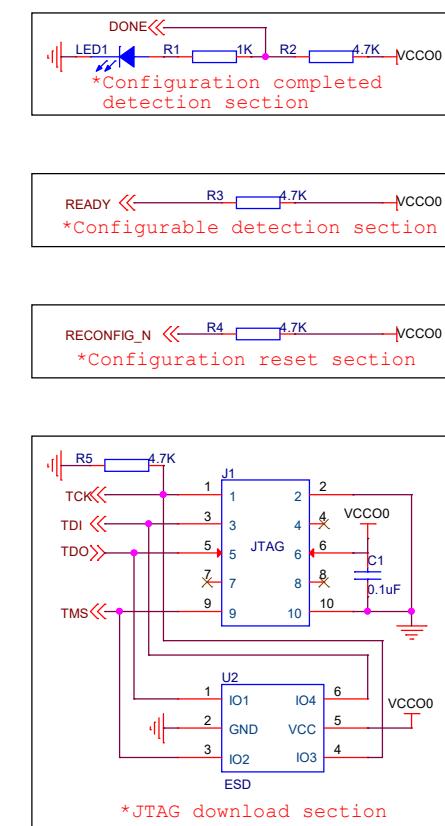
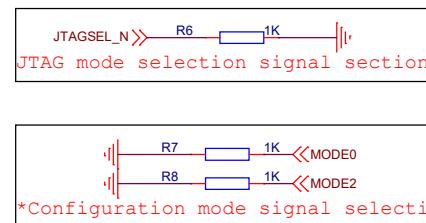
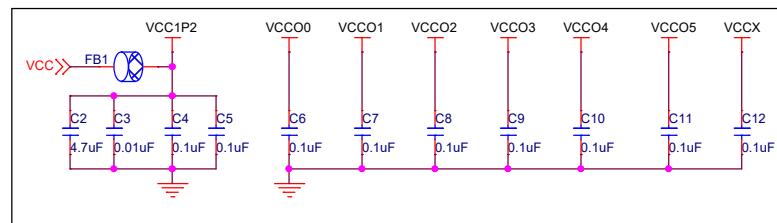
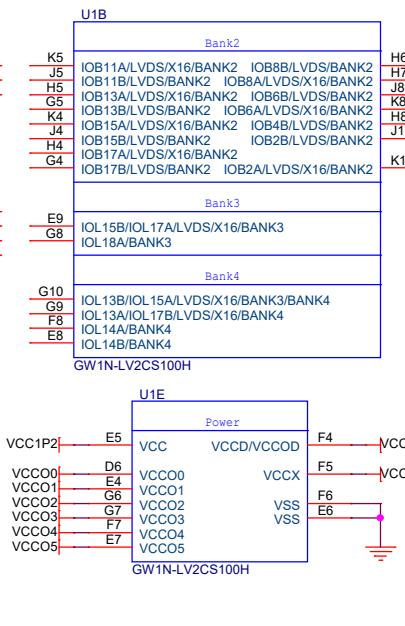
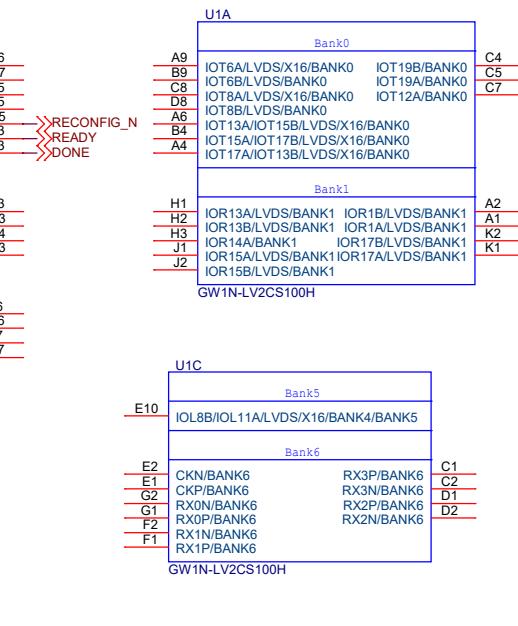
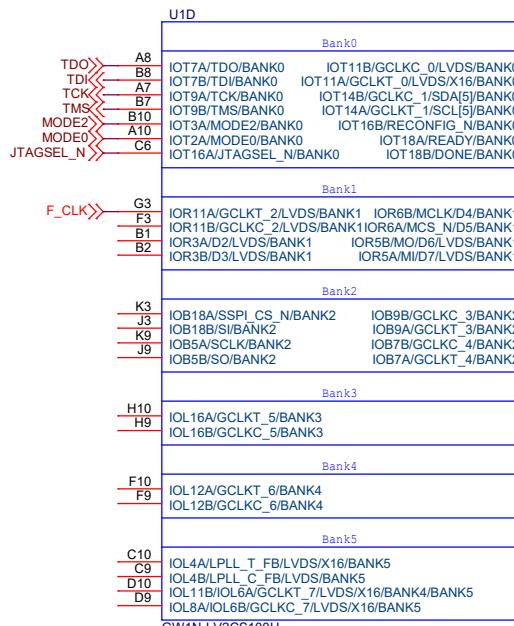


# GW1N-LV2CS100H

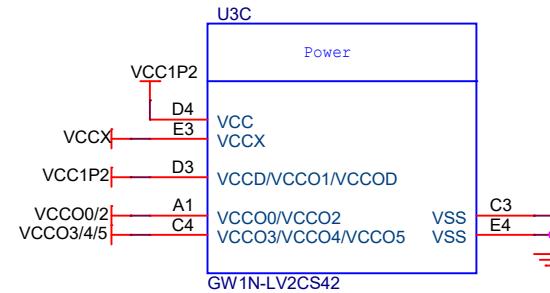
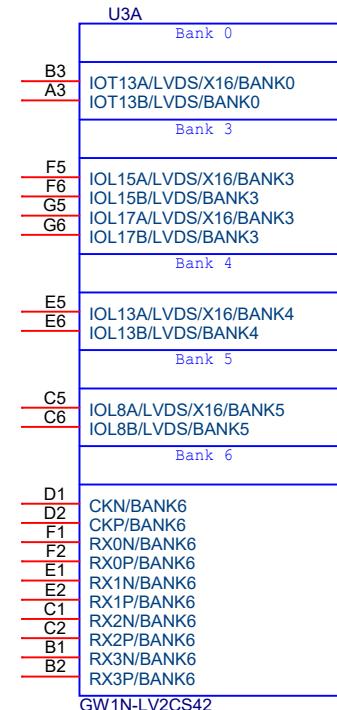
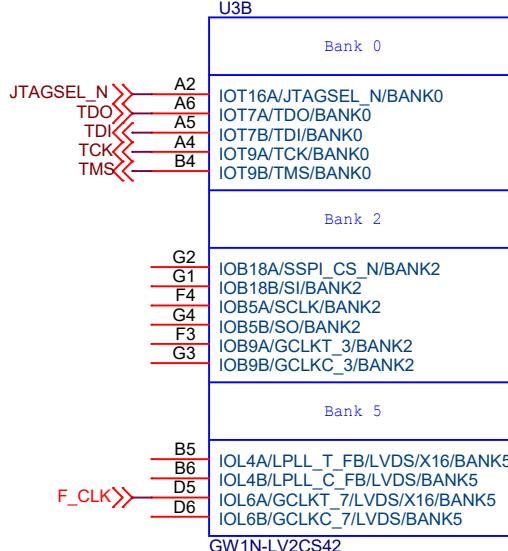


## Notes:

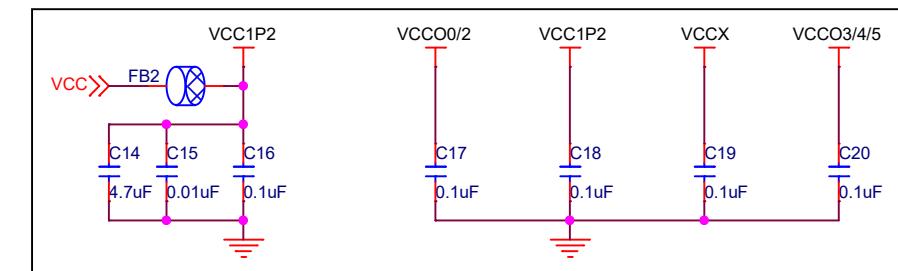
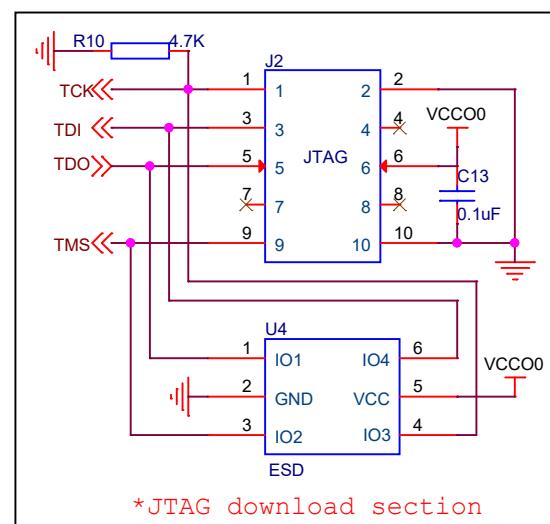
- F\_CLK signal is an external input clock signal.  
It is recommended that F\_CLK signal be provided through an active oscillator crystal.
- It is recommended that add an ESD protection chip to the JTAG download circuit.

Title		
GOWIN Minimum System Diagram		
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B	GW1N-LV2CS100H	2.0
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# GW1N-LV2CS42



JTAG mode selection signal section



## 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

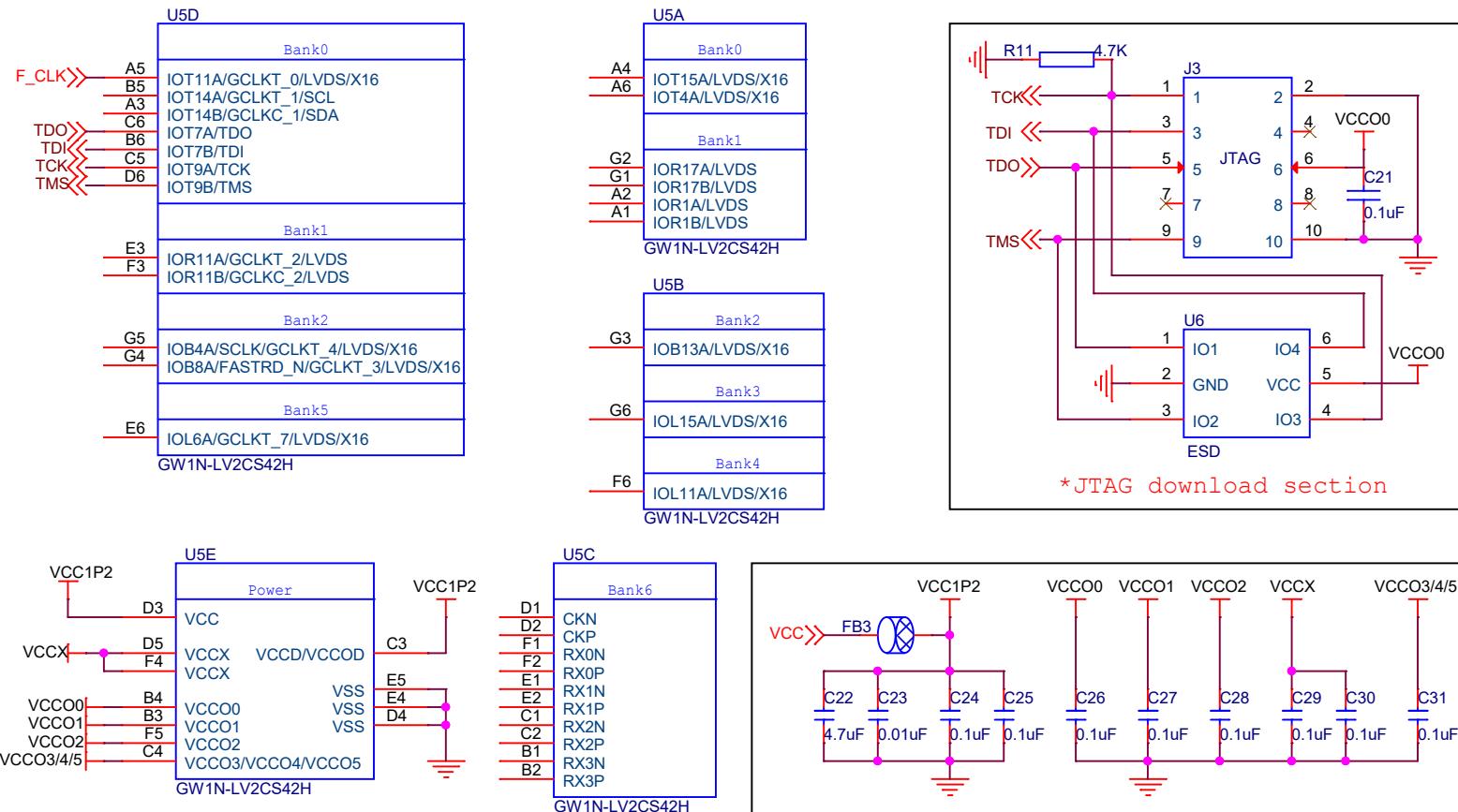
Size A4 Document Number  
GW1N-LV2CS42

Rev 2.0

Date: Monday, April 17, 2023

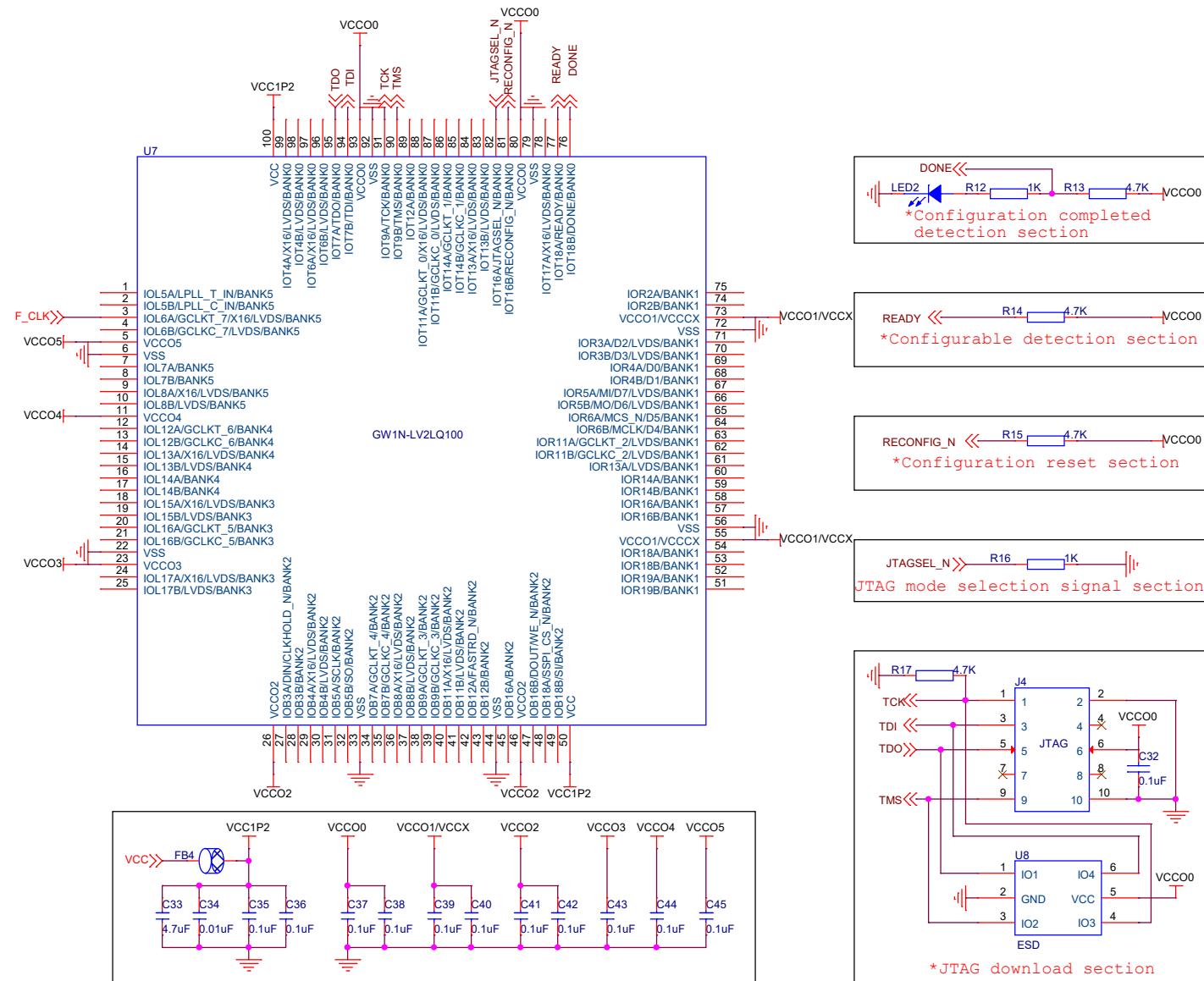
Sheet 2 of 33

# 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.

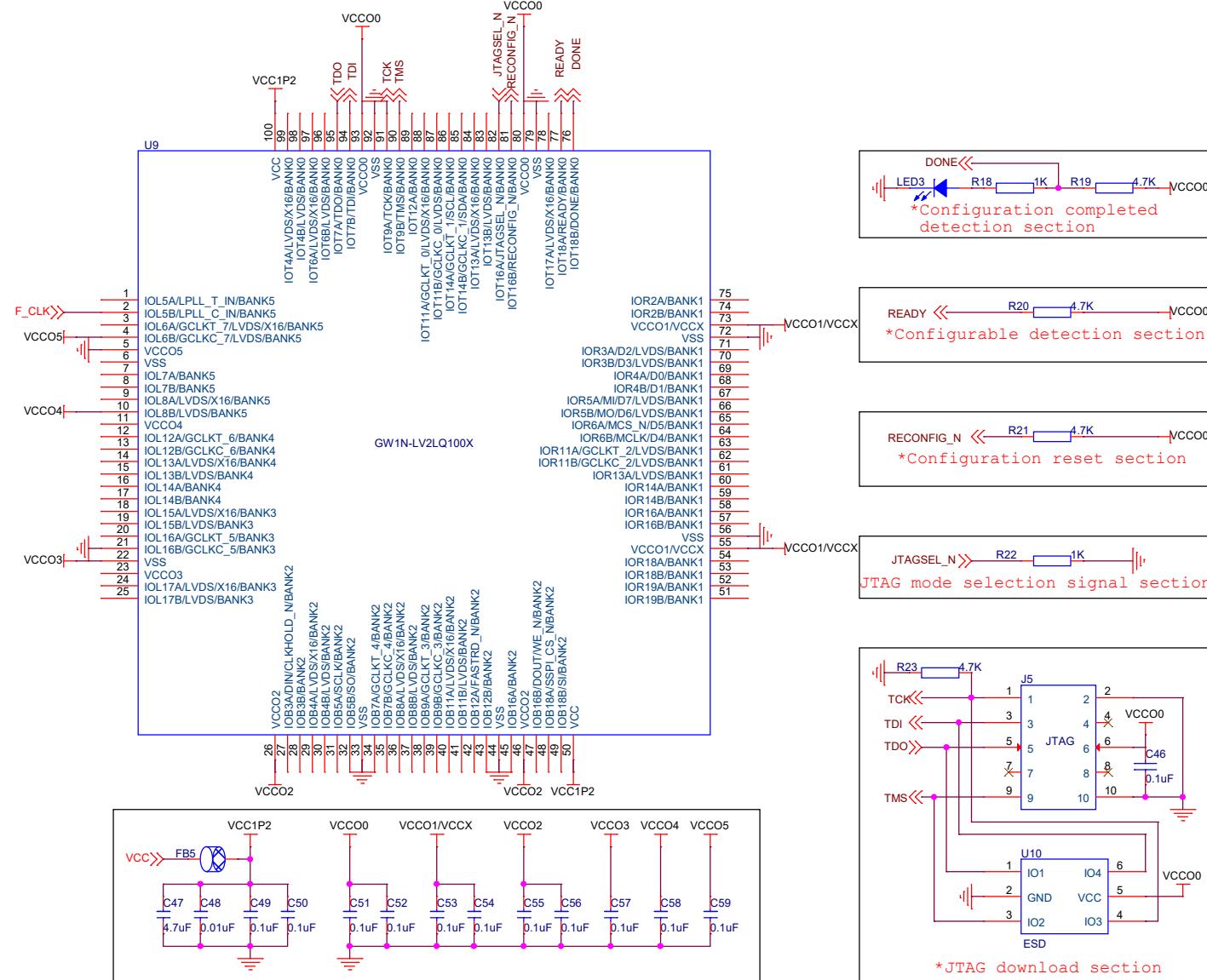


## Notes

- Notes:

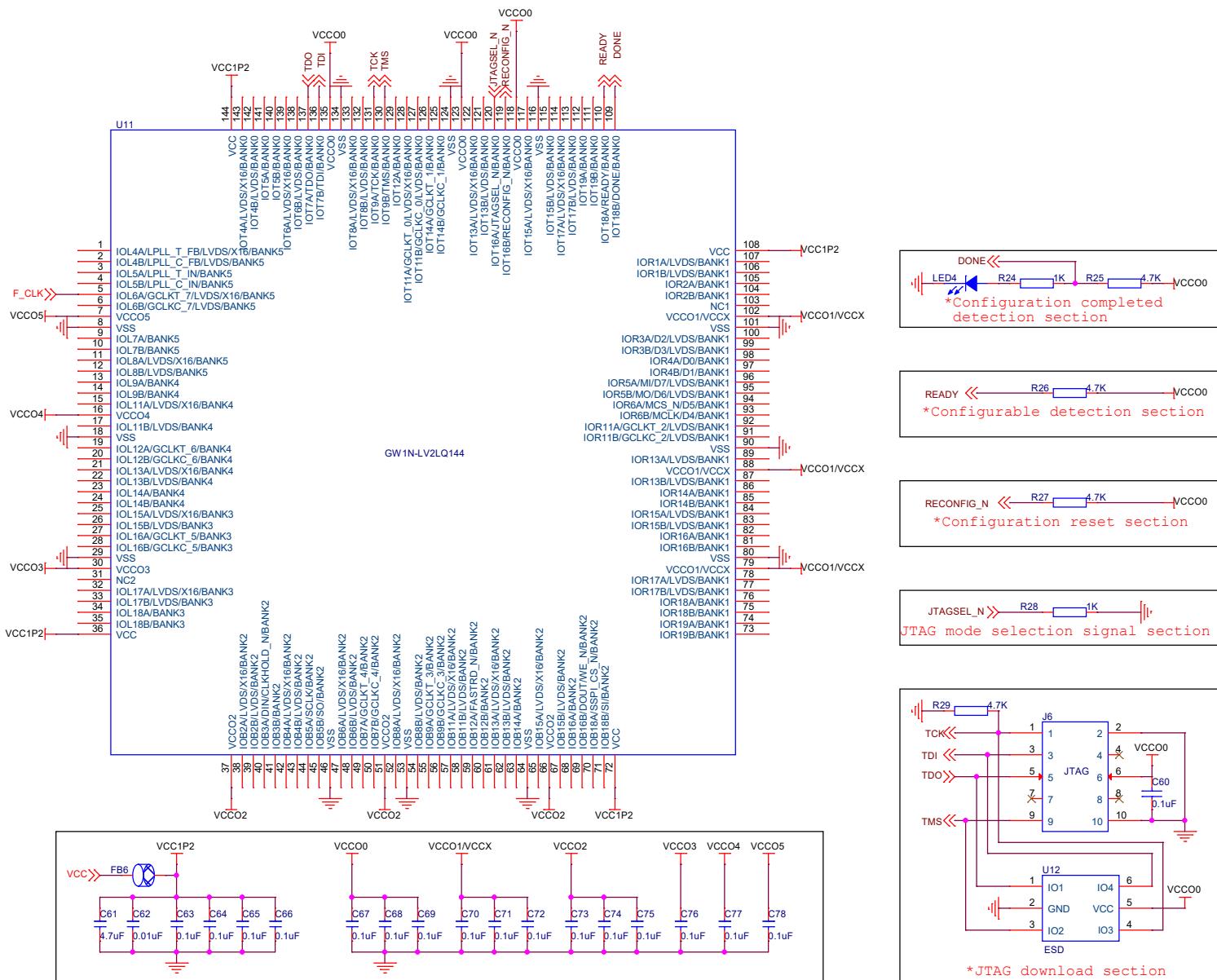
  1. F<sub>CLK</sub> signal is an external input clock signal.  
It is recommended that F<sub>CLK</sub> signal be provided through an active oscillator crystal.
  2. It is recommended that add an ESD protection chip to the JTAG download circuit.

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	
Size B	Document Number GW1N-LV2LQ100X
Rev 2.0	Date: Monday, April 17, 2023

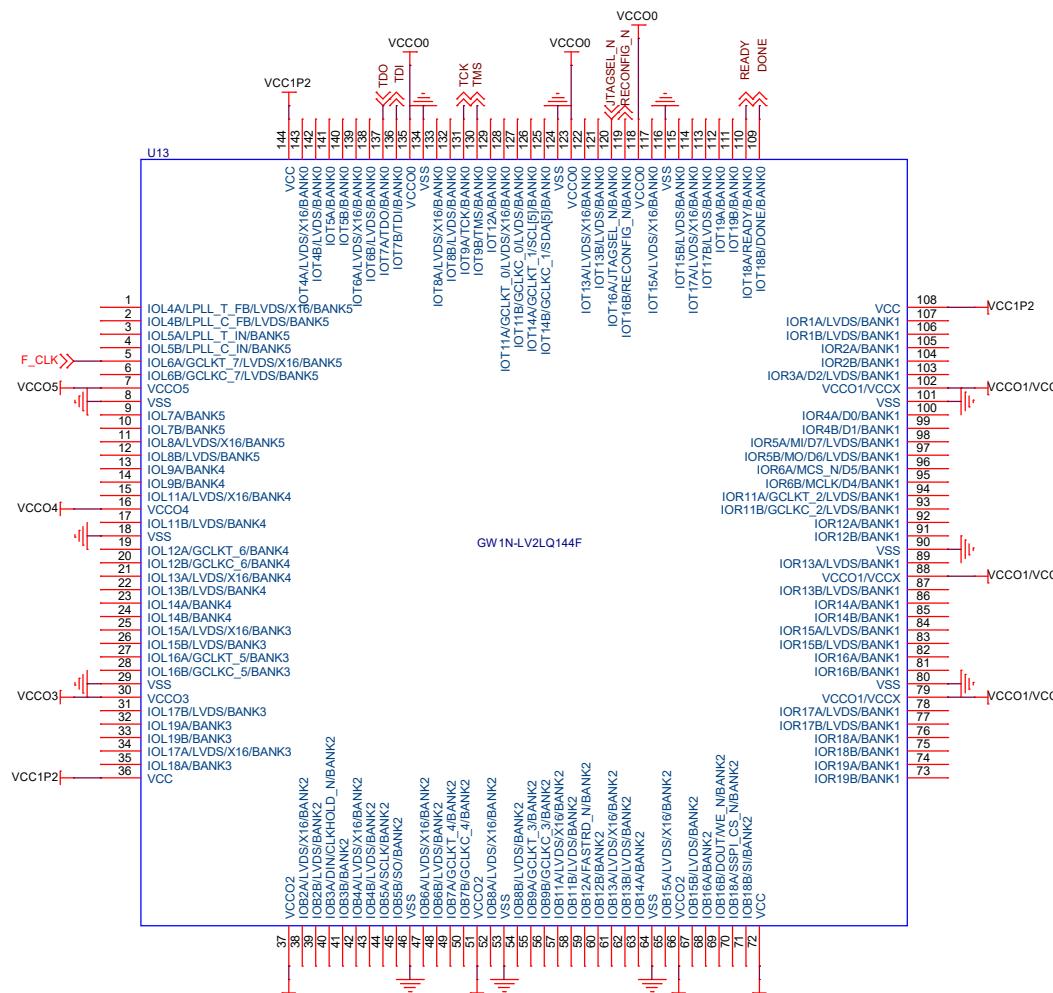


## Notes

- 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		
Size A3	Document Number GW1-NV2LQ144	Rev 2.0
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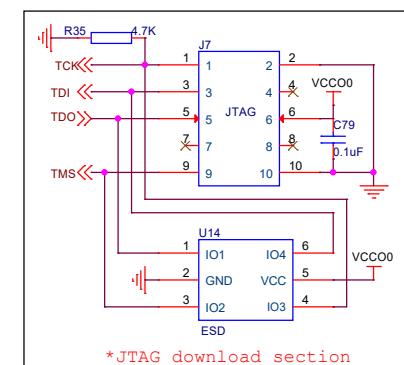
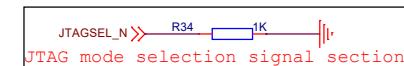
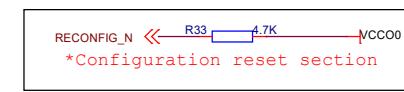
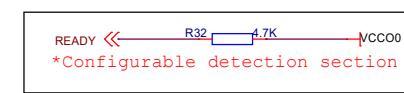
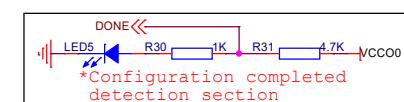


## Notes:

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

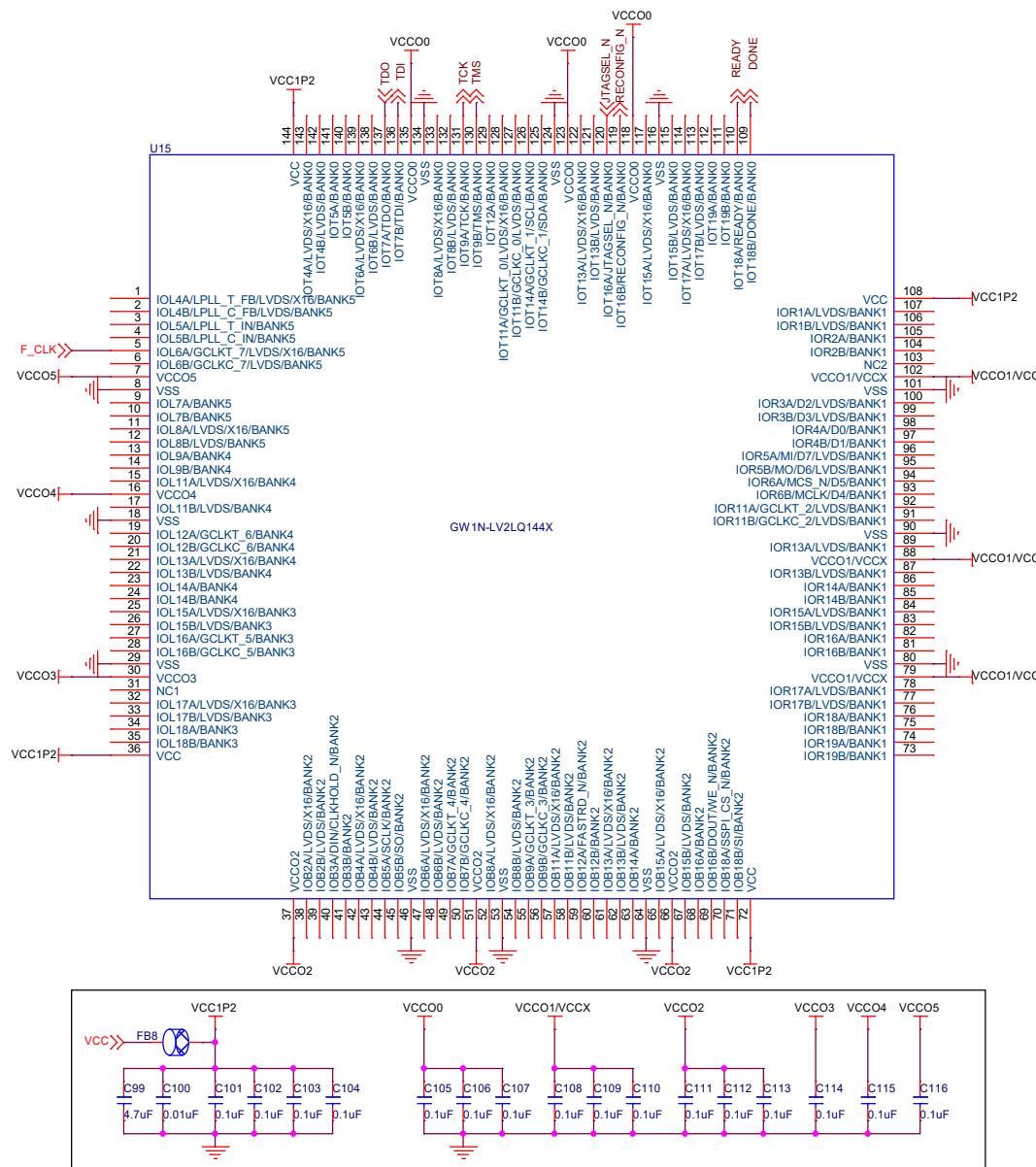
It is recommended that F CLK signal be provided through an active oscillator crystal.

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



Title	
GOWIN Minimum System Diagram	
Size	Document Number
A3	GW1N-LV2LQ144F
Date:	Monday, April 17, 2023
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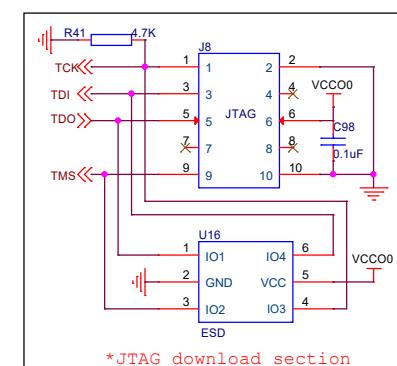
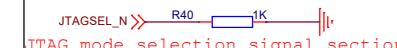
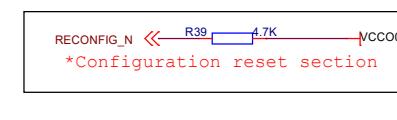
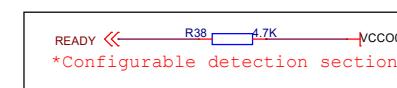
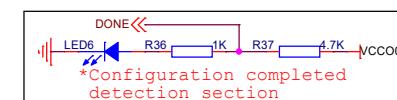
D

**Notes:**

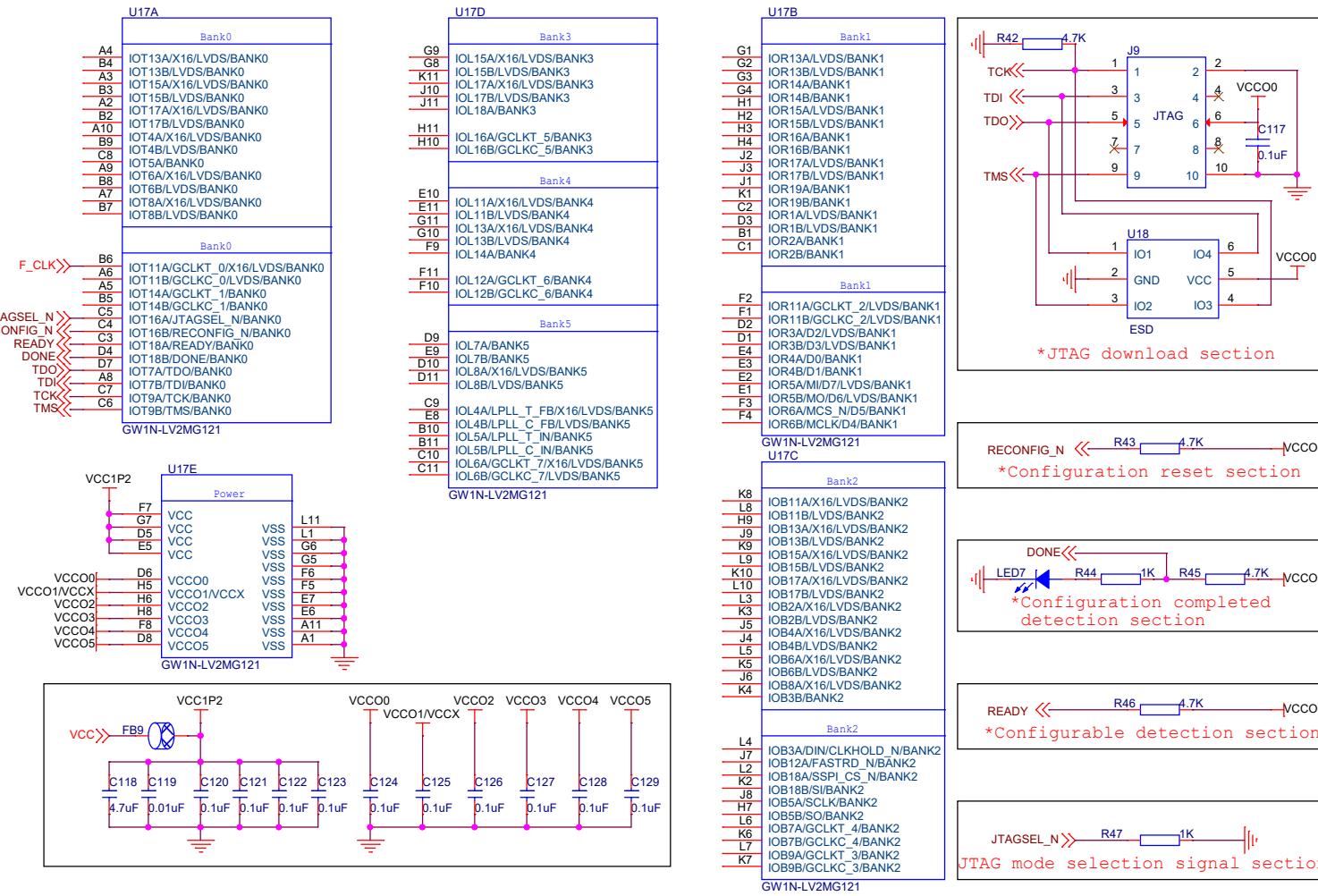
1. F CLK signal is an external input clock signal.

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

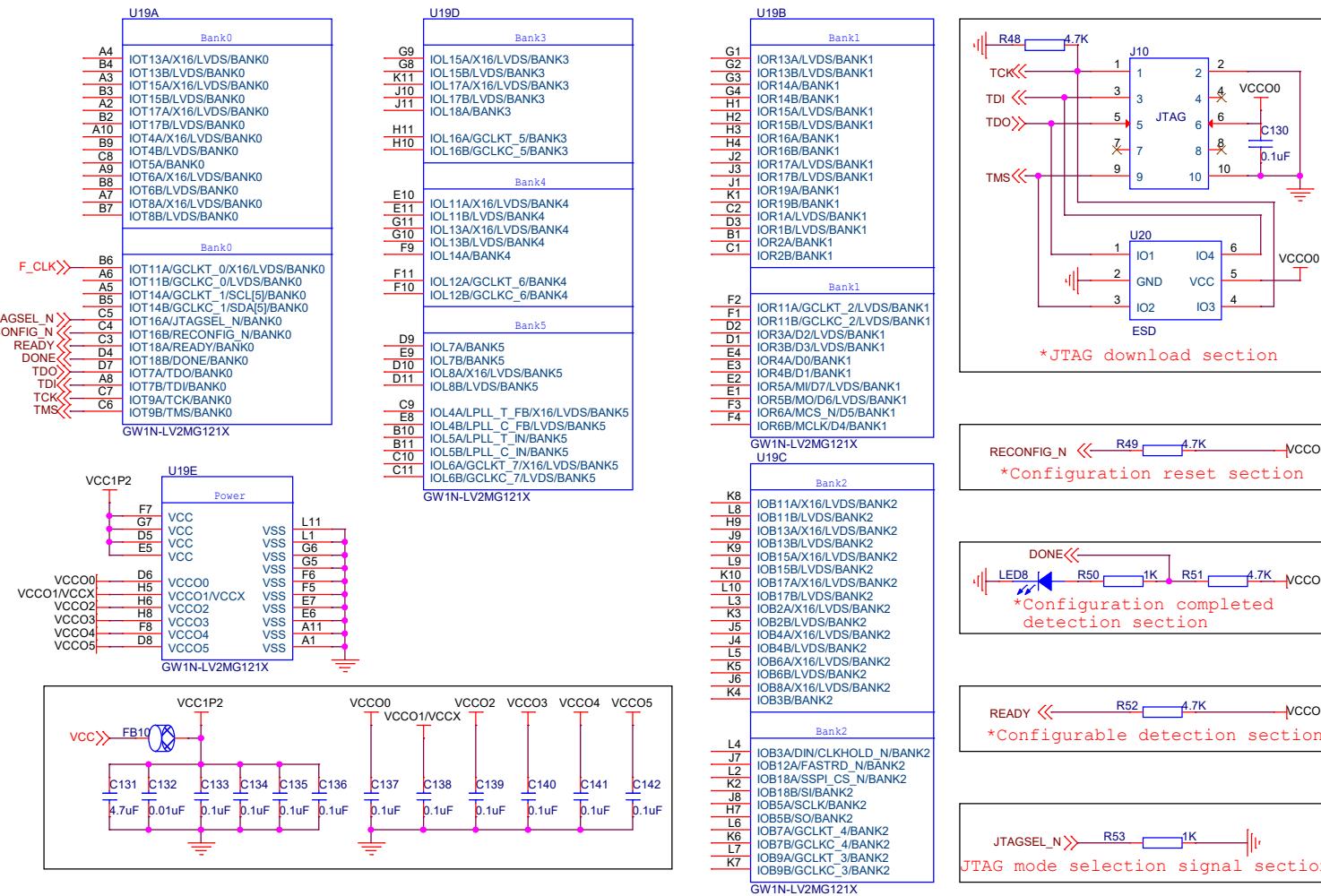
2. It is recommended that add an ESD protection chip to the JTAG download circuit.



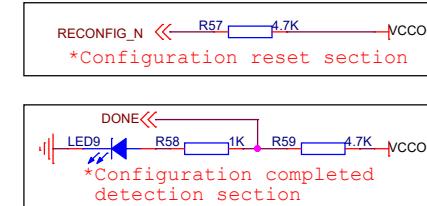
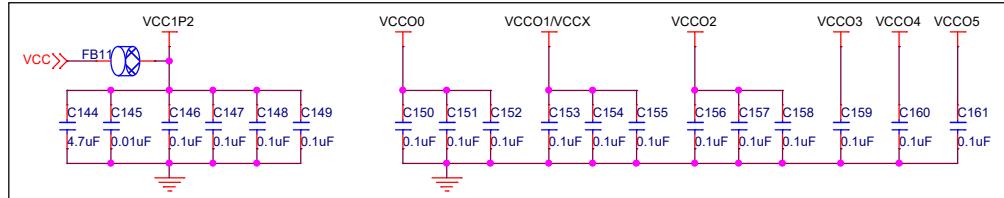
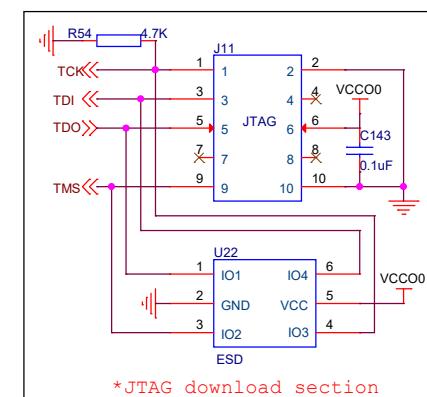
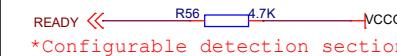
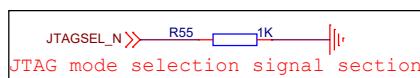
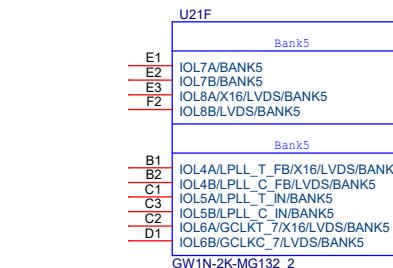
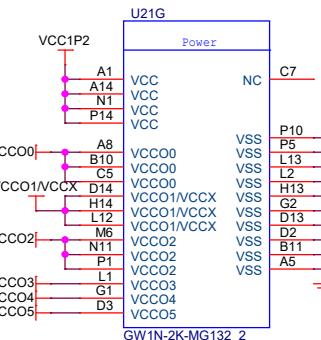
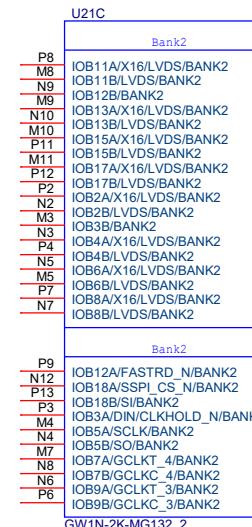
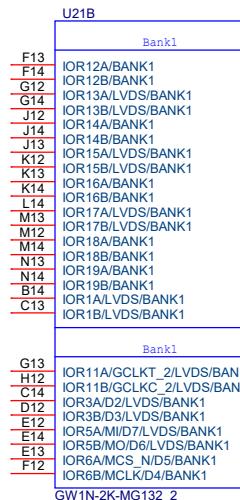
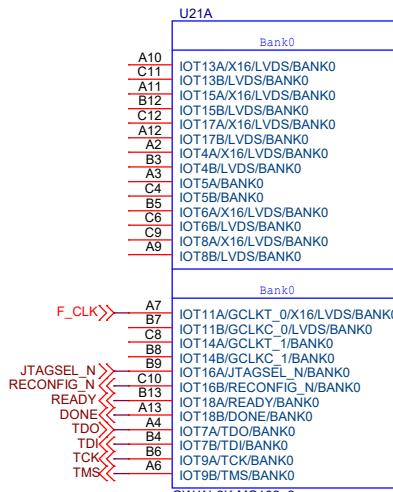
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Size	Document Number	GW1N-LV2LQ144X	
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GOWIN Minimum System Diagram		
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Title		
GOWIN Minimum System Diagram		
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B	GW1N-LV2MG121X	2.0
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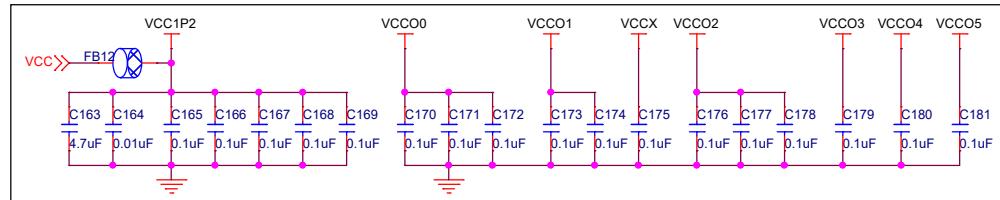
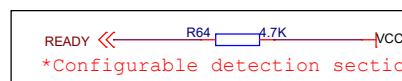
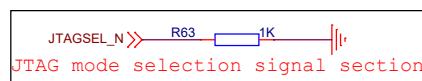
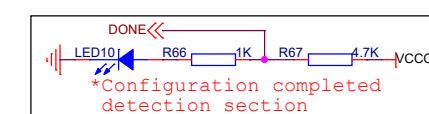
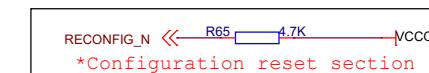
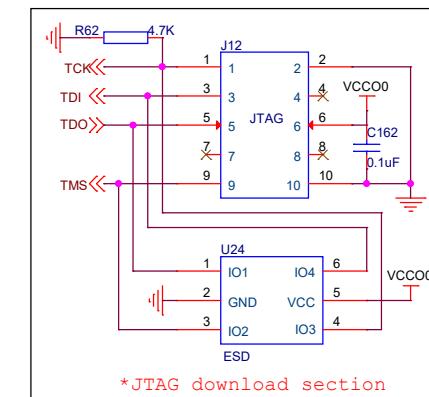
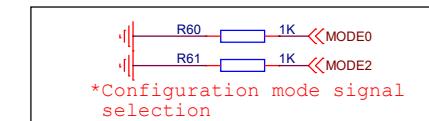
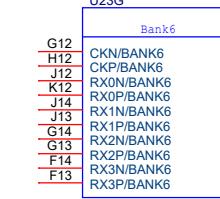
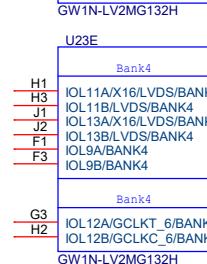
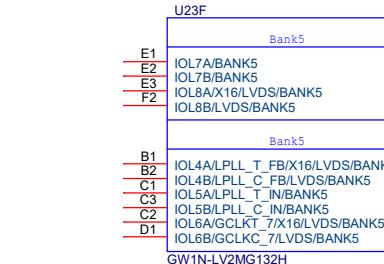
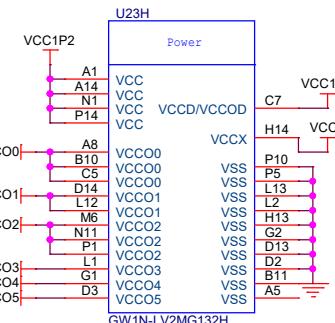
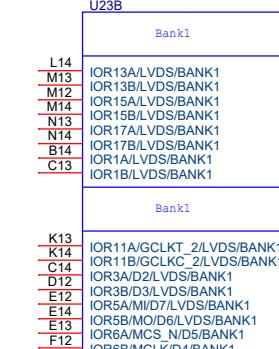
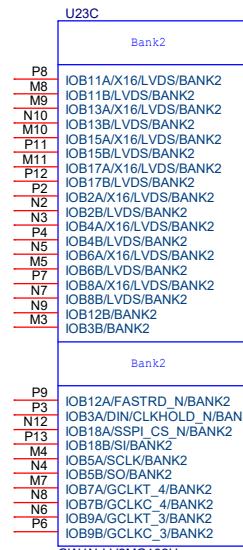
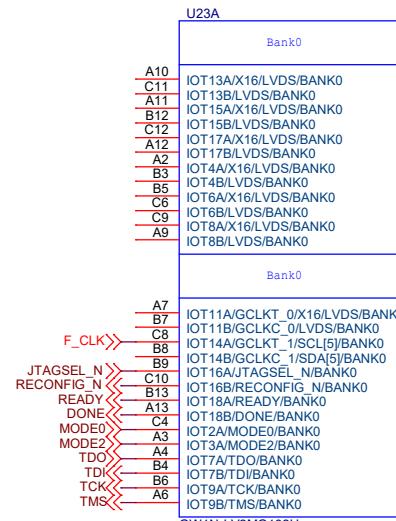


## Notes:

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.

Title		
GOWIN Minimum System Diagram		
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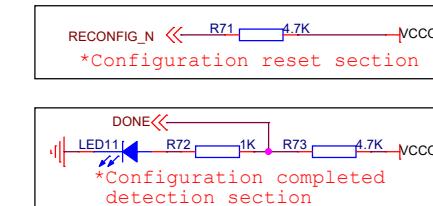
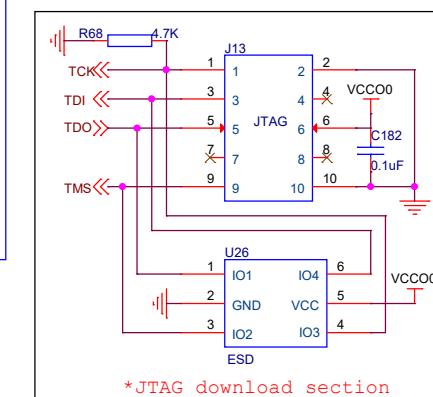
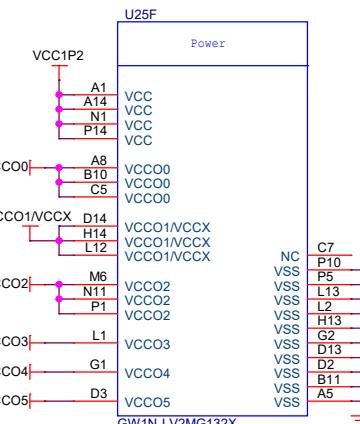
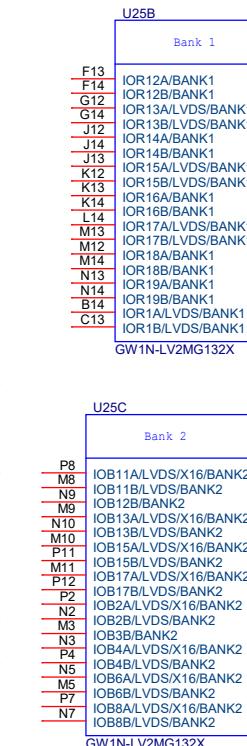
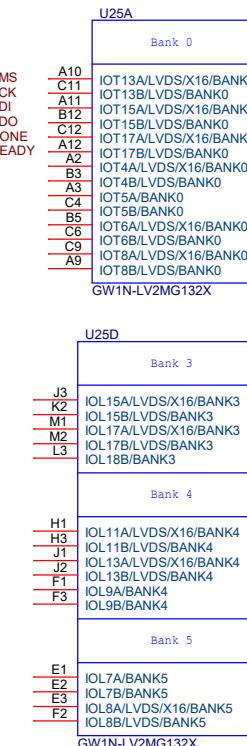
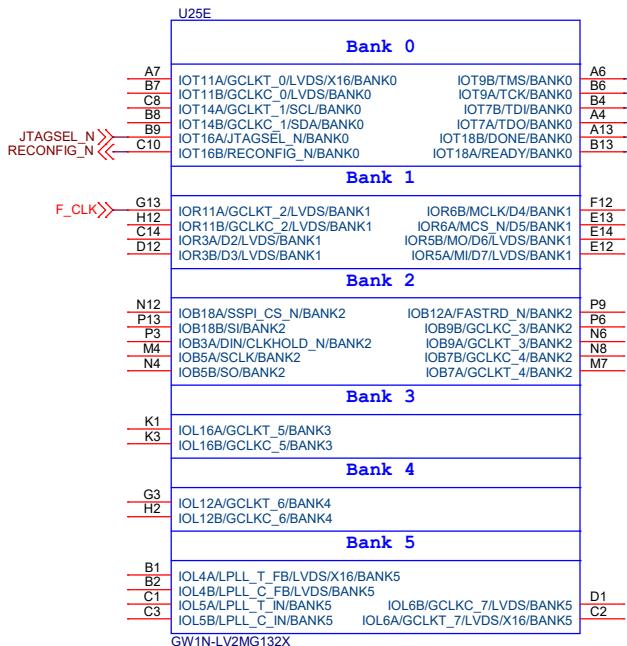
#### Notes:

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		
Size	Document Number	Rev
B	GW1N-LV2MG132H	2.0

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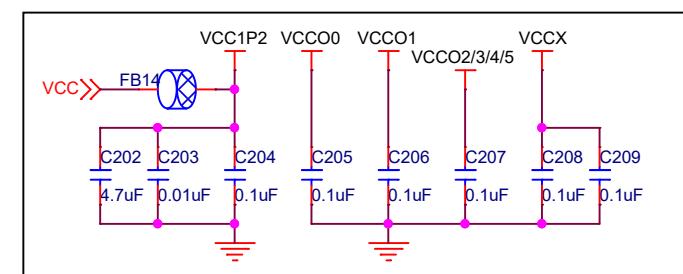
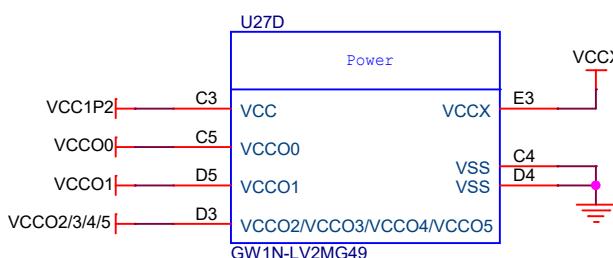
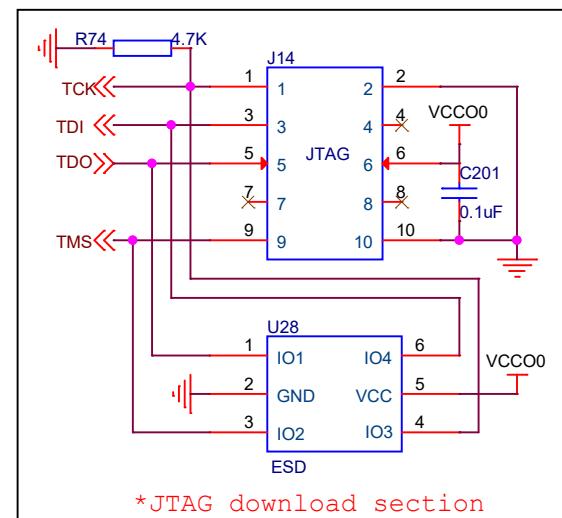
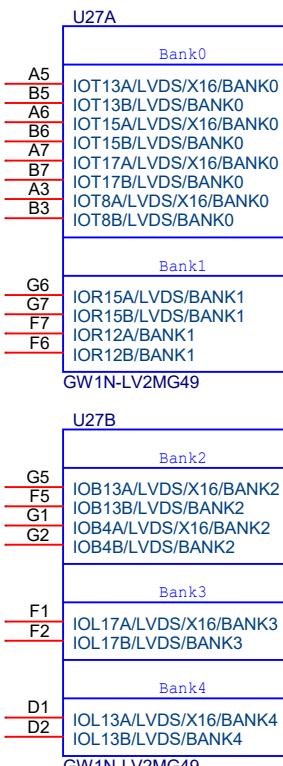
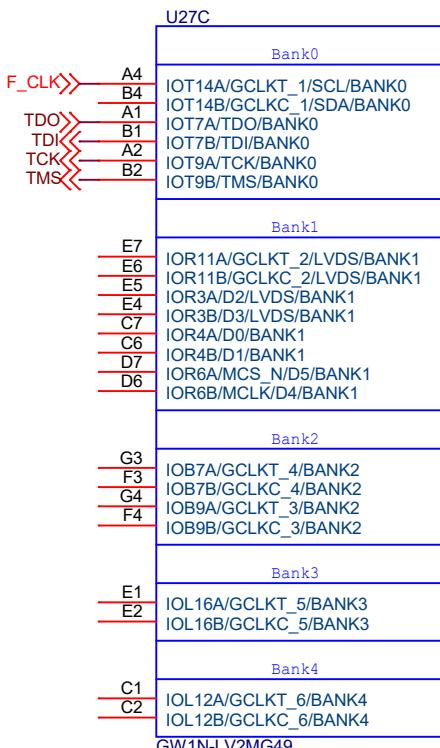


Notes:

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.

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.

Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
A4	GW1N-LV2MG49	2.0
Date:	Monday, April 17, 2023	

D

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C

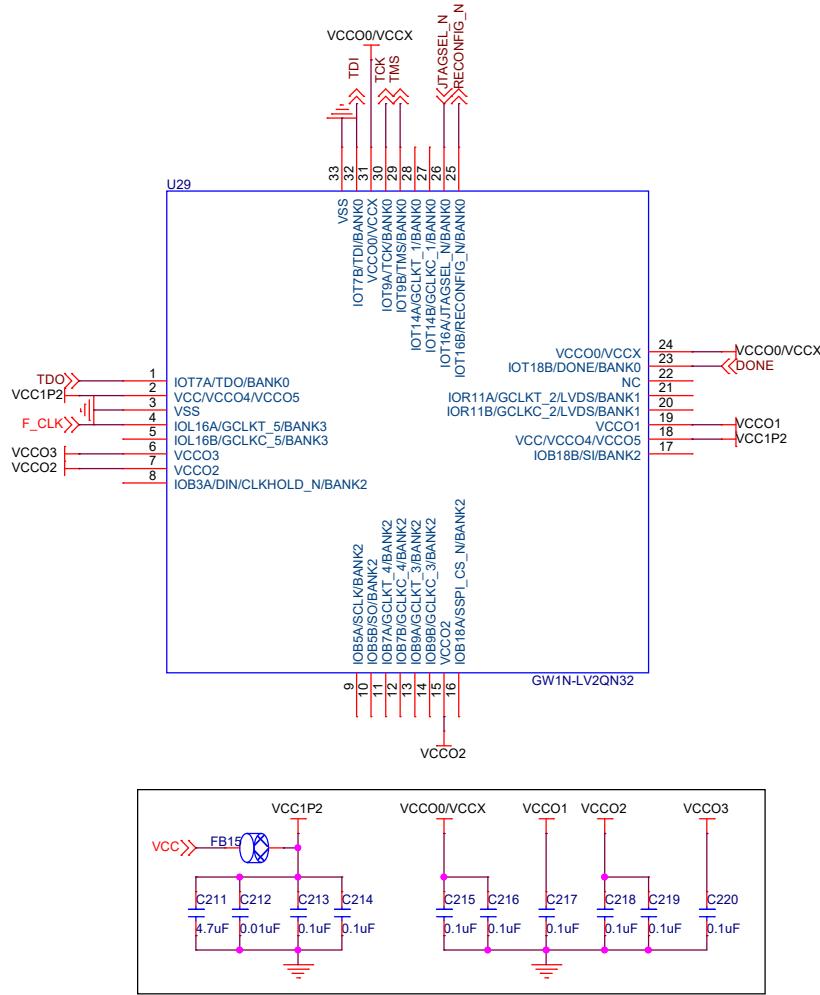
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A

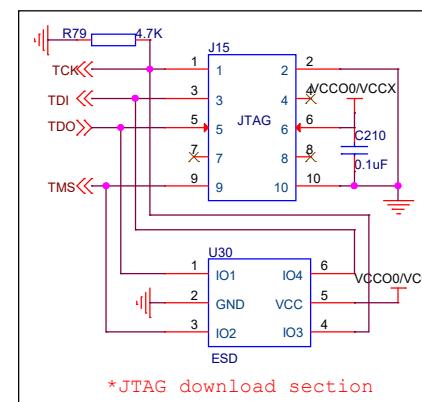
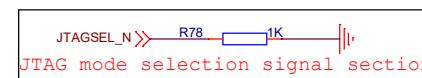
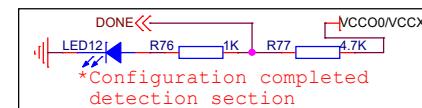
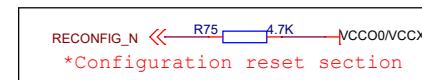


## Notes:

1. F\_CLK signal is an external input clock signal.

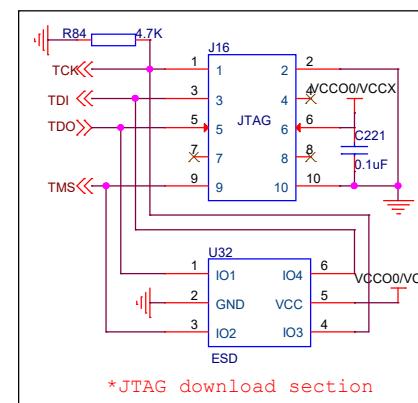
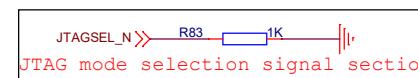
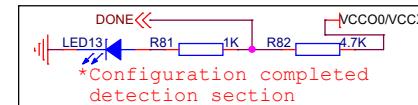
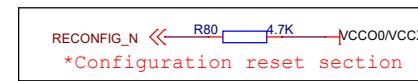
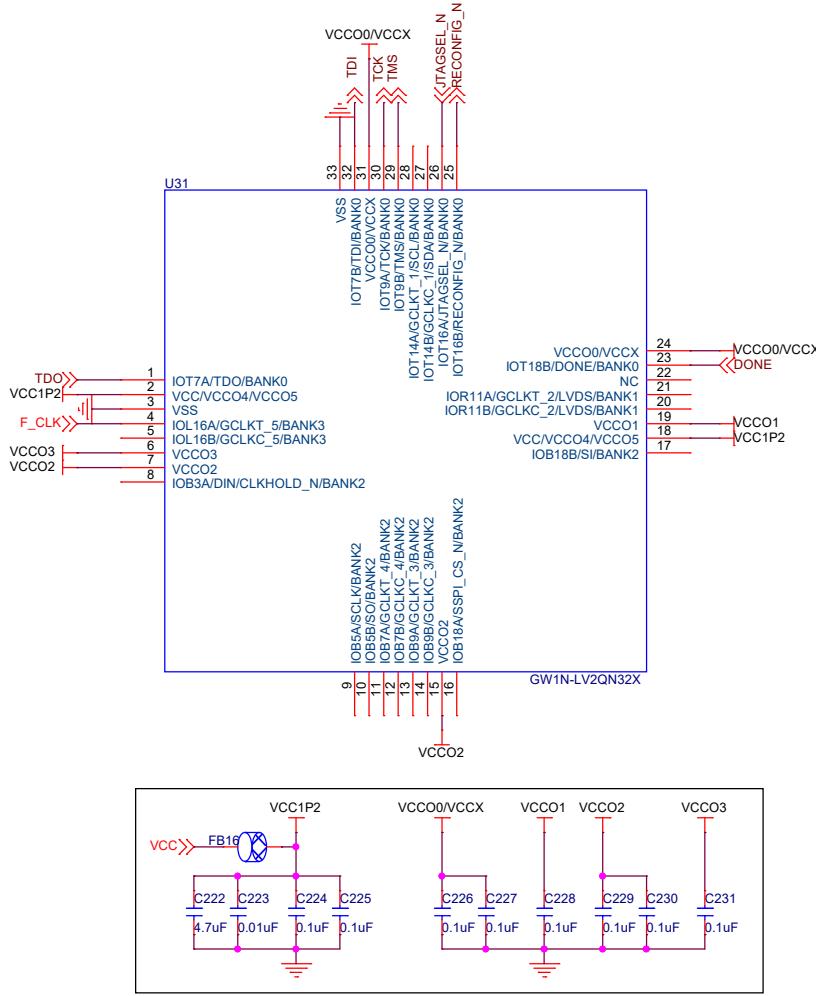
It is recommended that F\_CLK signal be provided through an active oscillator crystal.

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



Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2QN32	2.0

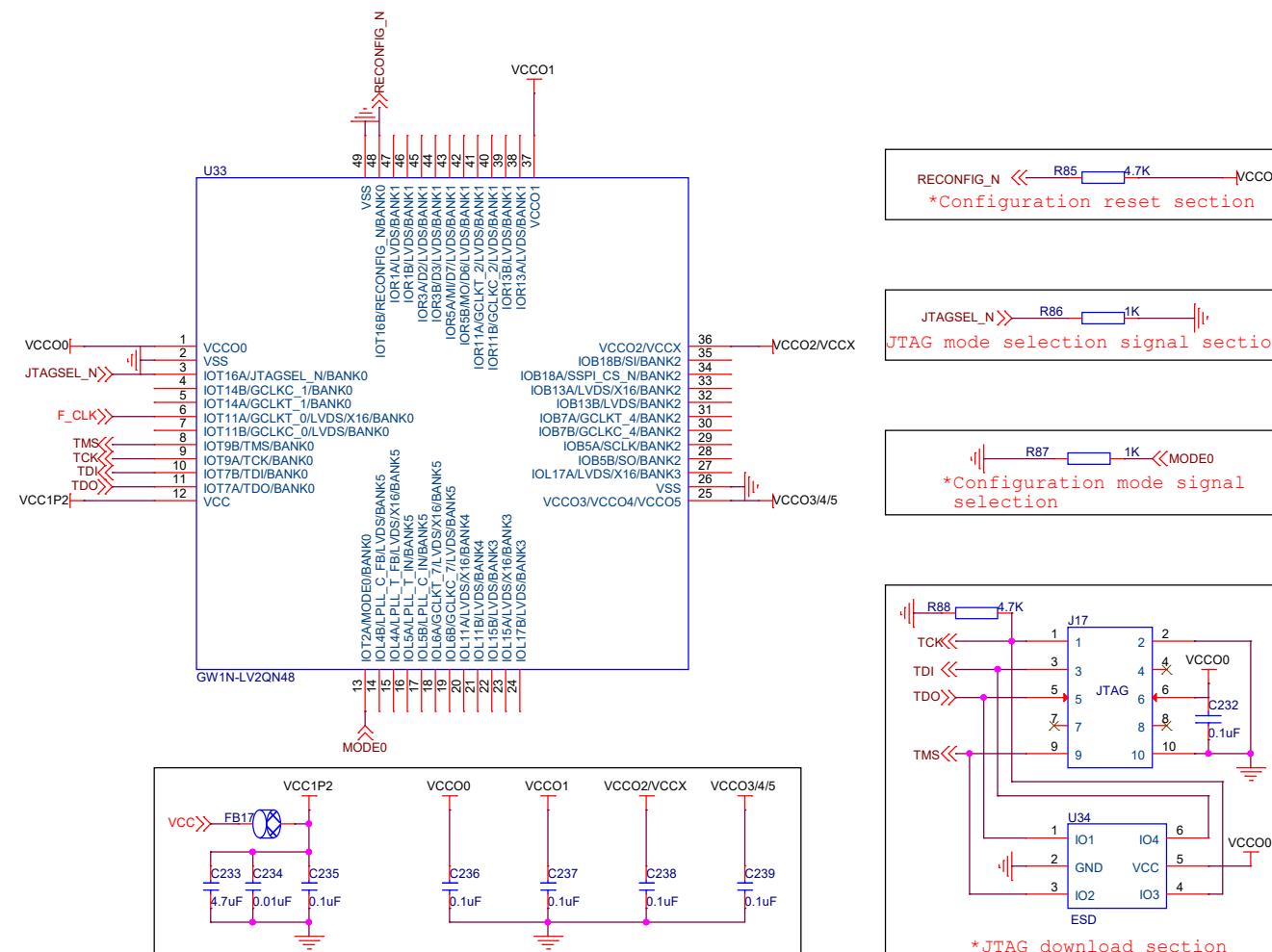
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Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2QN32X	2.0

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# GW1N-LV2QN48



## Notes:

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

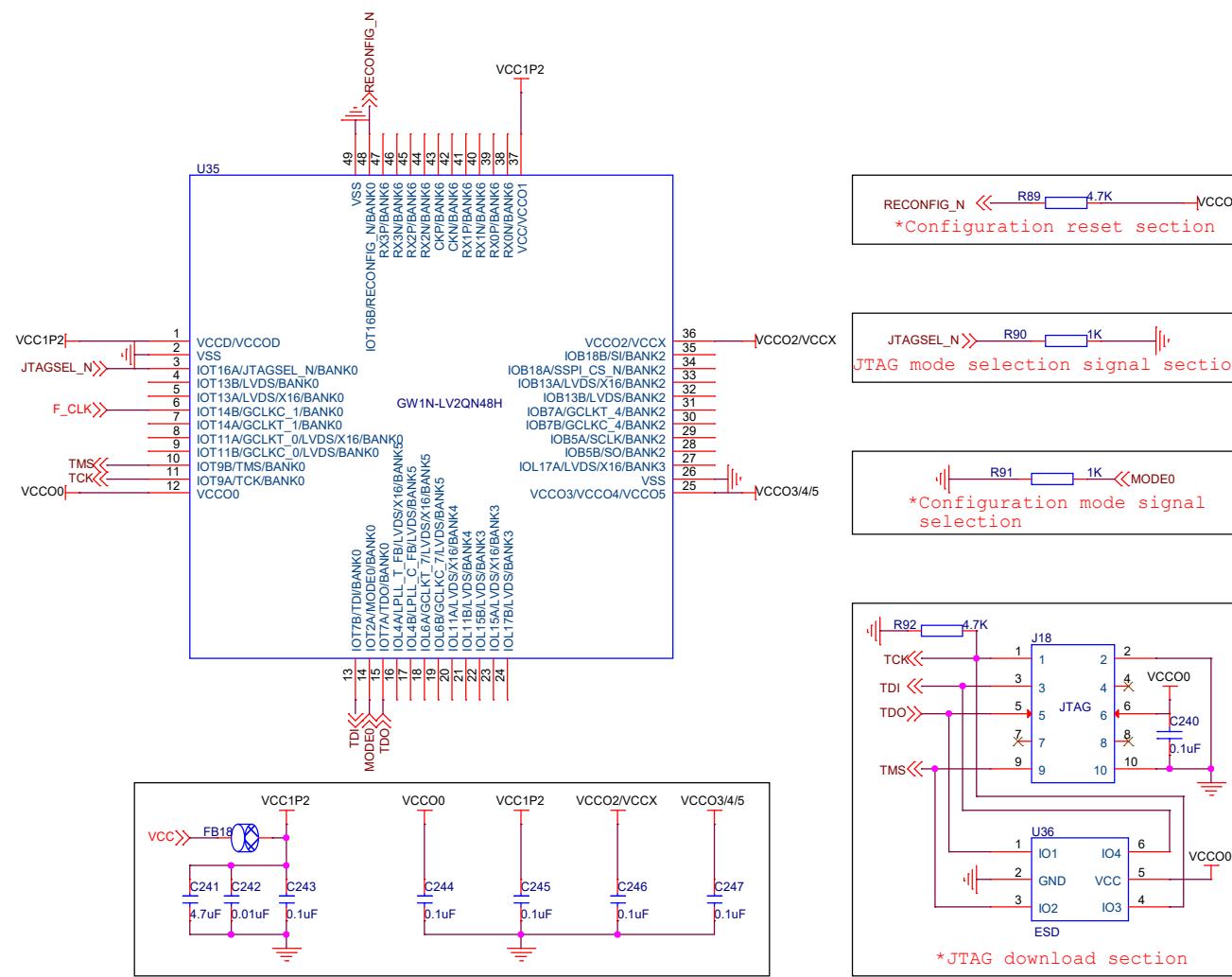
It is recommended that F CLK signal be provided through an active oscillator crystal.

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

Title		
GOWIN Minimum System Diagram		
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B	GW1N-LV2QN48	2.0

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# GW1N-LV2QN48H



Notes:

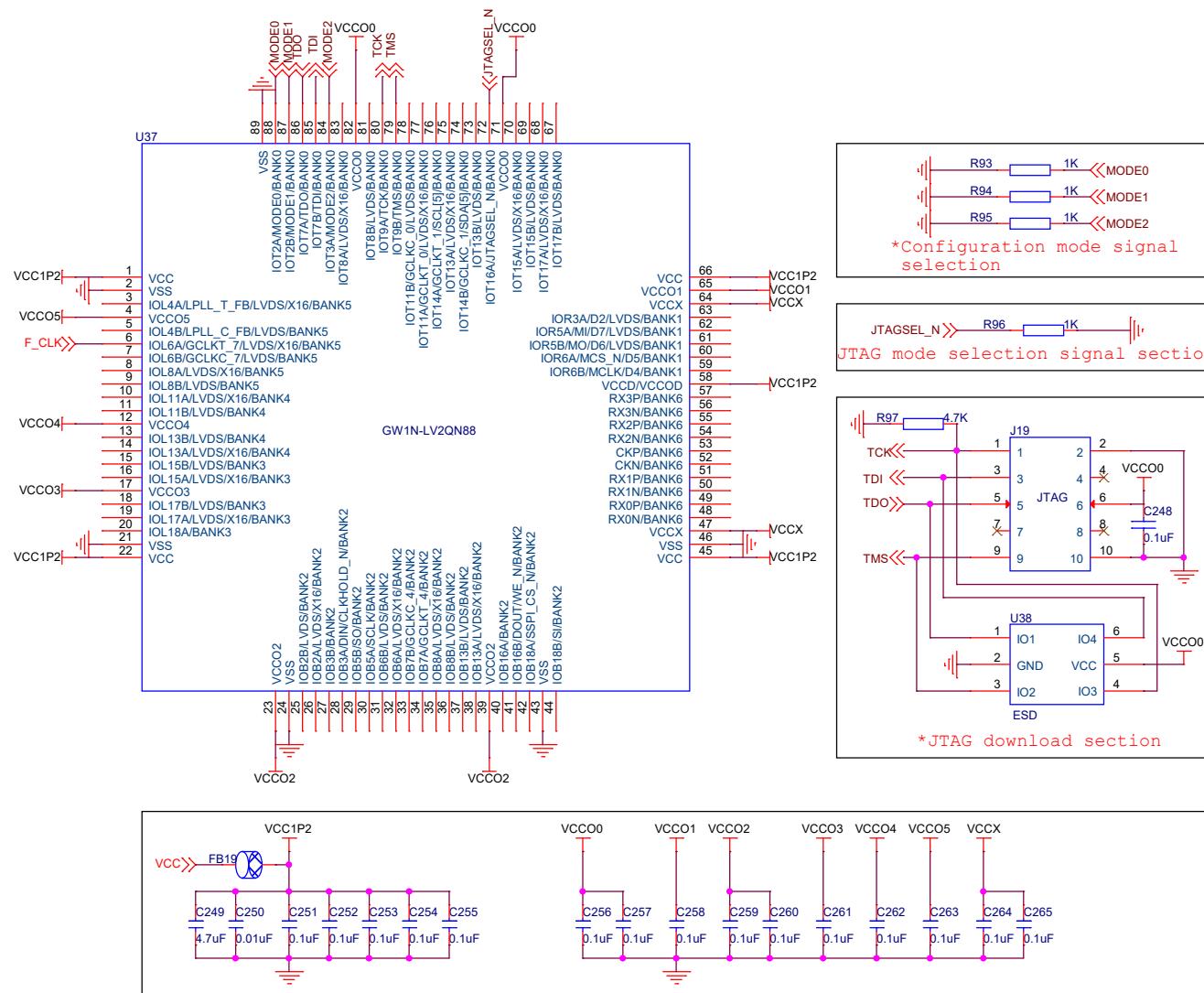
1. F CLK signal is an external input clock signal.

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		
Size	Document Number	Rev
B	GW1N-LV2QN48H	2.0

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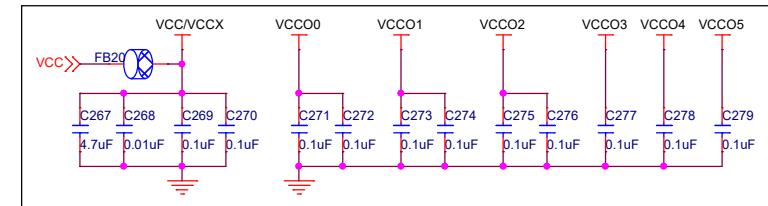
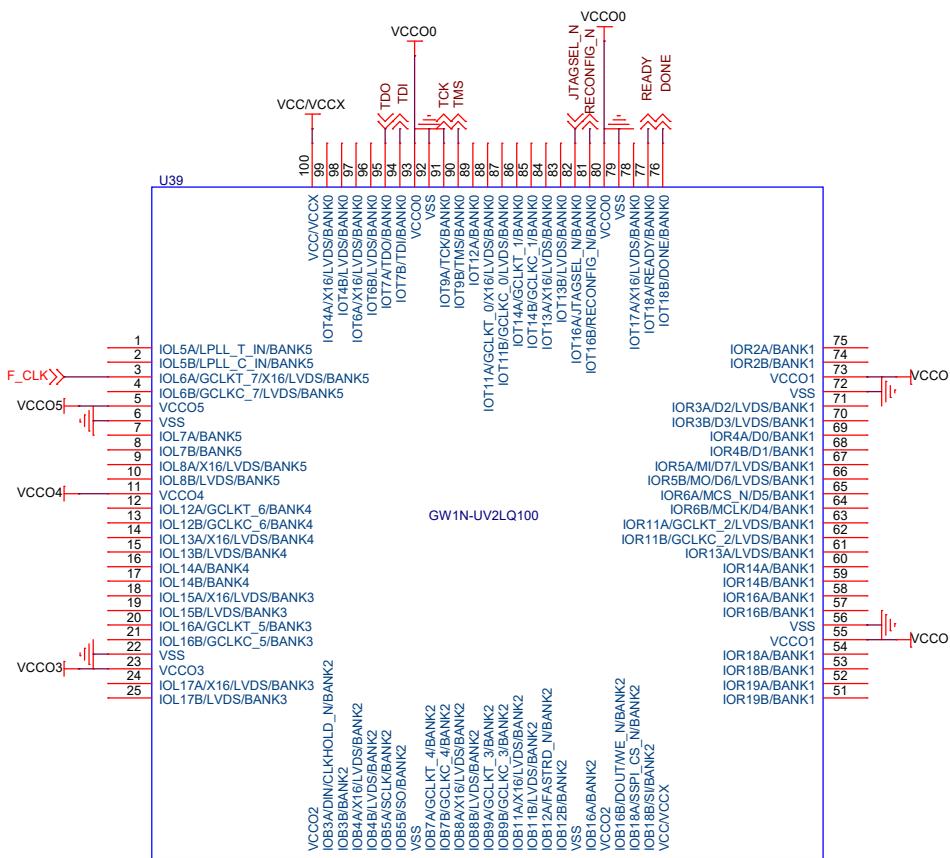
**Notes:**

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

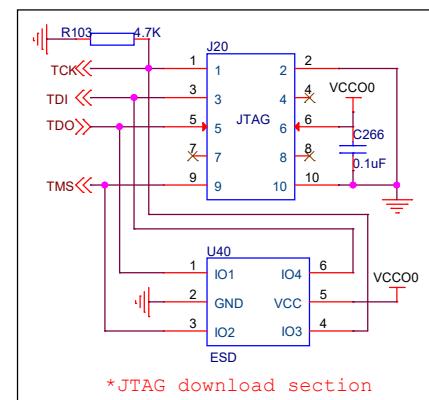
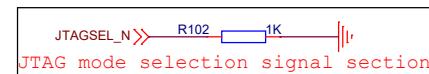
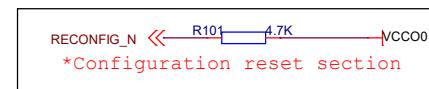
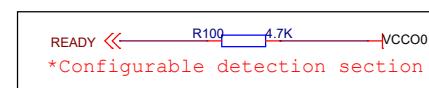
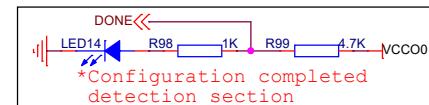
Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2QN88	2.0
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D

D

**Notes:**

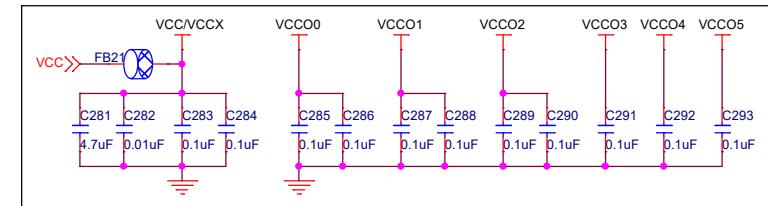
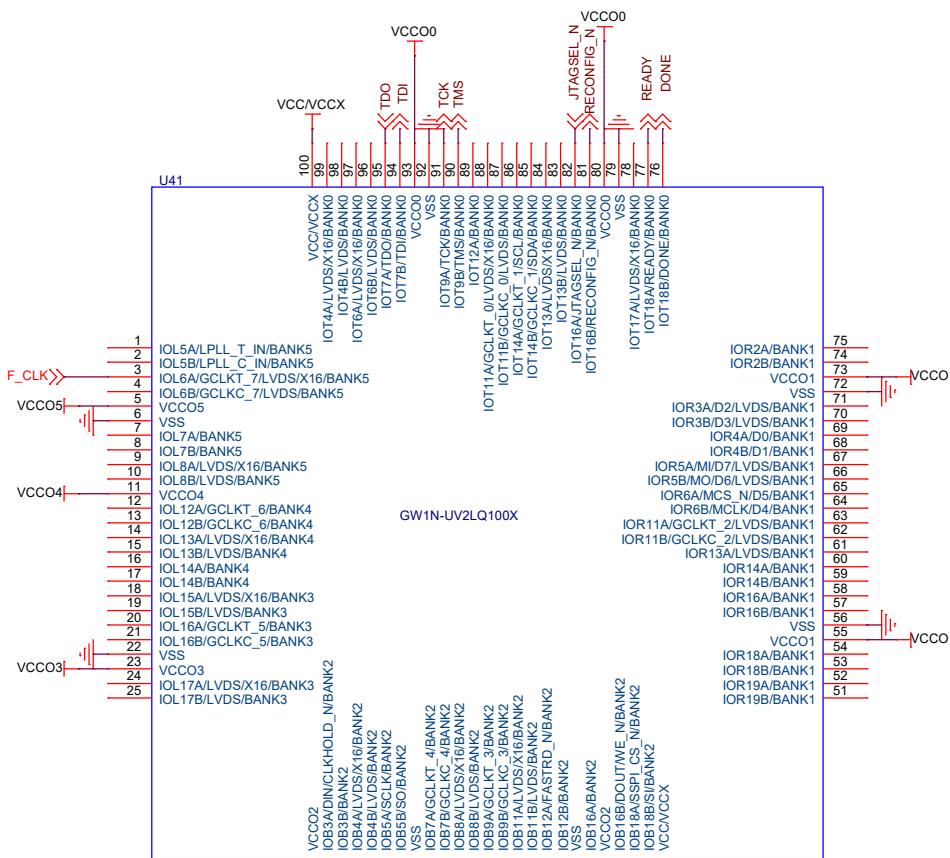
1. F\_CLK signal is an external input clock signal.  
It is recommended that F\_CLK signal be provided through an active oscillator crystal.
2. It is recommended that add an ESD protection chip to the JTAG download circuit.



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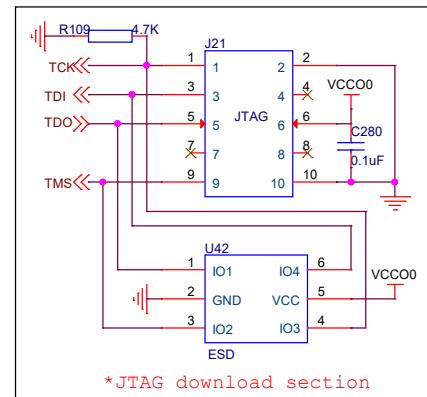
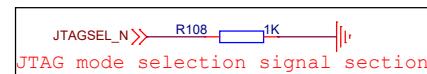
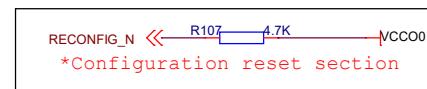
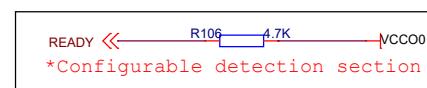
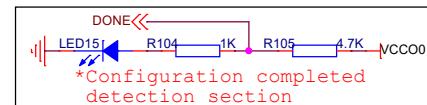
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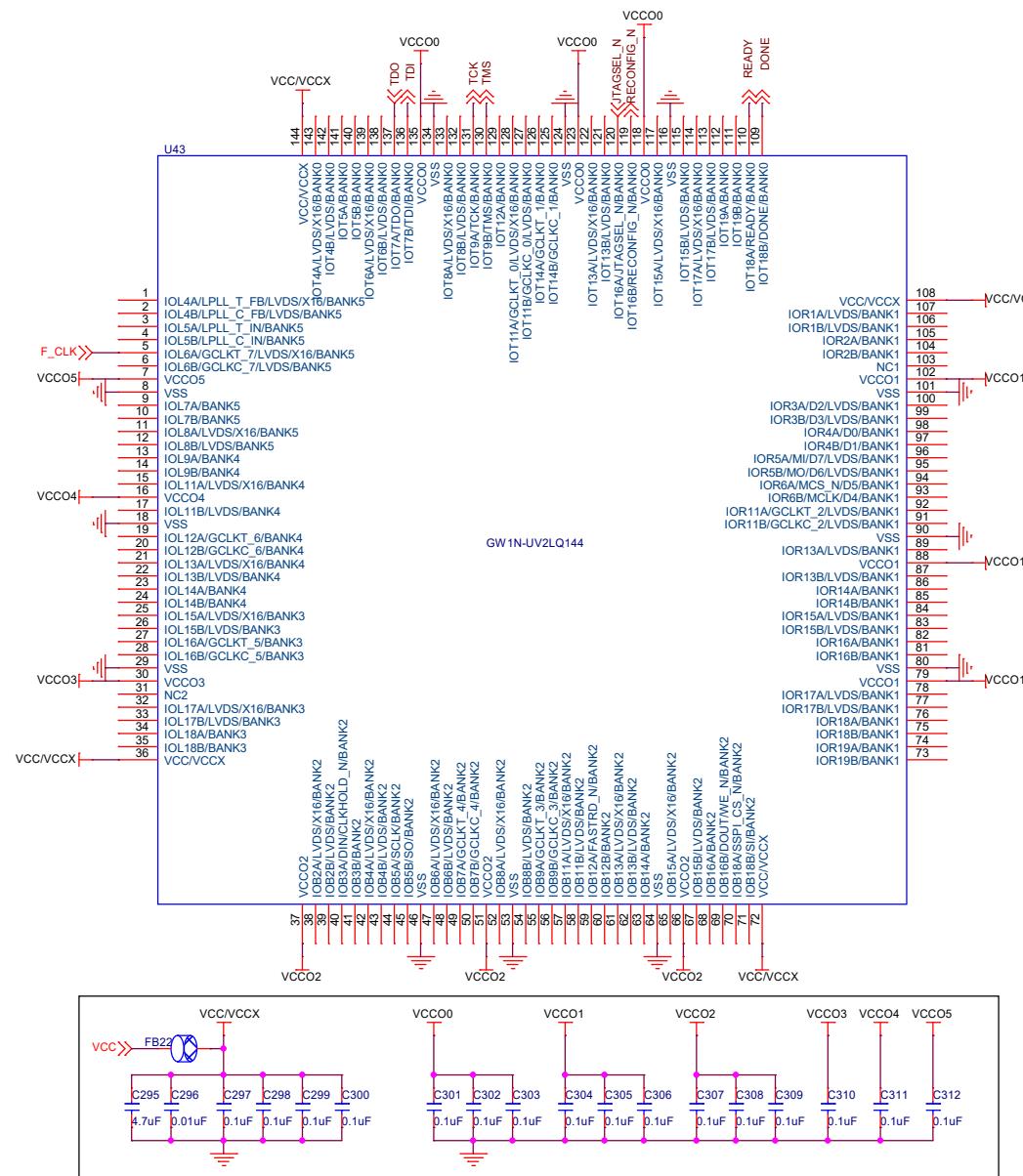


## Notes:

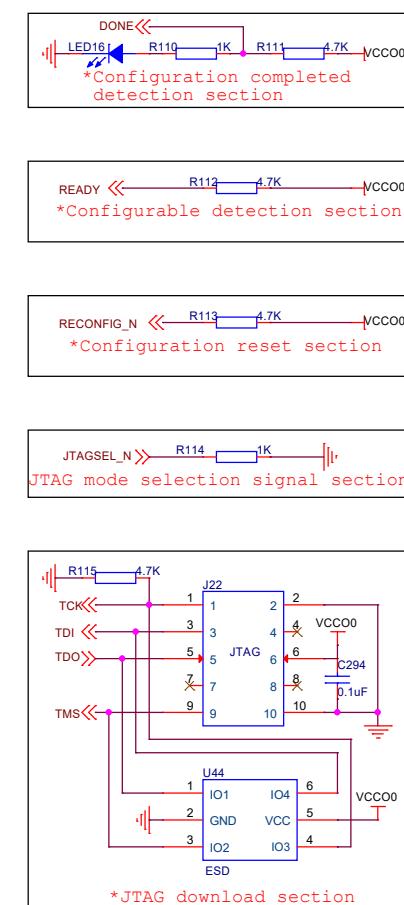
1. F\_CLK signal is an external input clock signal.  
It is recommended that F\_CLK signal be provided through an active oscillator crystal.
2. It is recommended that add an ESD protection chip to the JTAG download circuit.



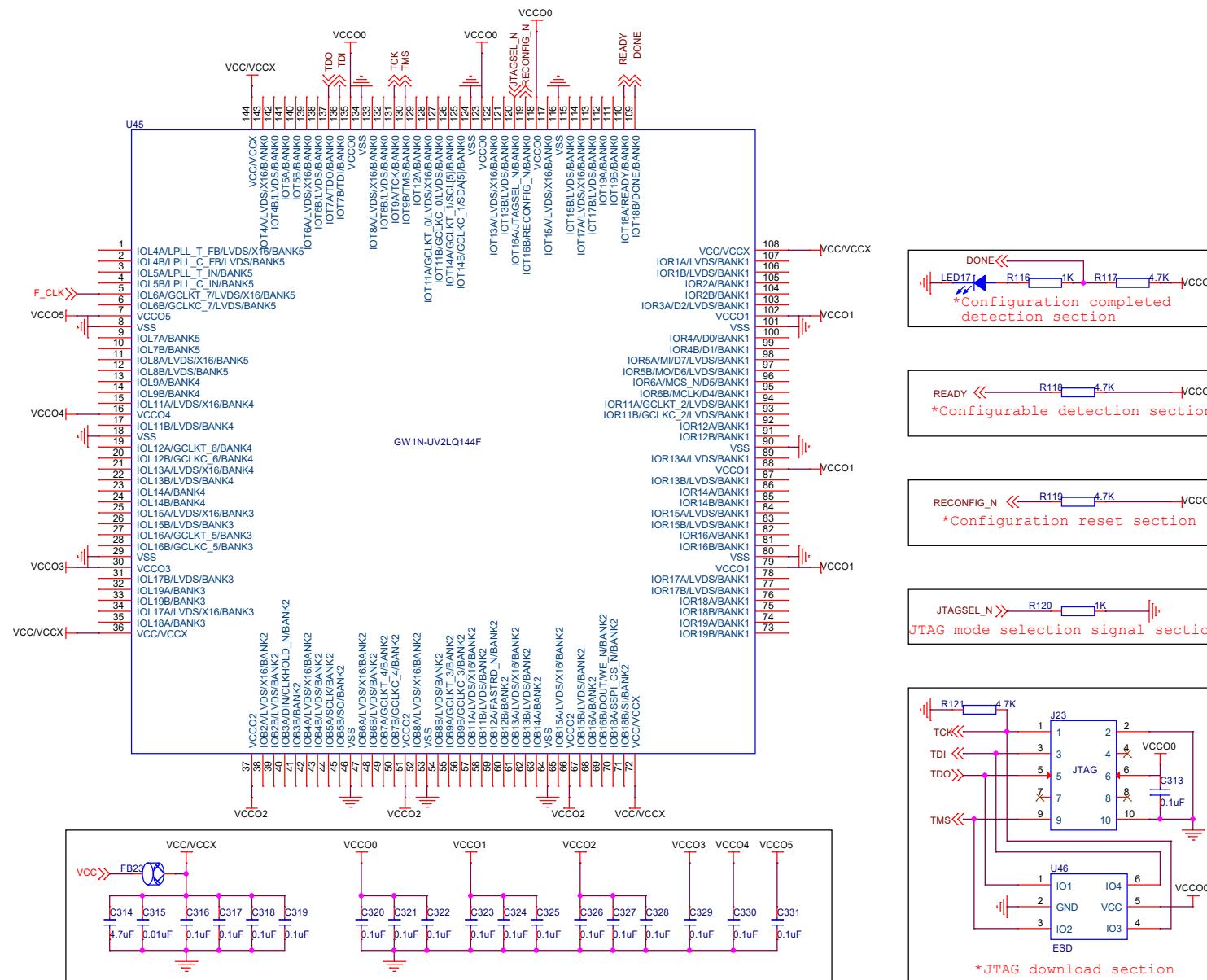
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GWIN Minimum System Diagram	
Size	Document Number
B	GW1N-UV2LQ100X
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**Notes:**

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.

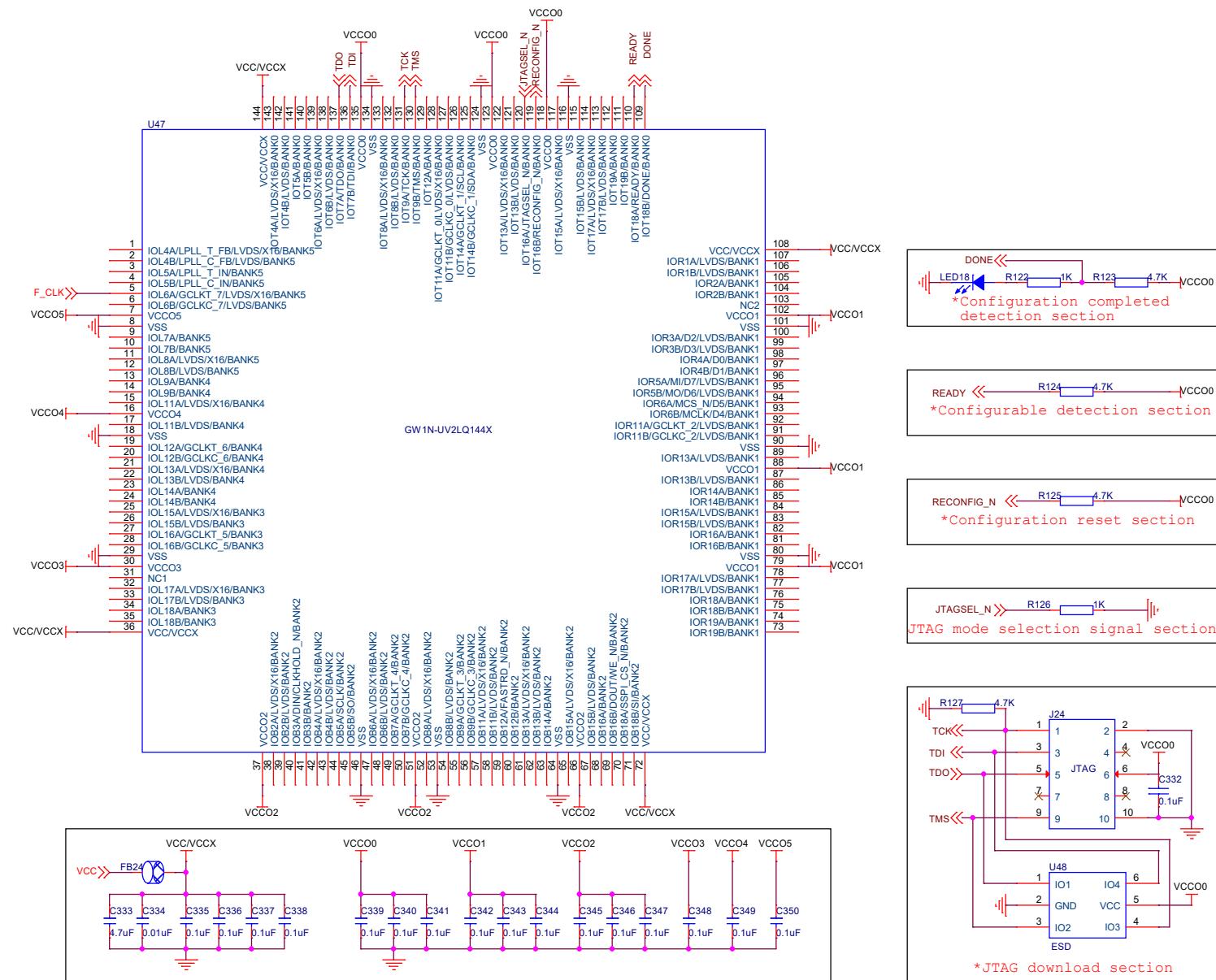


Title	
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Size	Document Number
A3	GW1N-UV2LQ144
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**Notes:**

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.

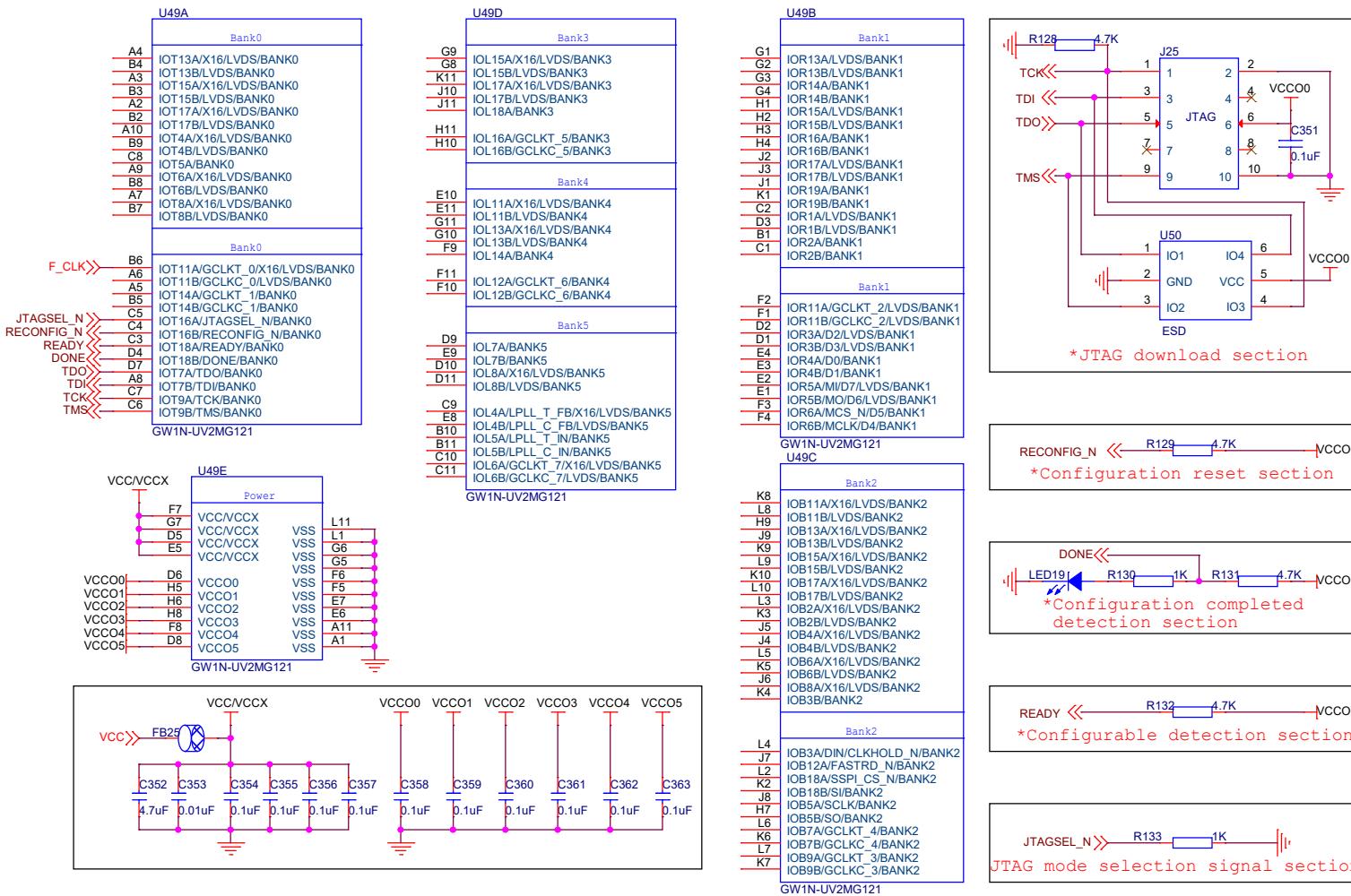
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Size	Document Number	Rev 2.0	
A3	GW1N-UV2LQ144F		
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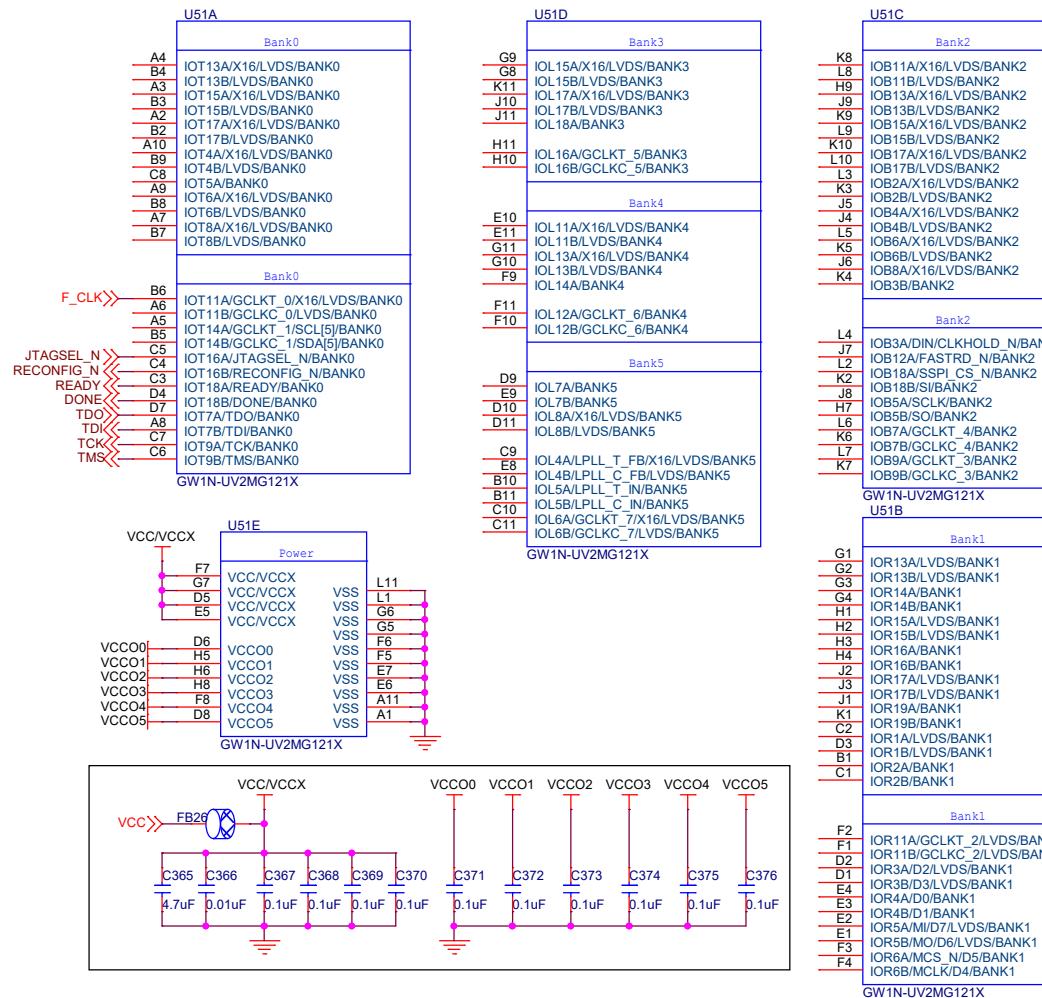
#### Notes:

- 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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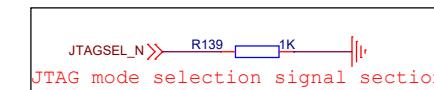
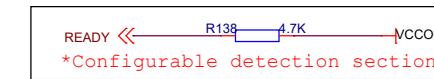
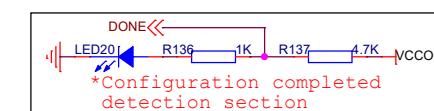
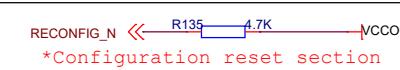
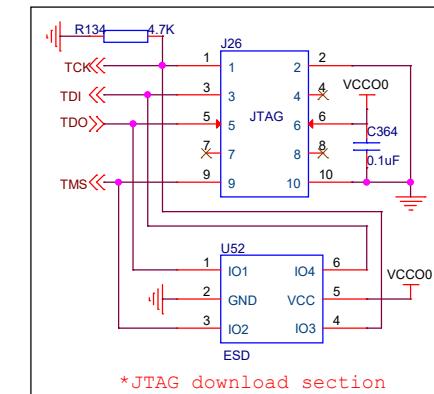
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Size	Document Number	Rev
B	GW1N-UV2MG121	2.0
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**Notes:**

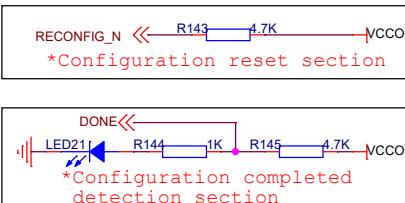
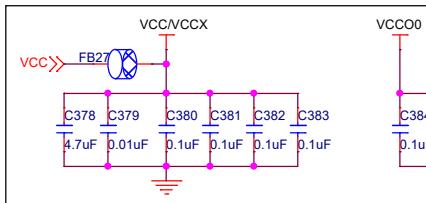
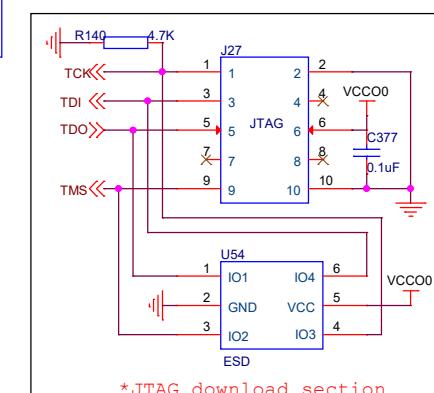
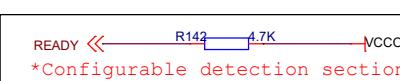
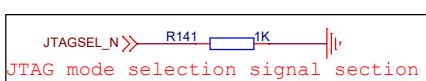
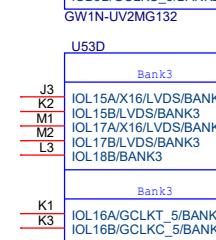
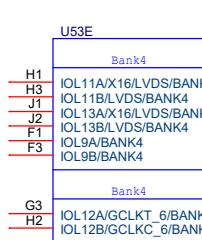
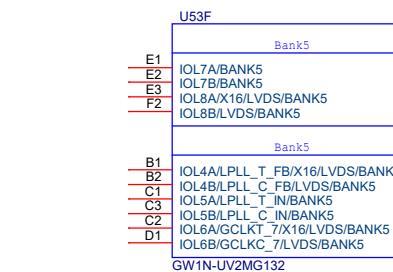
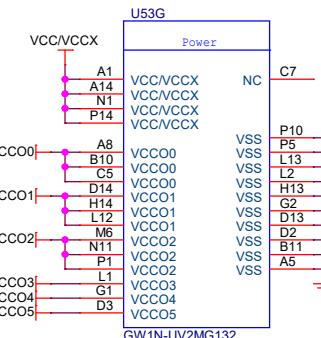
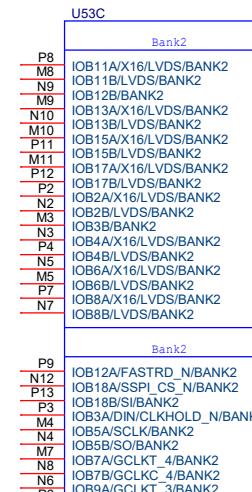
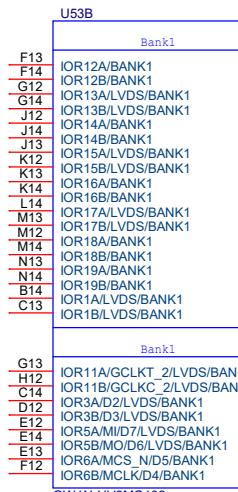
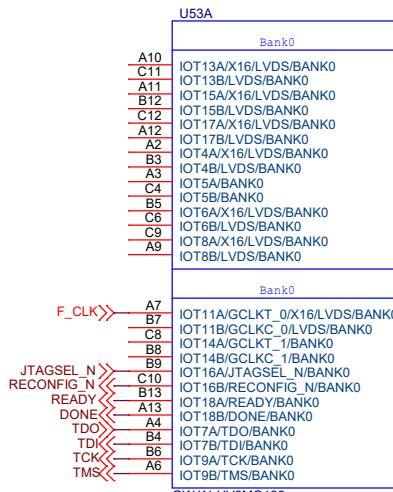
1. F\_CLK signal is an external input clock signal.

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

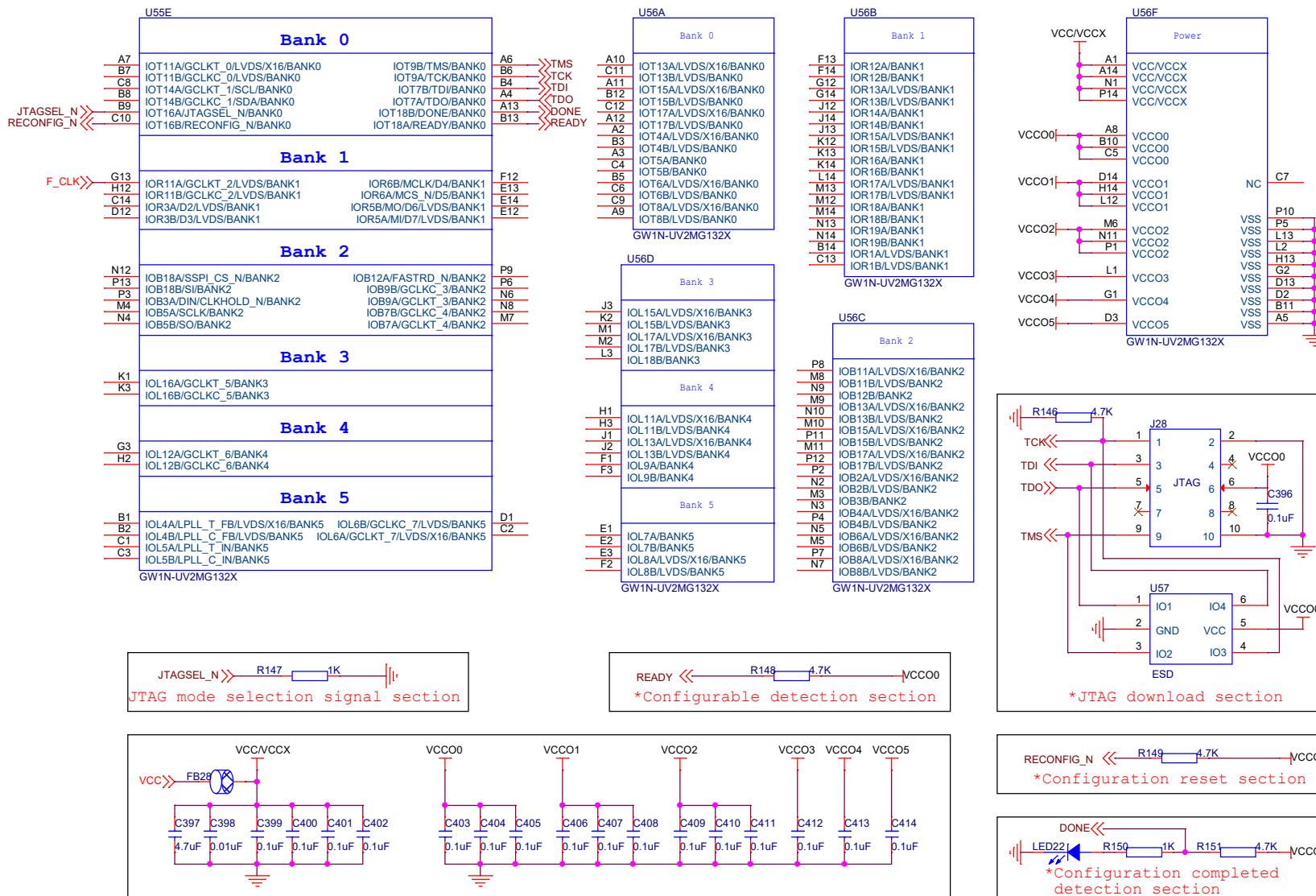
2. It is recommended that add an ESD protection chip to the JTAG download circuit.



Title		
GOWIN Minimum System Diagram		
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B	GW1N-UV2MG121X	2.0
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Title		
GOWIN Minimum System Diagram		
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B	GW1N-UV2MG132	2.0
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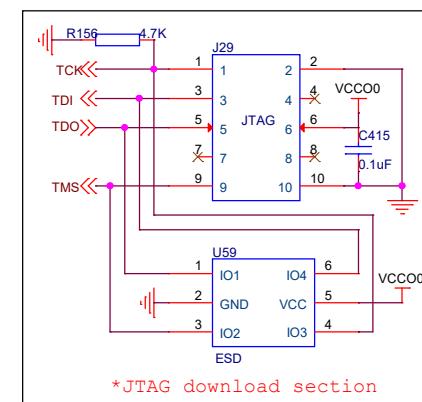
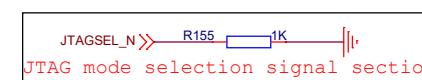
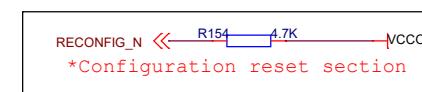
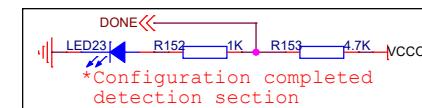
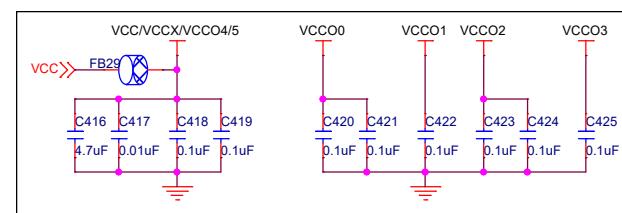
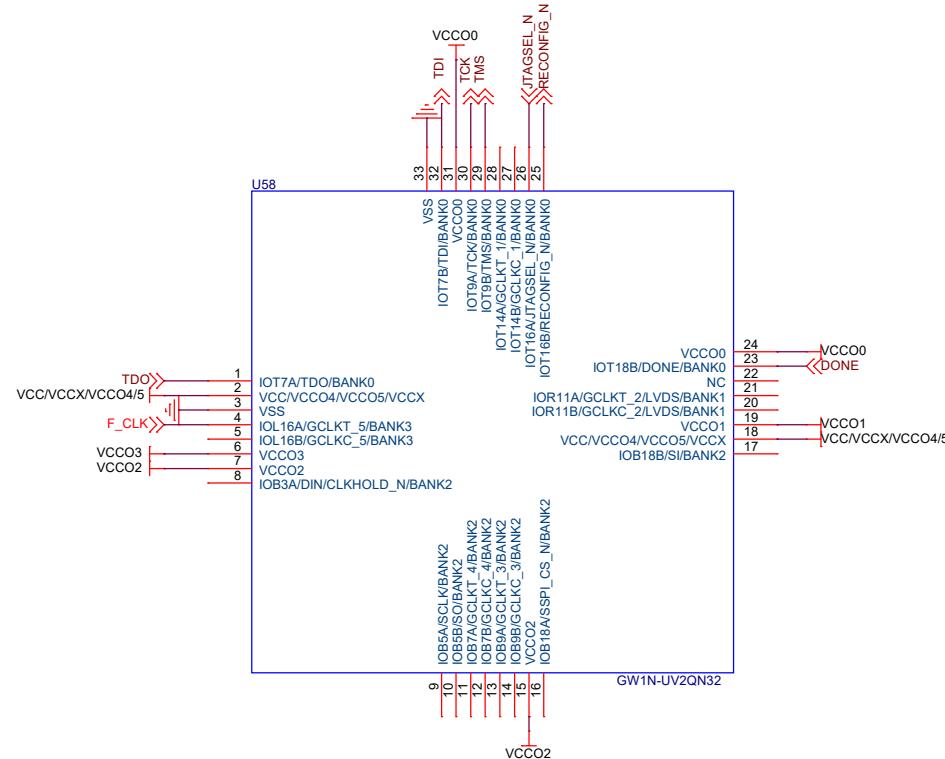


## Notes:

- F\_CLK signal is an external input clock signal.  
It is recommended that F\_CLK signal be provided through an active oscillator crystal.
- 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-UV2MG132X	2.0
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**GW1N-UV2QN32**



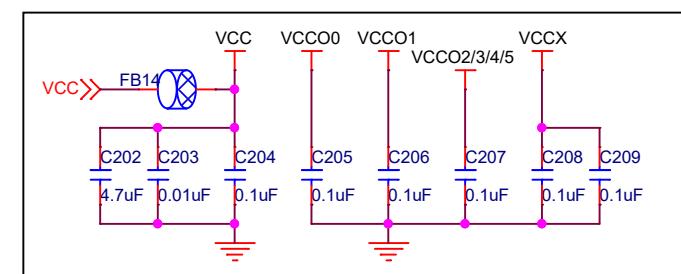
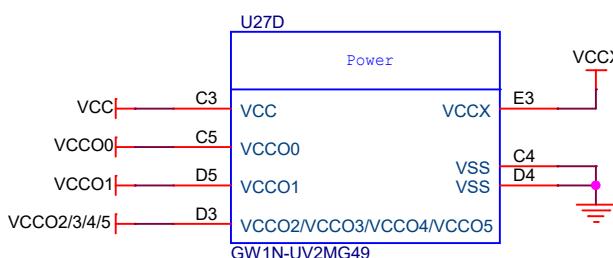
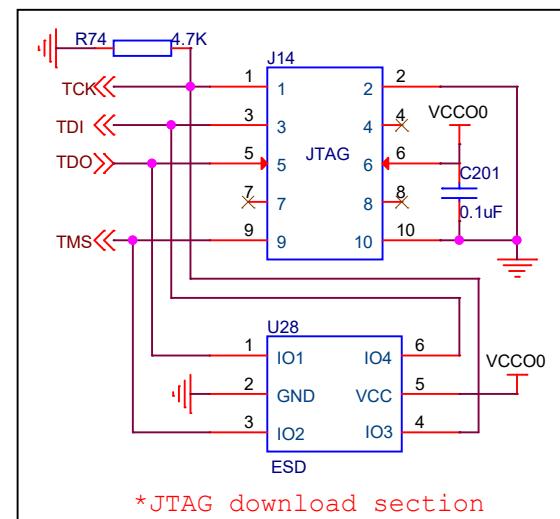
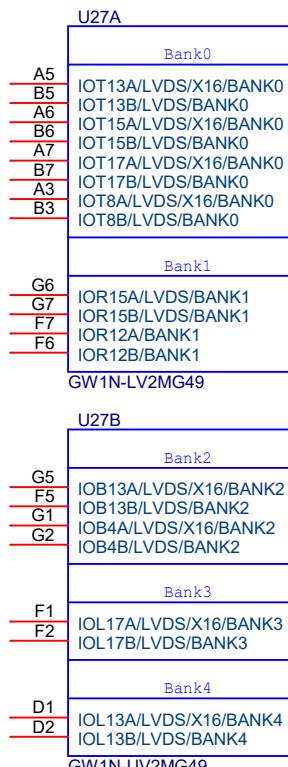
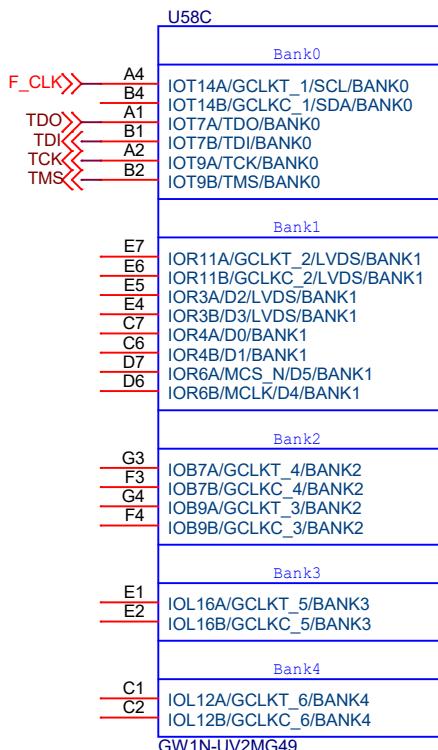
## Notes

- 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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# 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.

Title	
GOWIN Minimum System Diagram	
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# GW1N-UV2QN32X

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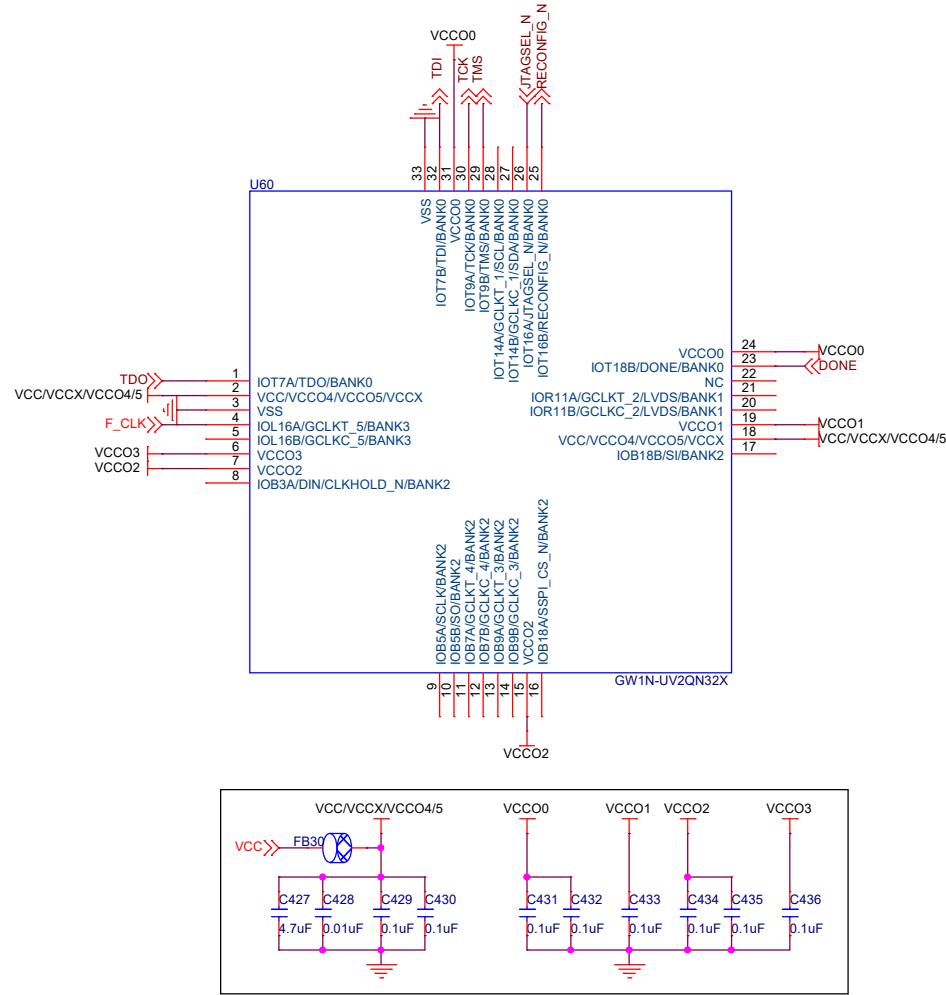
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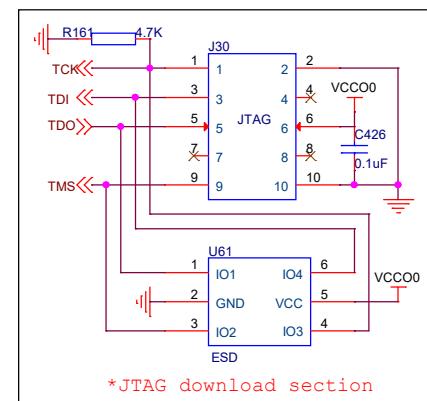
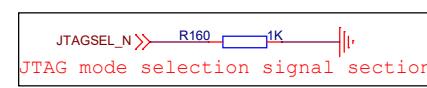
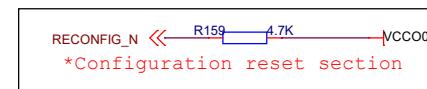
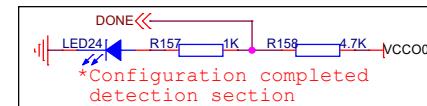
A

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.



Title		
GOWIN Minimum System Diagram		
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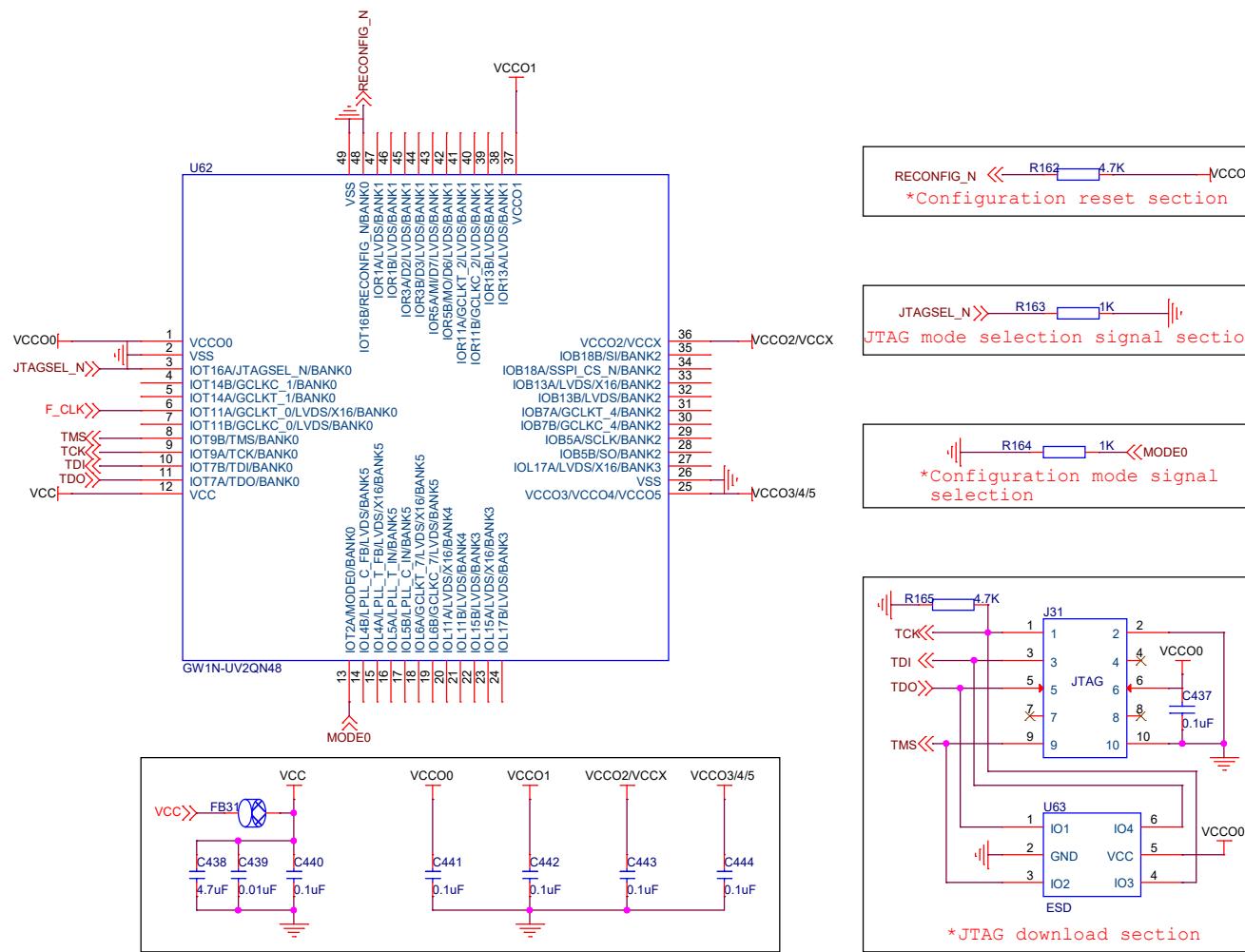
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*GW1N-UV2QN48*



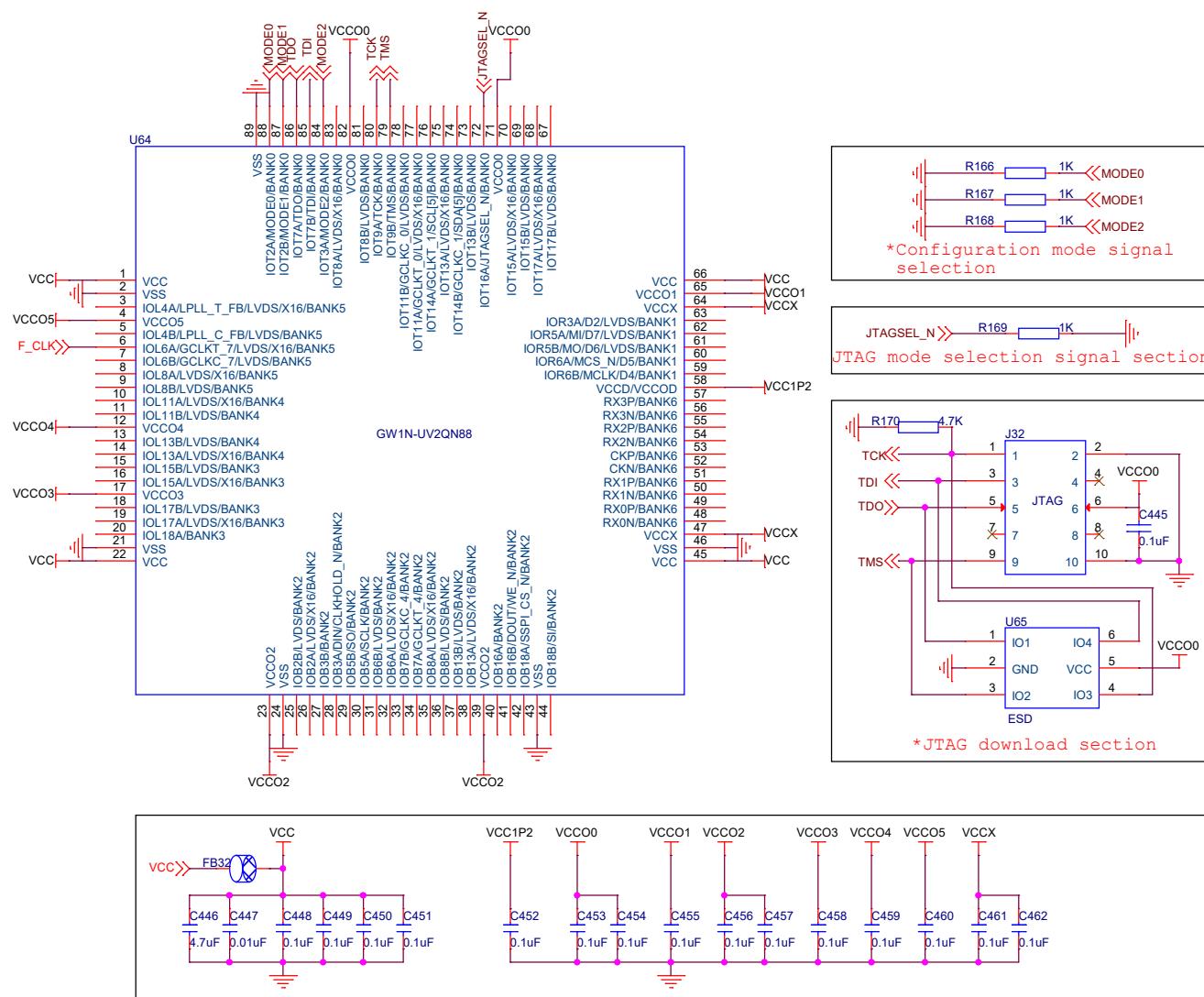
## Notes

- 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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*GW1N-UV2QN88*



## Notes

- Notes:  
1.F<sub>CLK</sub> signal is an external input clock signal.  
It is recommended that F<sub>CLK</sub> 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 B	Document Number GW1N-UV2QN88	Rev 2.0
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