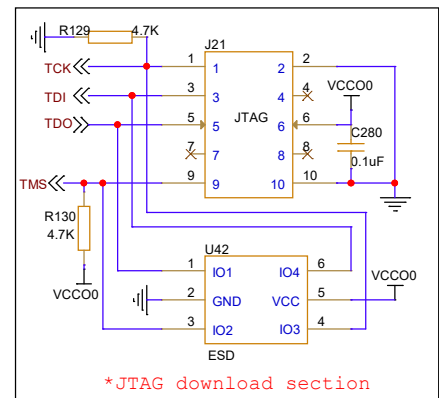
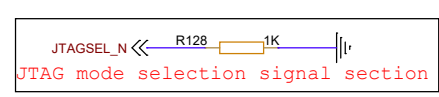
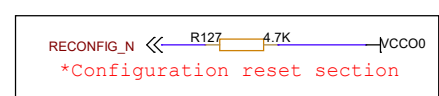
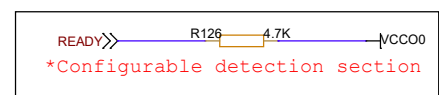
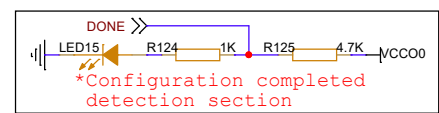
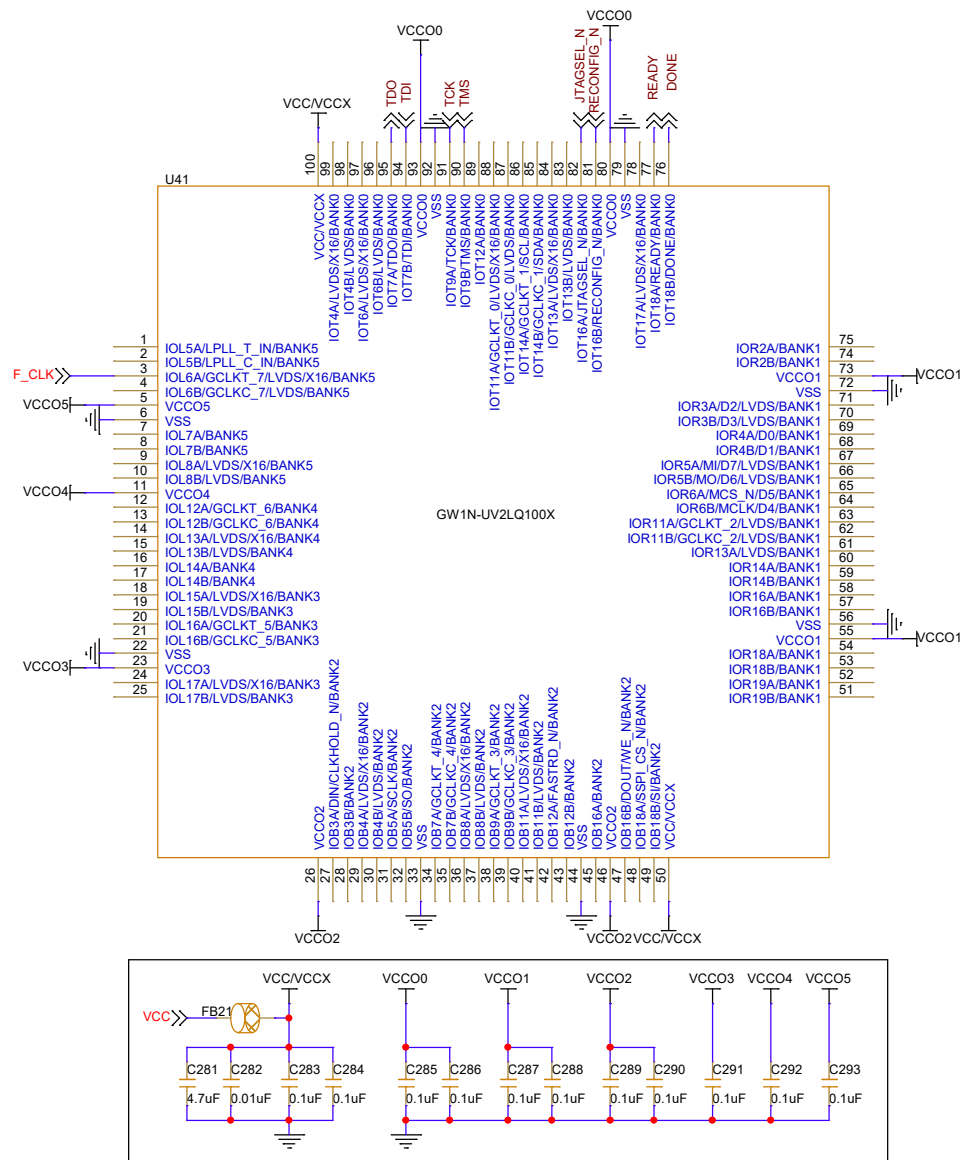
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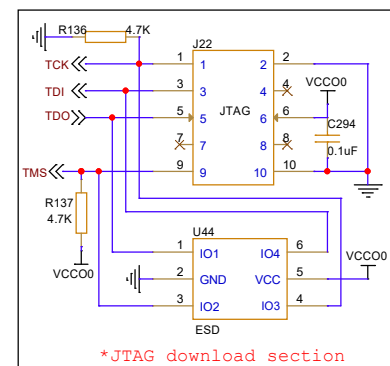
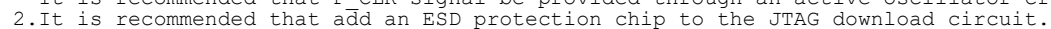
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GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-UV2LQ100	2.2
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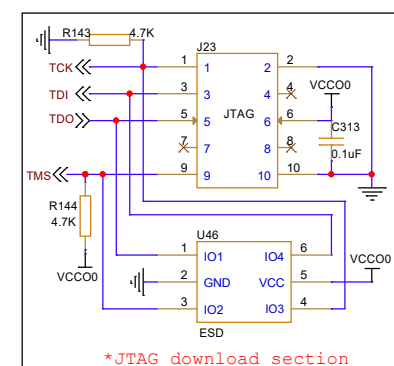


Notes:

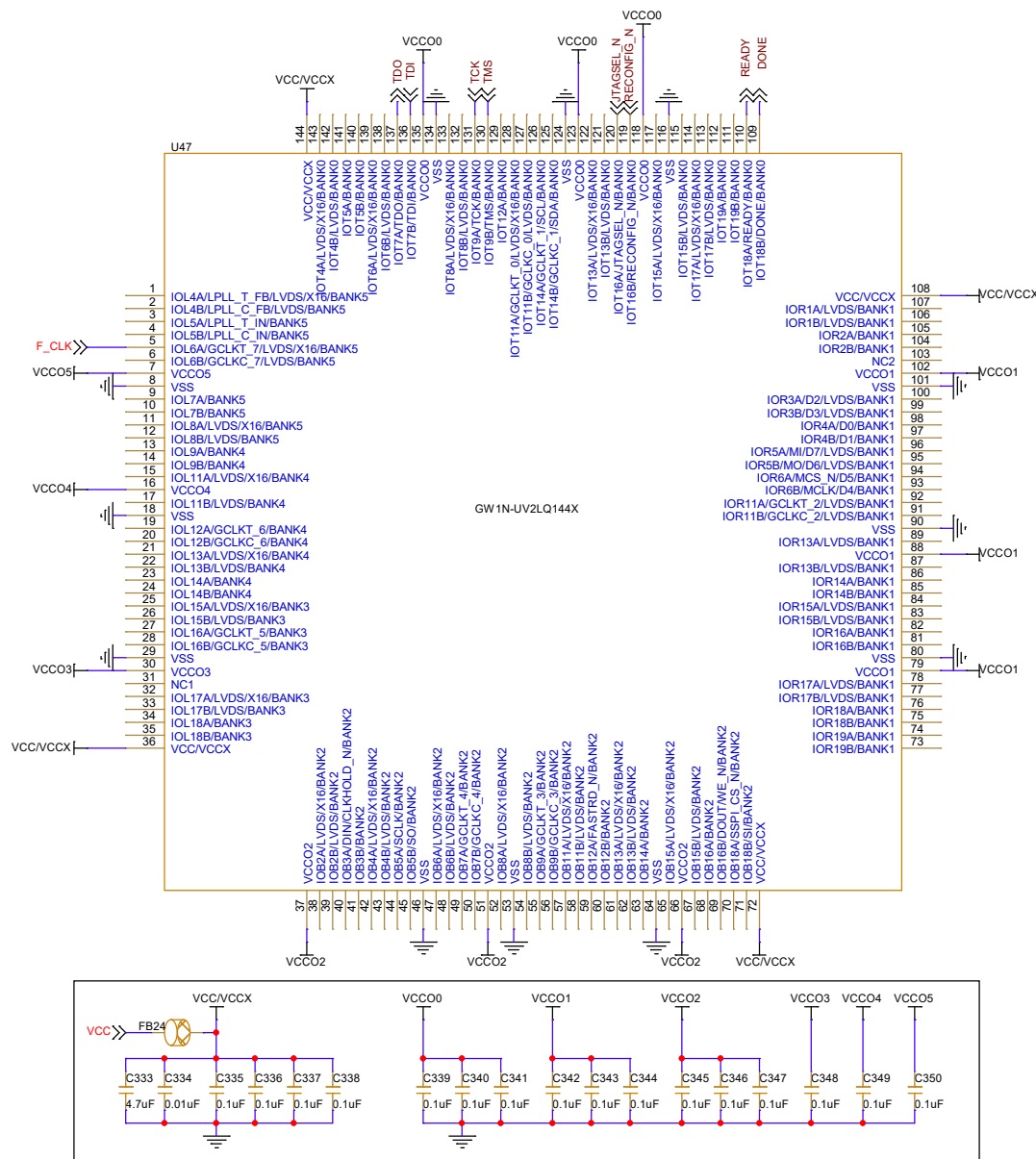
- 1.F CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal.
- 2.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title		
GOWIN Minimum System Diagram		
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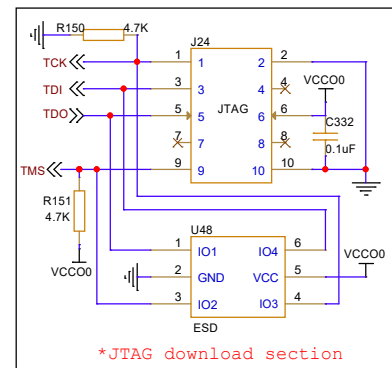
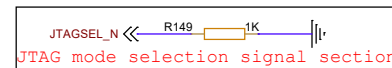
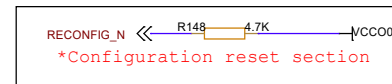
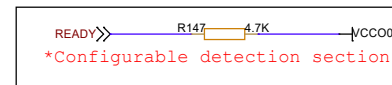
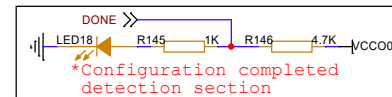


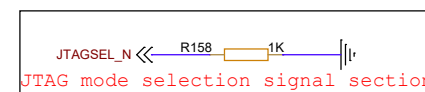
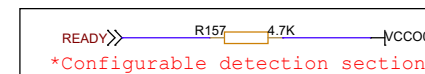
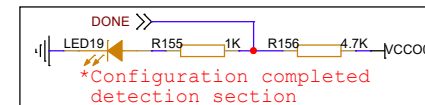
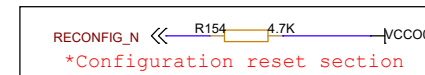
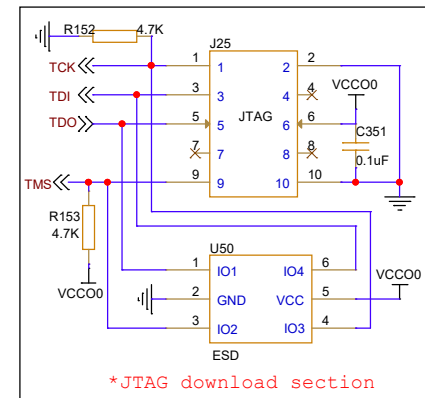
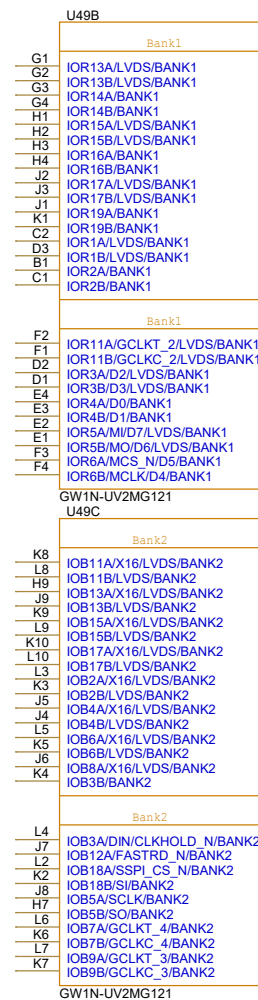
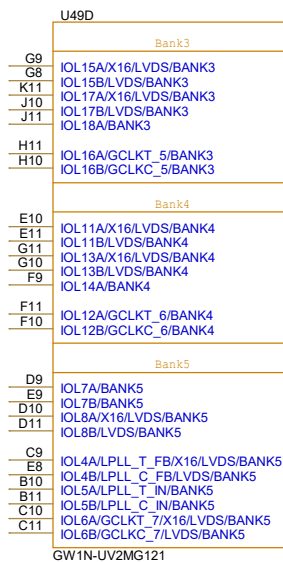
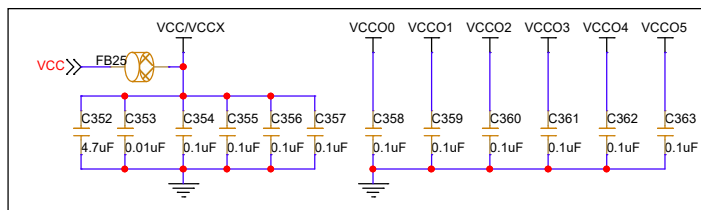
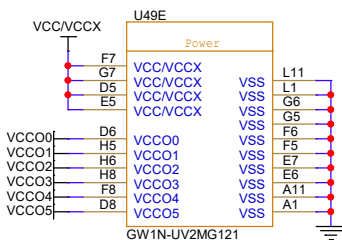
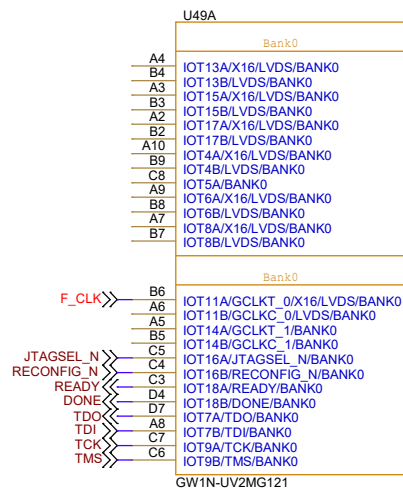
2. It is recommended that add an ESD protection chip to the JTAG download circuit.



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.





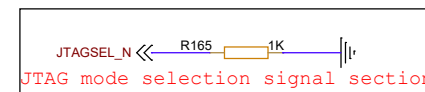
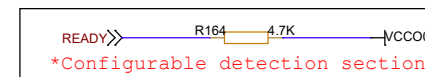
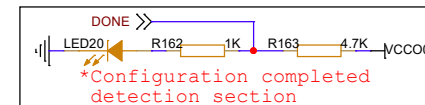
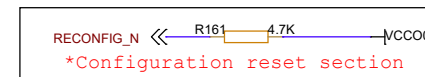
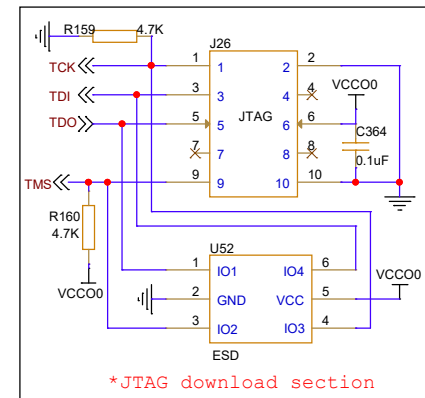
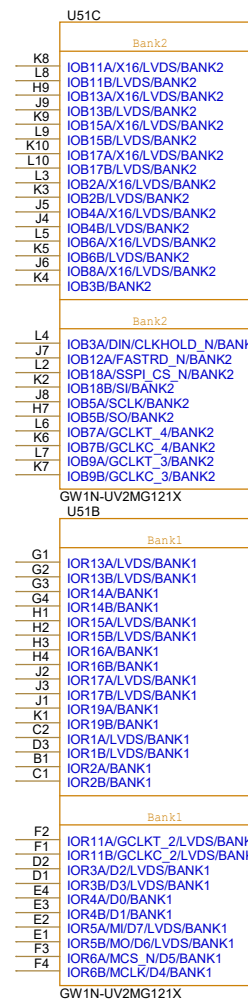
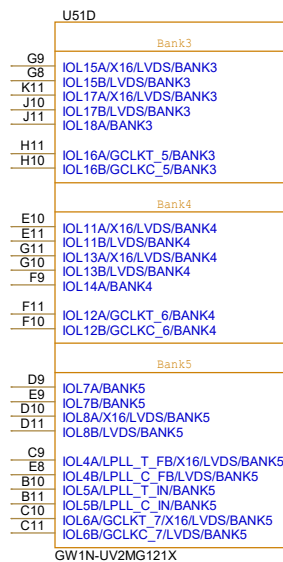
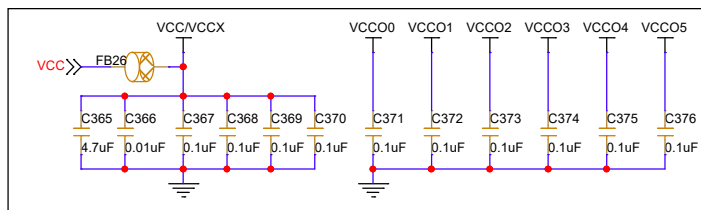
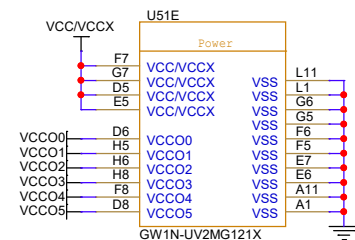
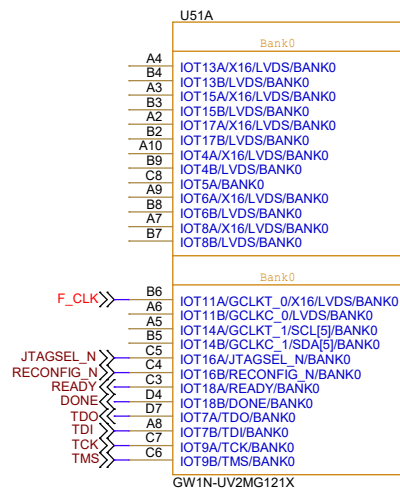
Notes:

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.

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GOWIN Minimum System Diagram		
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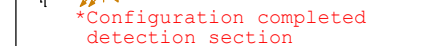
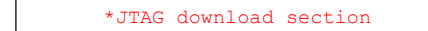
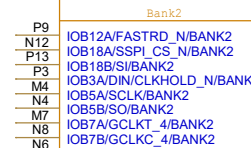
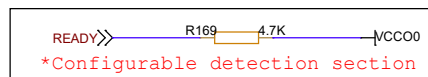
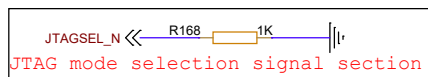
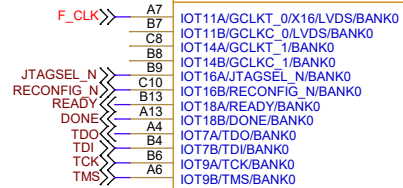
Notes:

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	2.2
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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.

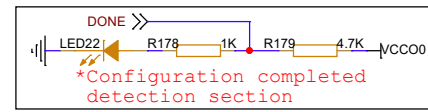
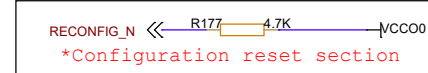
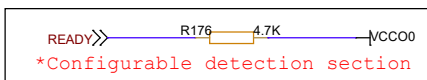
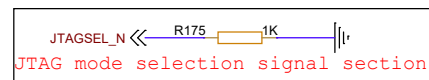
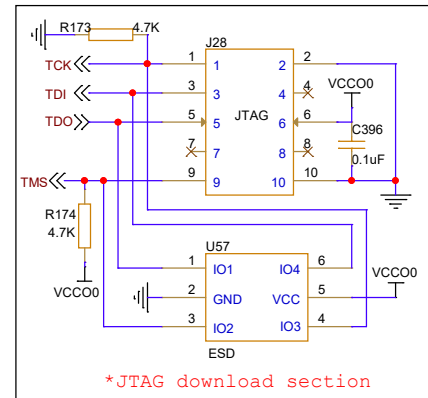
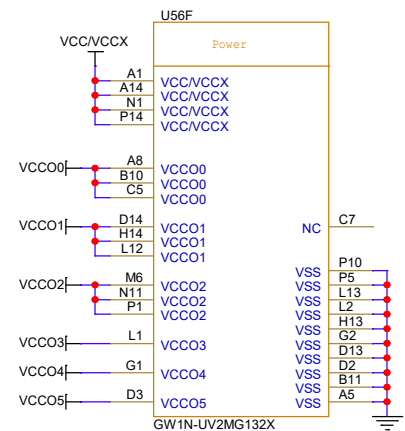
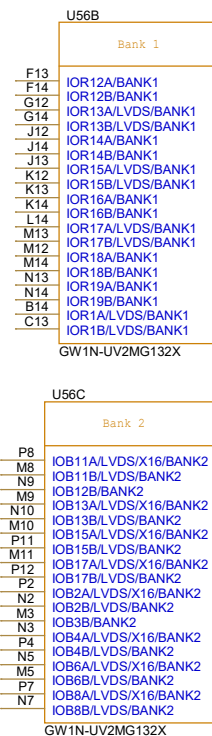
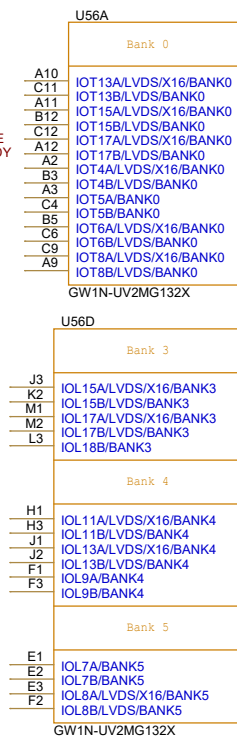
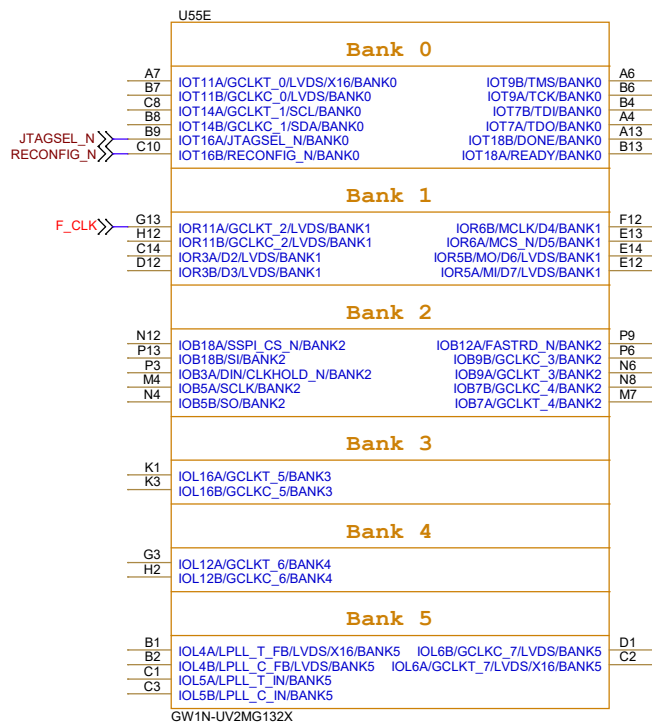
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Size B	Document Number GW1N-UV2MG132		Rev 2.2
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D

C

B

A



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.

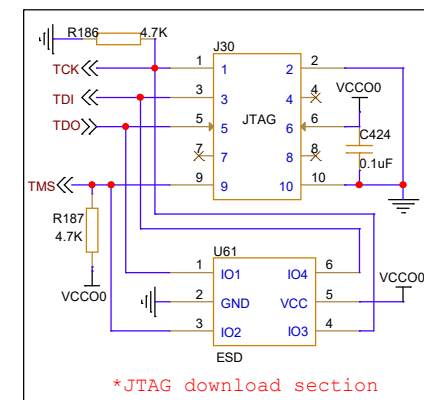
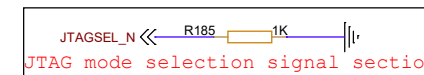
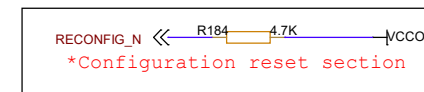
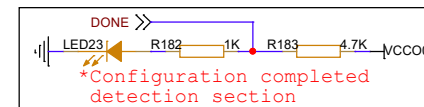
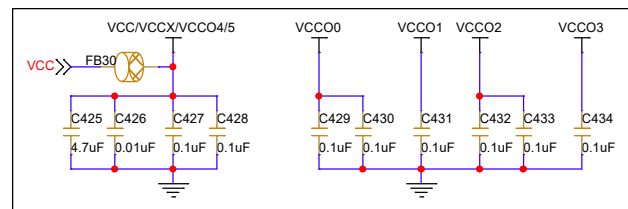
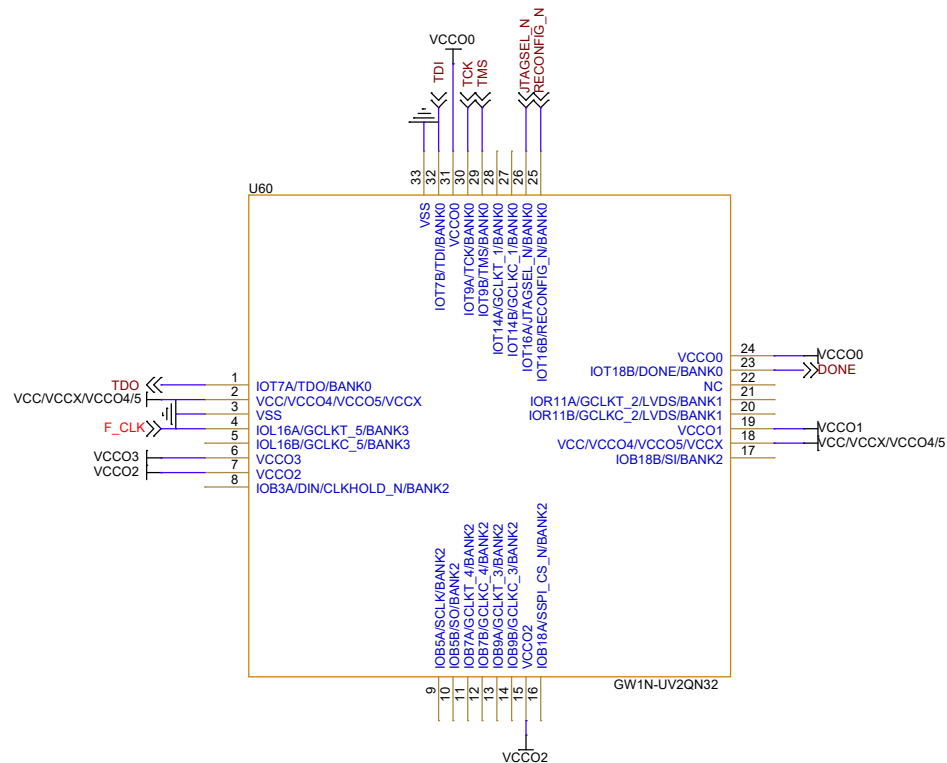
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GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-UV2MG132X	2.2
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A

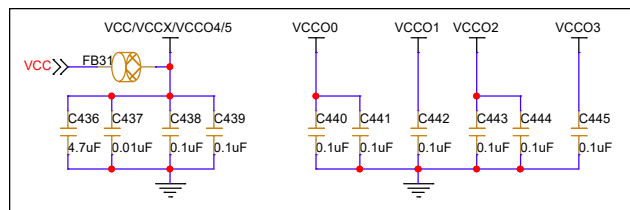
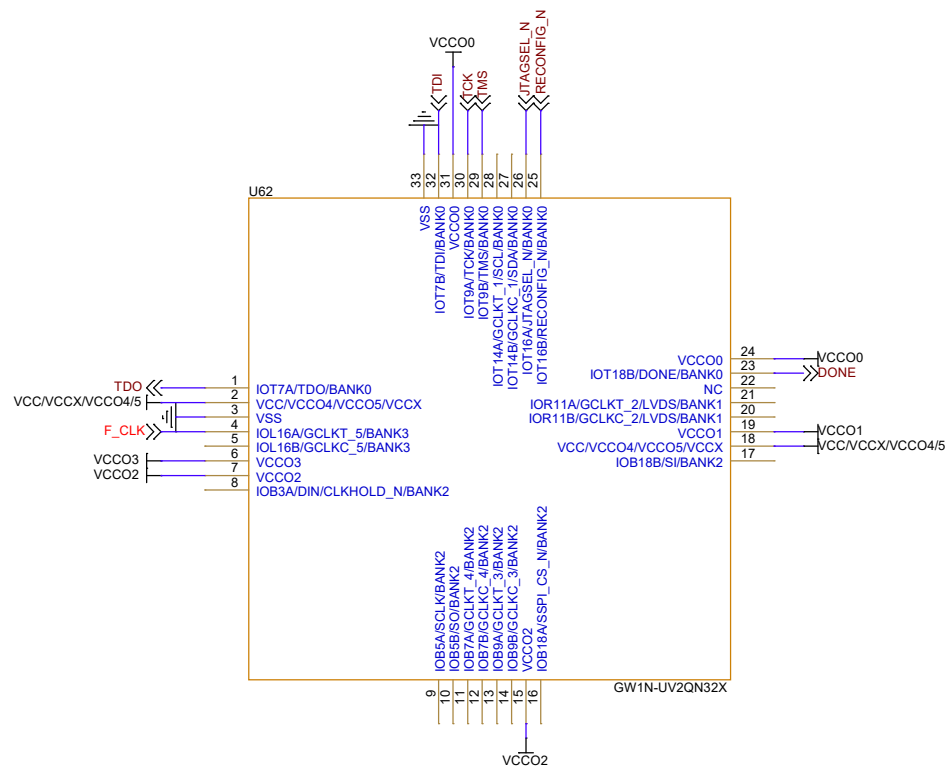


Notes:

1.F CLK signal is an external input clock signal.

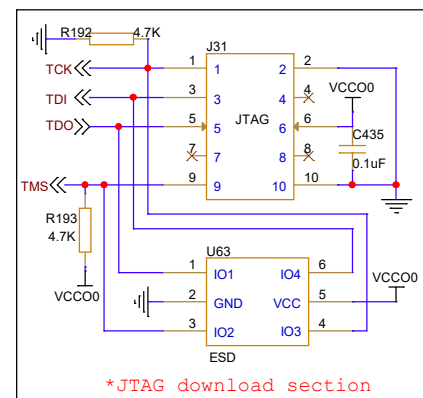
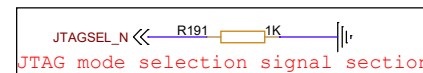
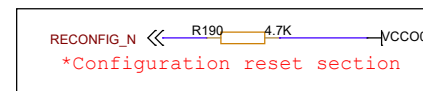
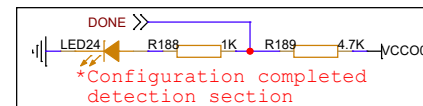
It is recommended that F CLK signal be provided through an active oscillator crystal.

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

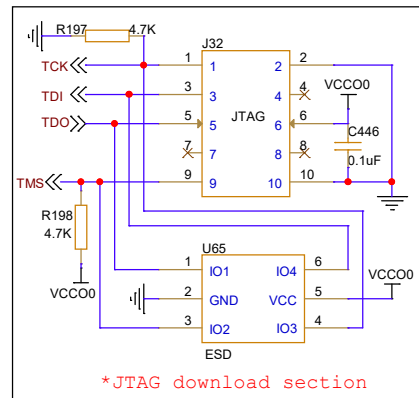
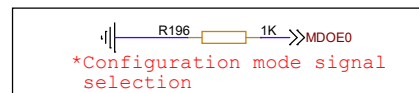
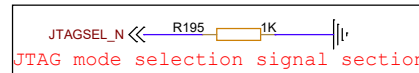
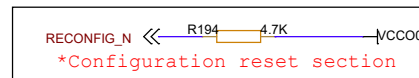
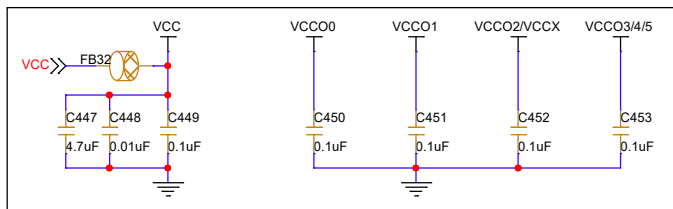
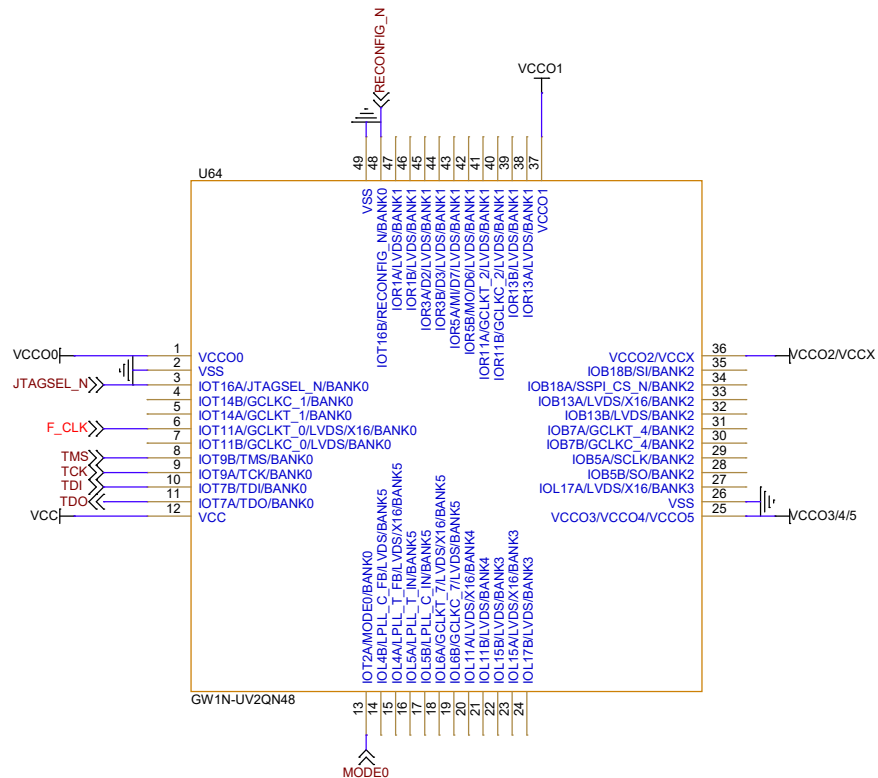


Notes:

- 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.



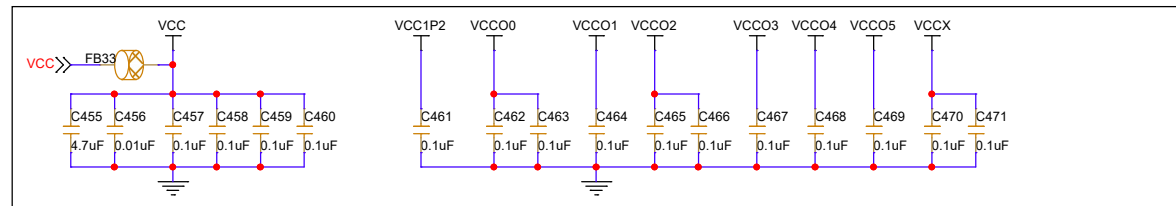
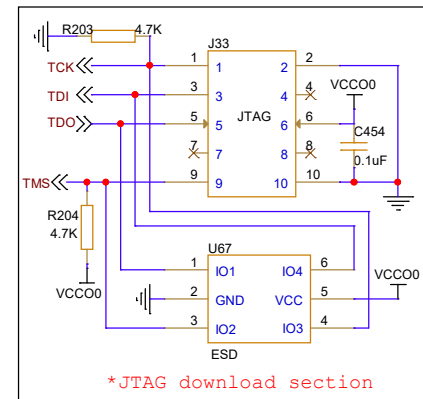
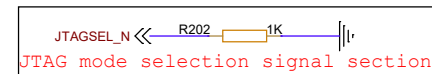
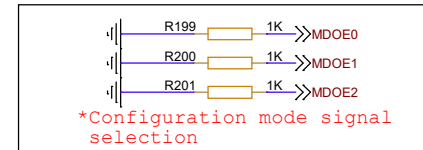
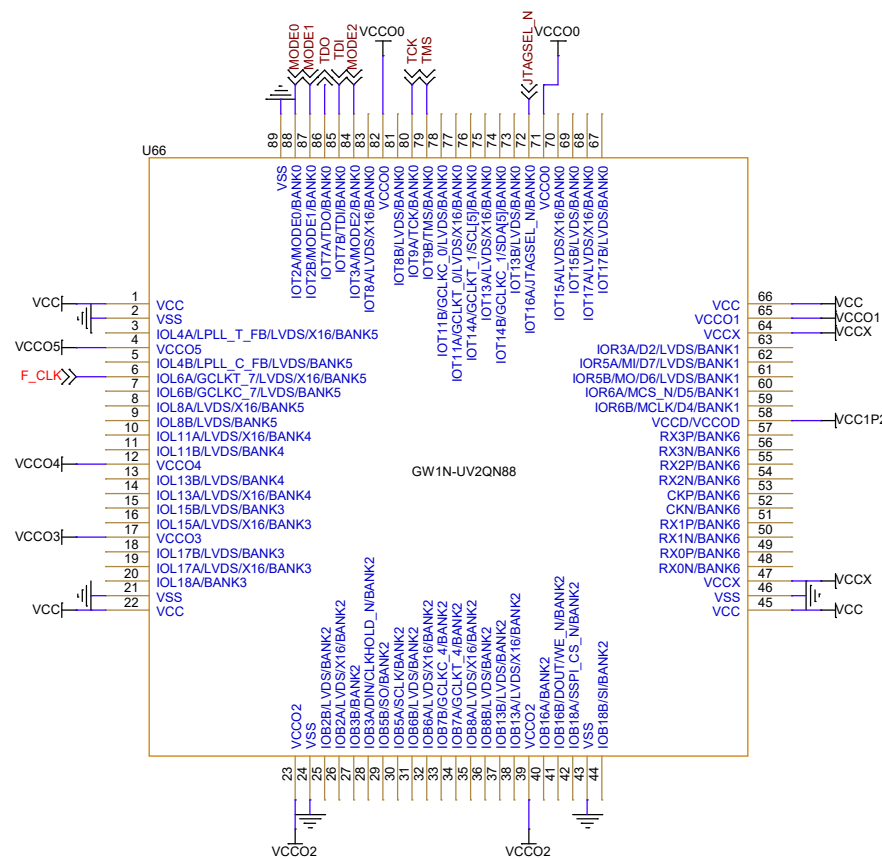
Title			
GOWIN Minimum System Diagram			
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Notes:

- 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-UV2QN48	2.2
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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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