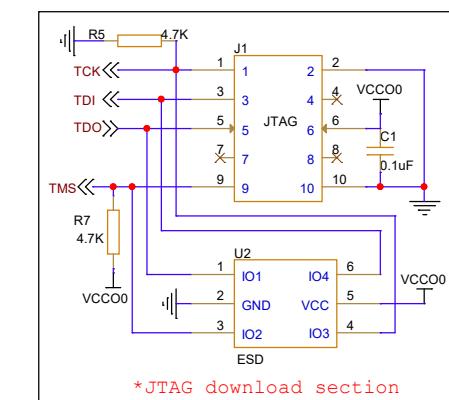
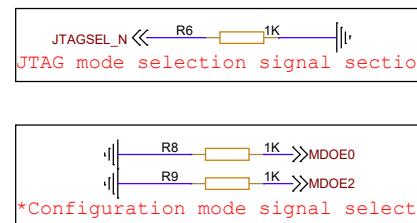
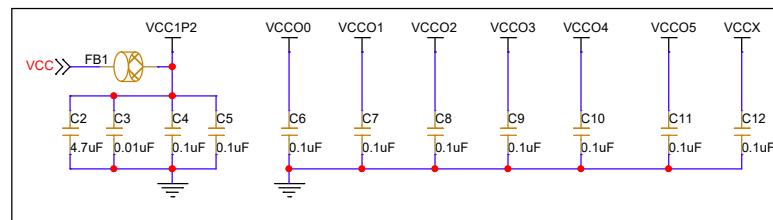
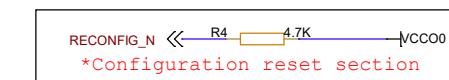
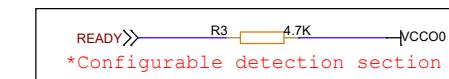
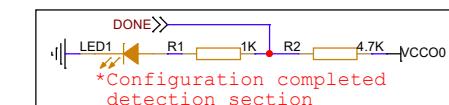
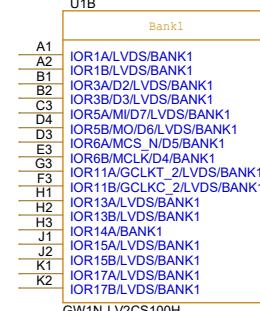
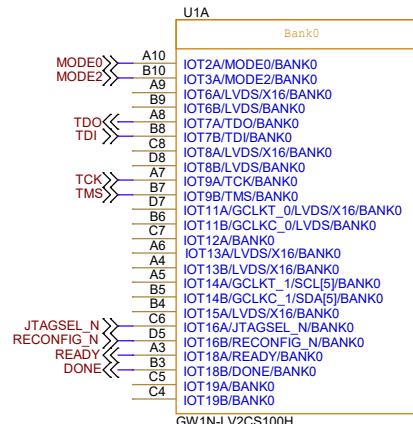
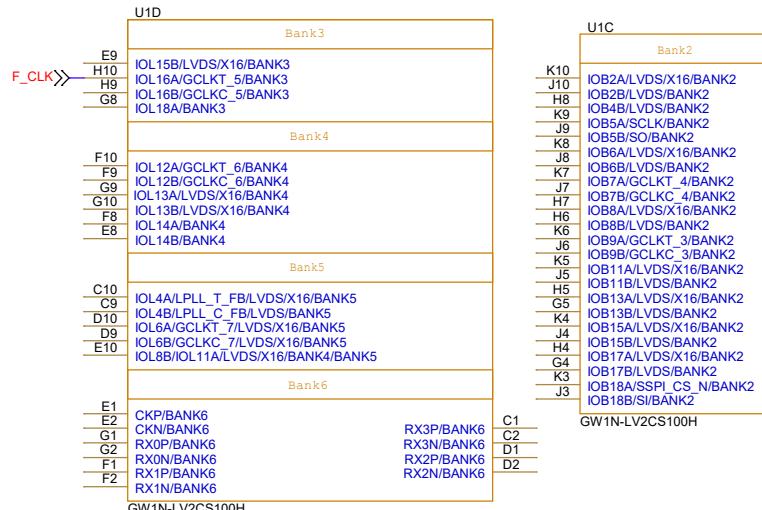


GW1N-LV2CS100H

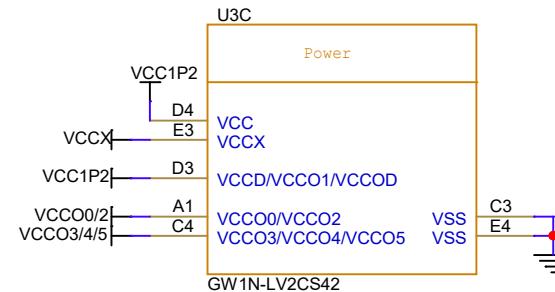
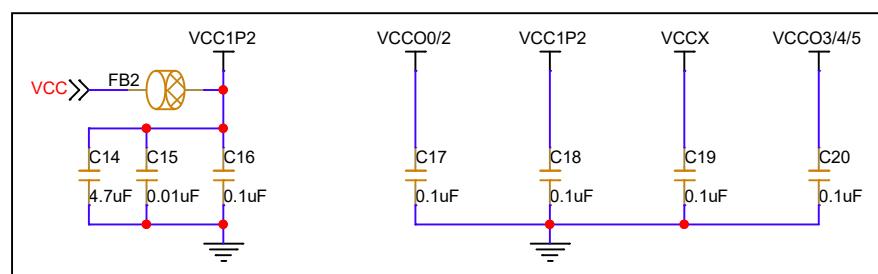
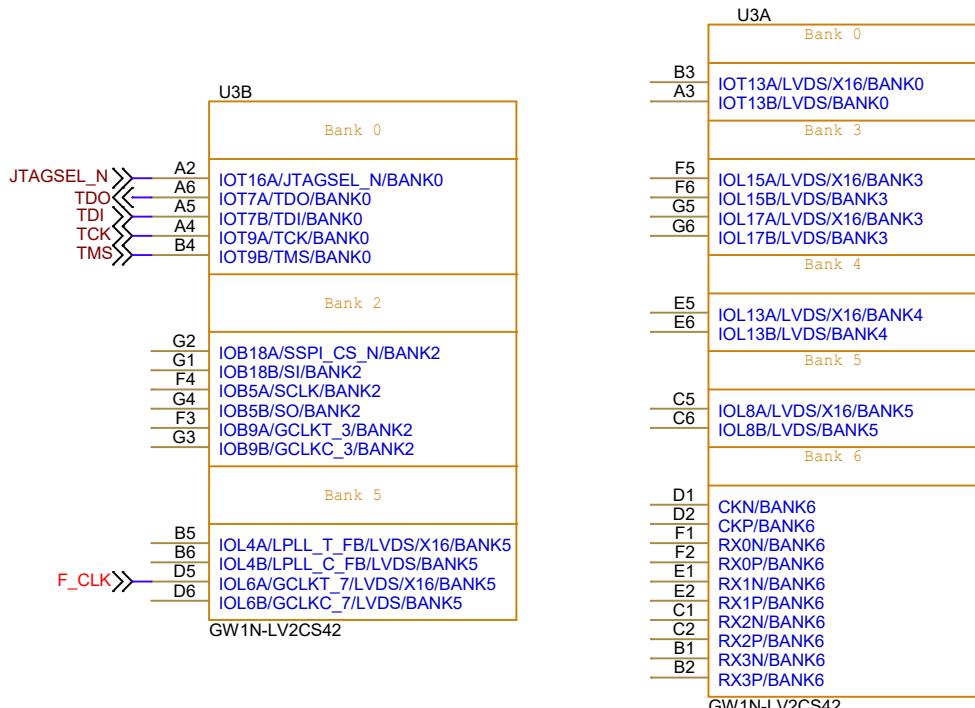


Notes:

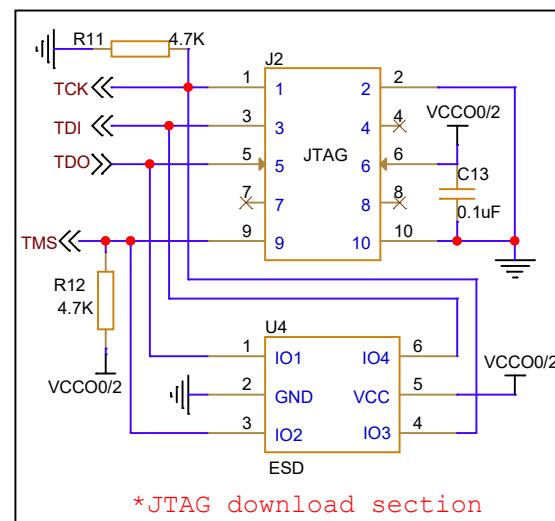
- 1.F_CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal
 - 2.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title		
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GW1N-LV2CS42



JTAGSEL_N << R10 1K ||| JTAG mode selection signal section

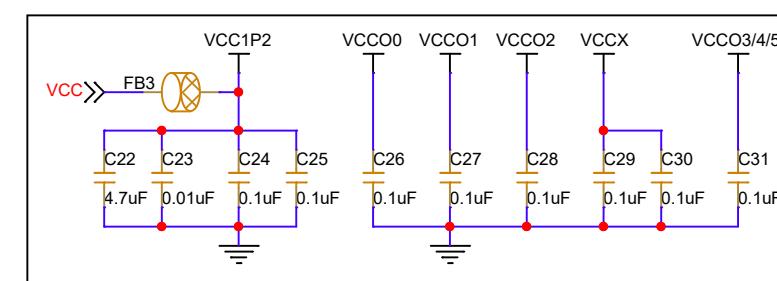
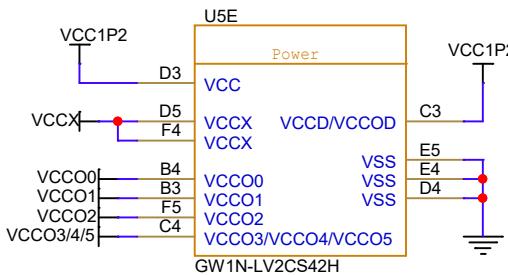
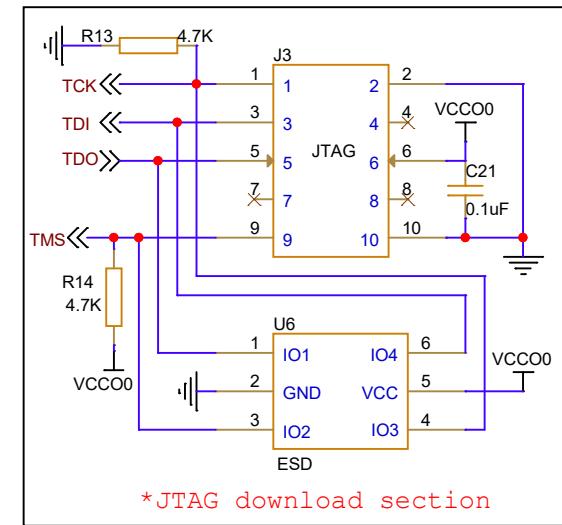
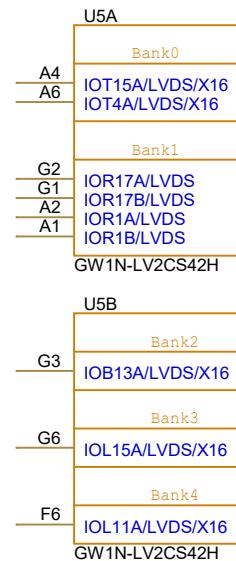
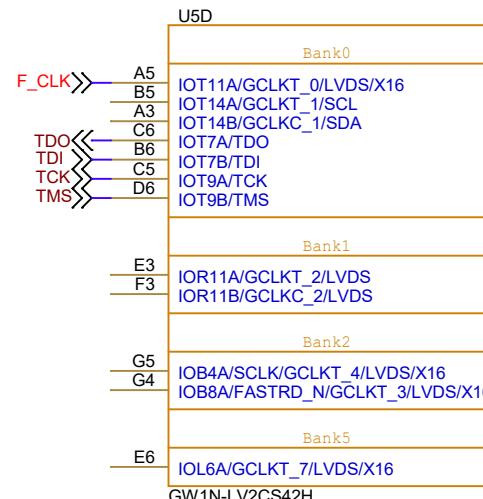


Notes:

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	Document Number
A4	GW1N-LV2CS42

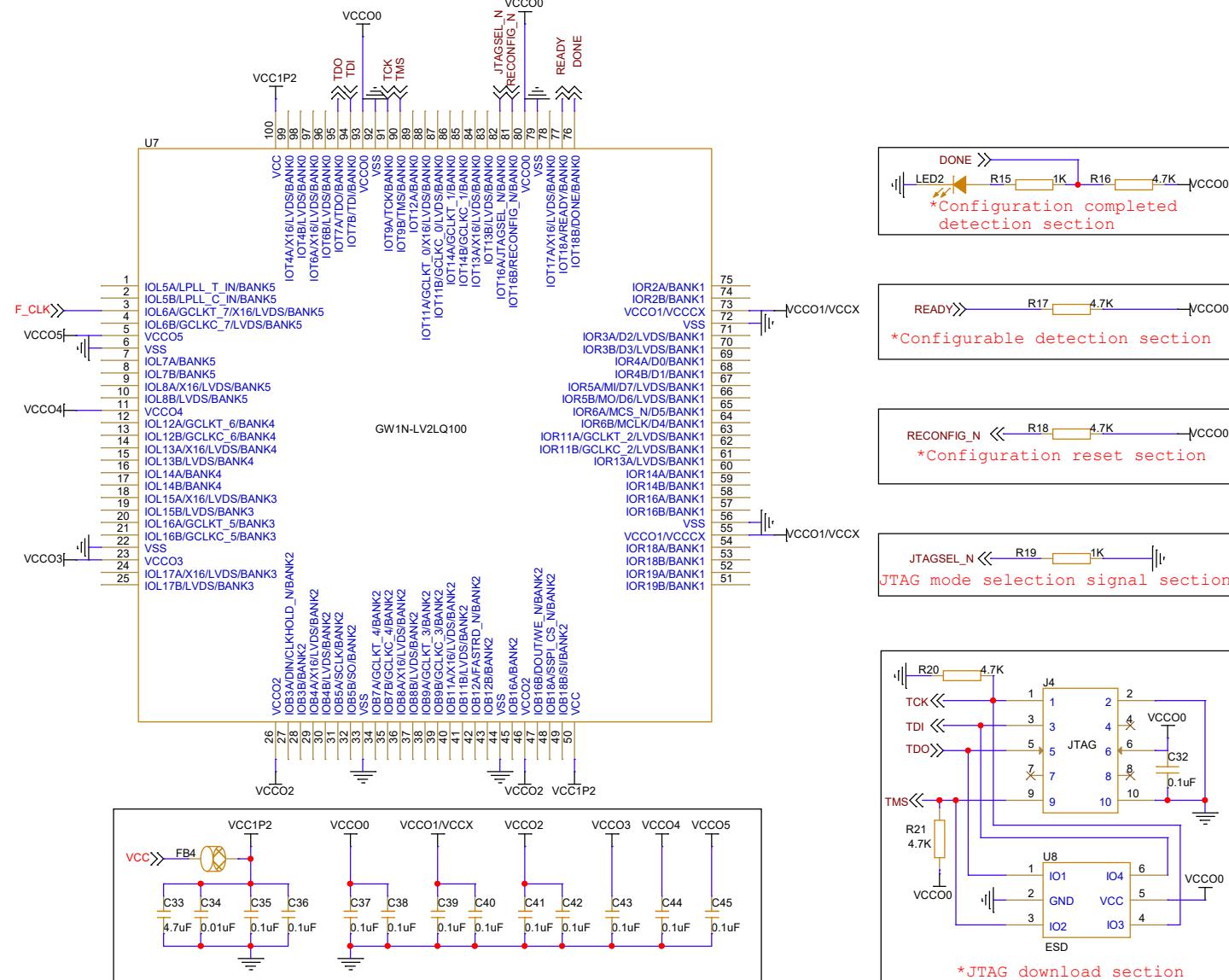
GW1N-LV2CS42H



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.

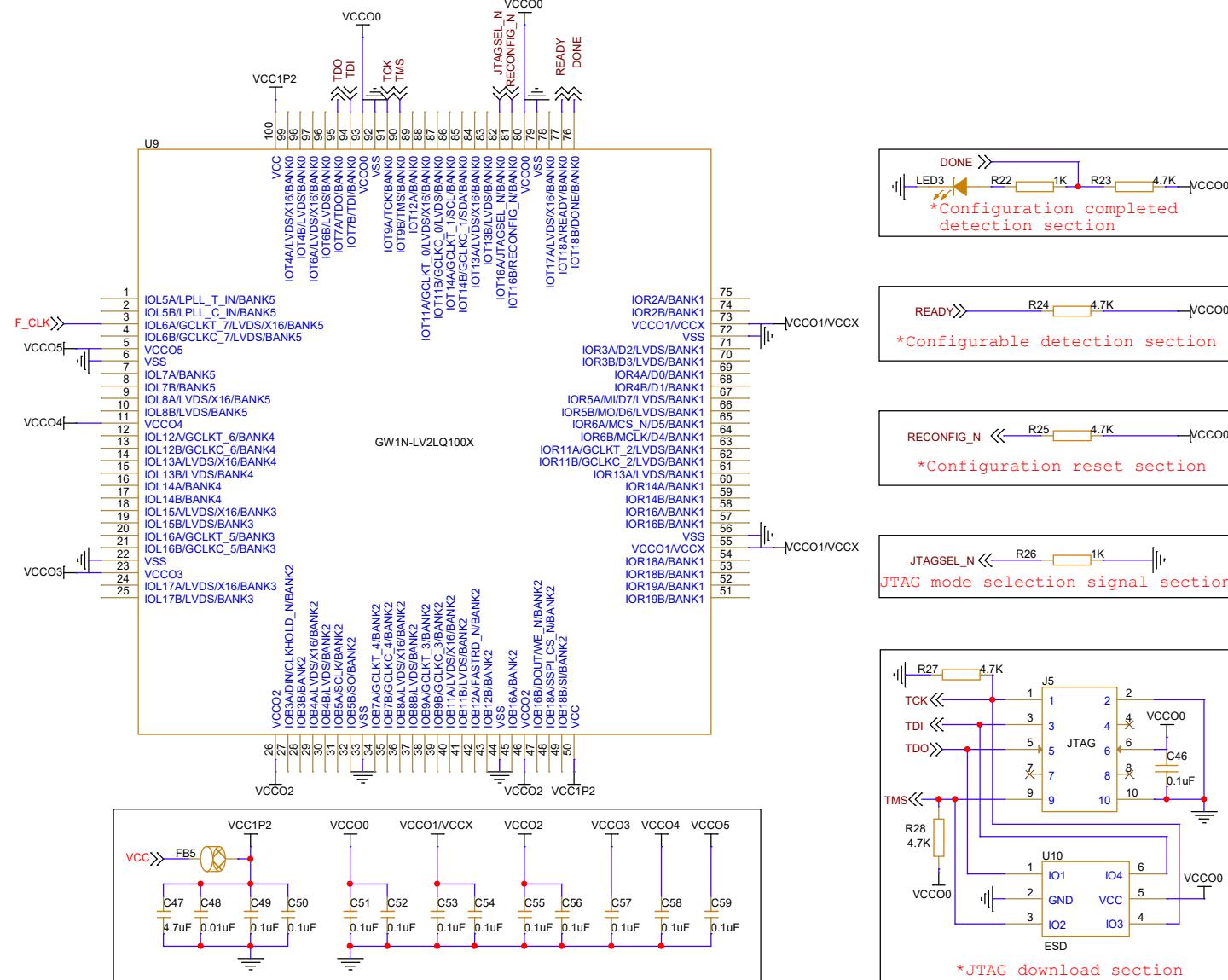
D

**Notes:**

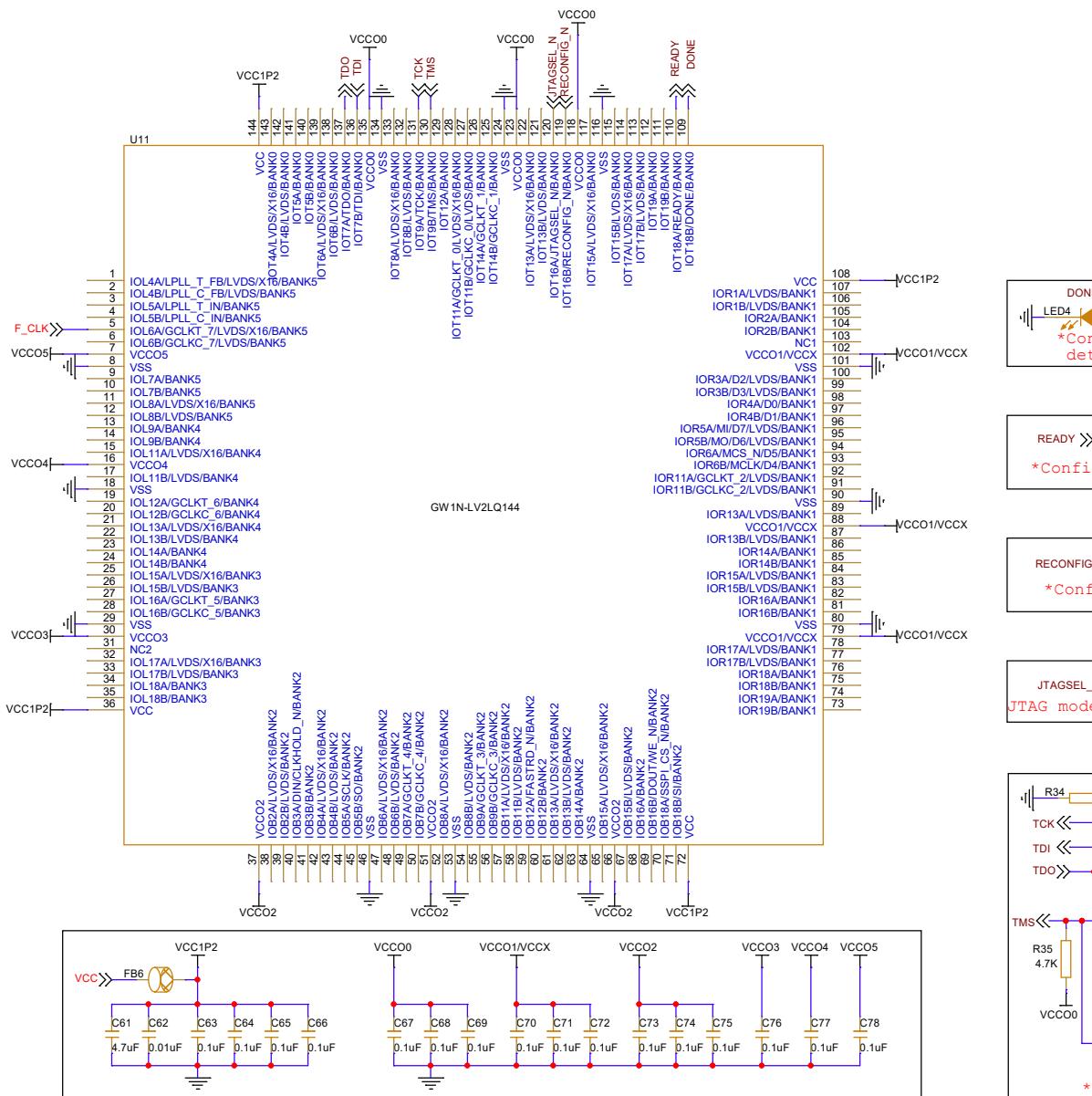
- F_CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal.
- It is recommended that add an ESD protection chip to the JTAG download circuit.

Title		GOWIN Minimum System Diagram
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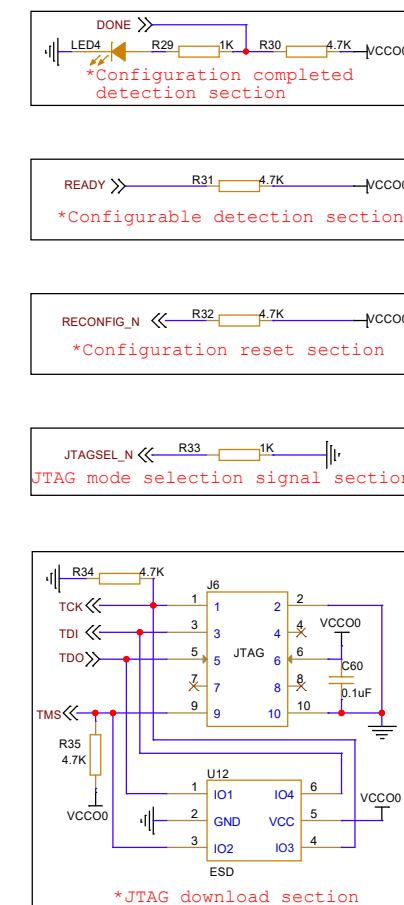
Title	
GOWIN Minimum System Diagram	
Size B	Document Number GW1N-LV2LQ100X
Rev 2.2	Date: Thursday, July 04, 2024

**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.

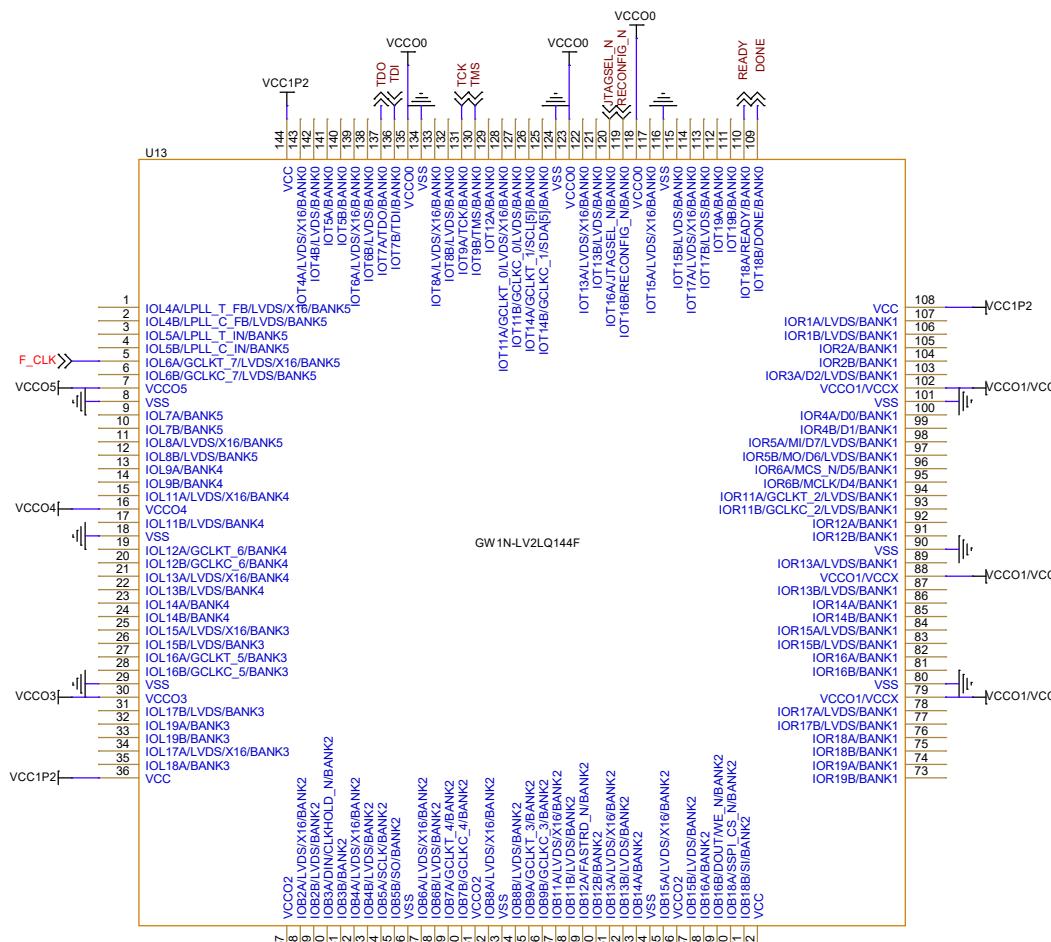
2.It is recommended that add an ESD protection chip to the JTAG download circuit.



Title		GW1N Minimum System Diagram	
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A3	GW1N-LV2LQ144	2.2	
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D

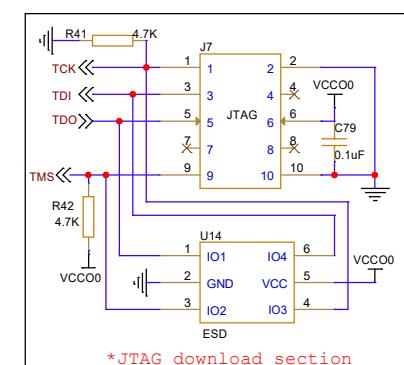
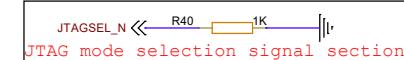
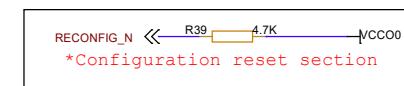
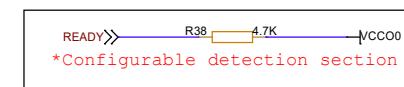
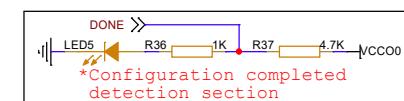


Notes:

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

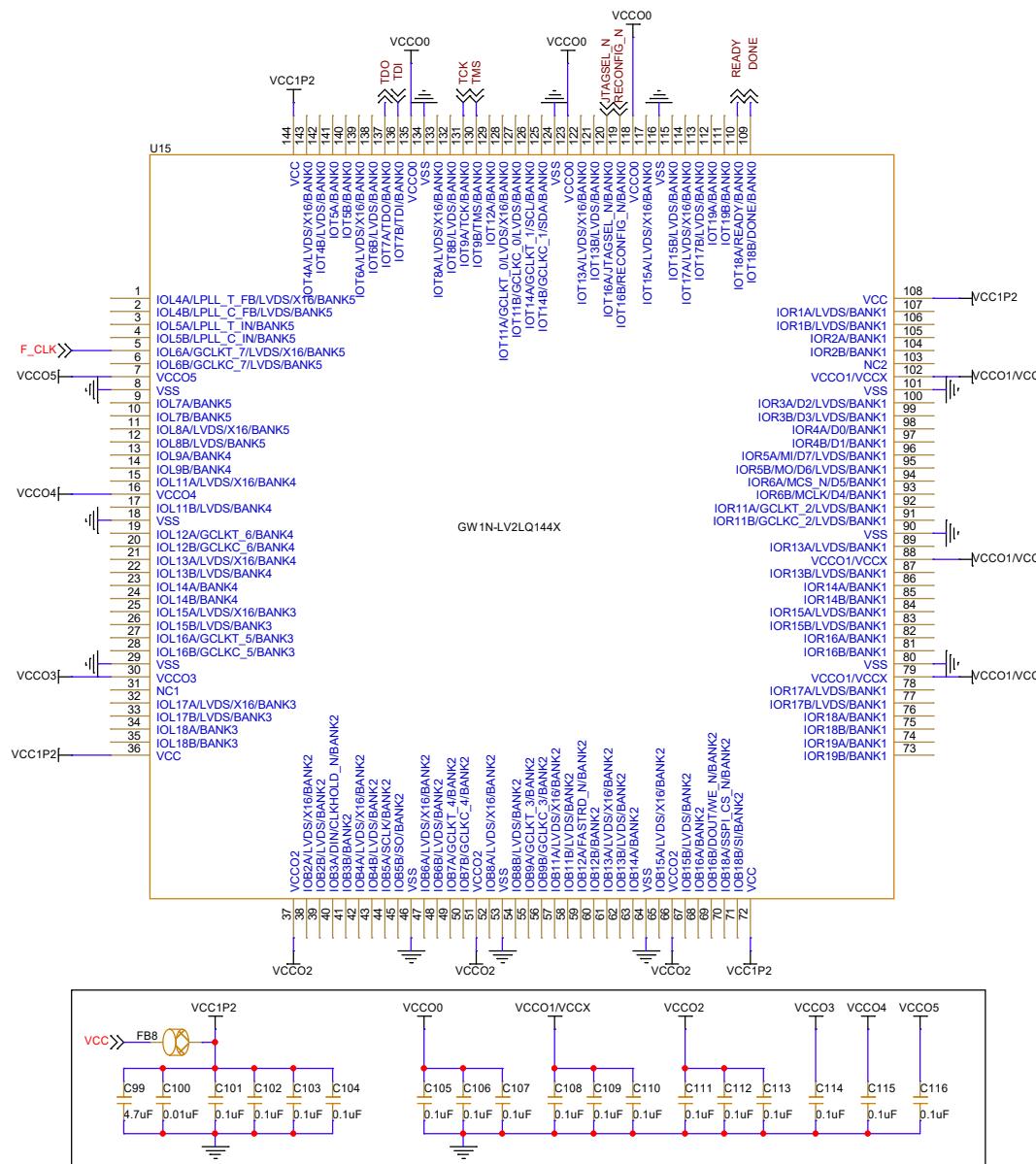
It is recommended that F CLK signal be provided through an active oscillator crystal.

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



Title	
GOWIN Minimum System Diagram	
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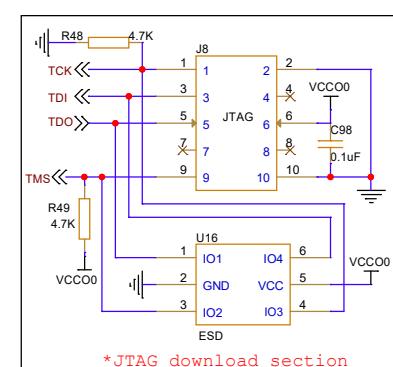
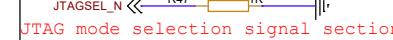
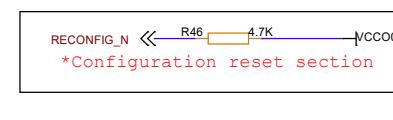
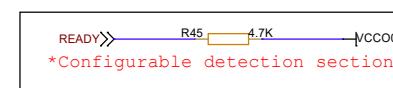
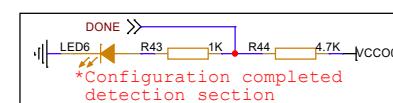
D

**Notes:**

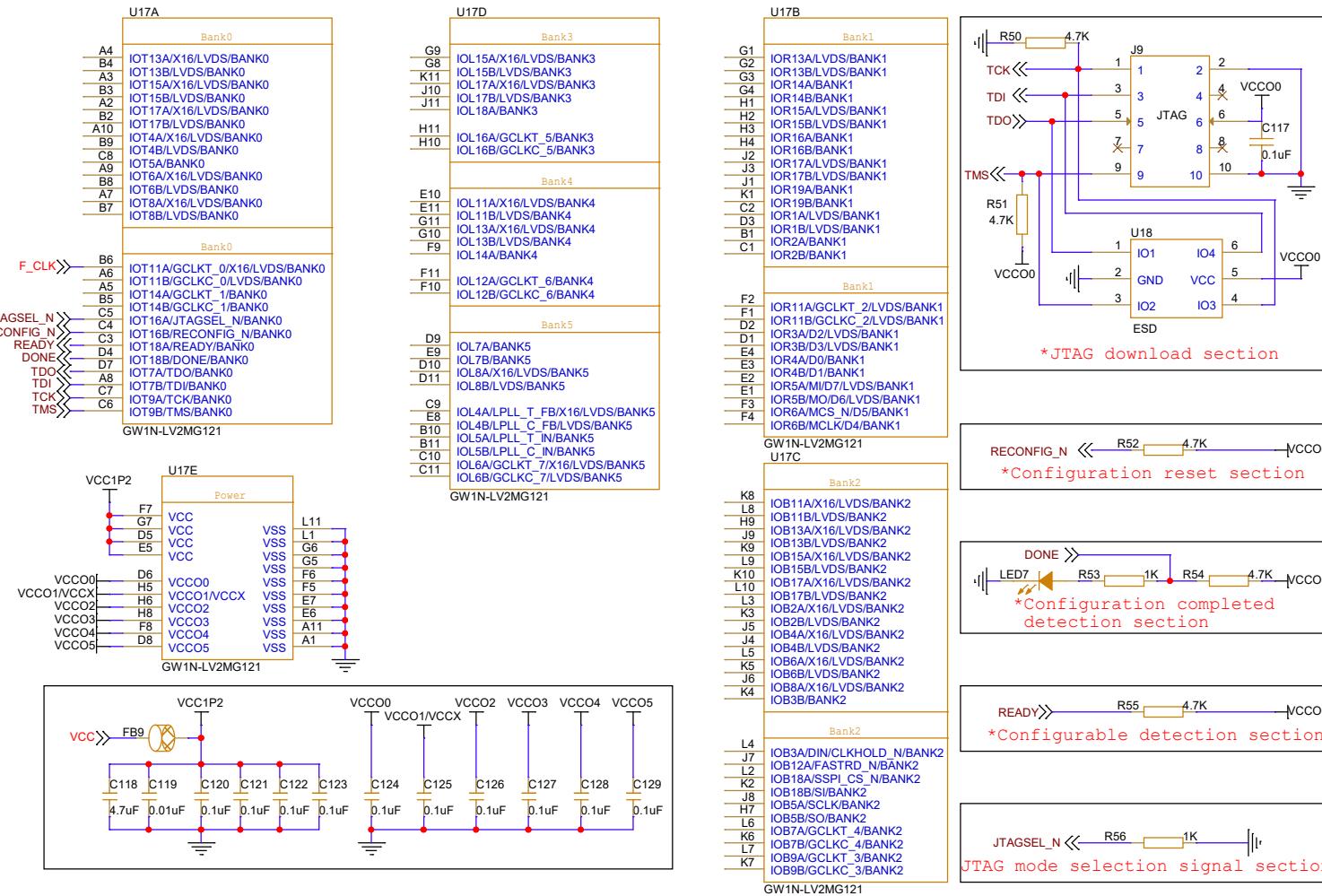
1.F CLK signal is an external input clock signal.

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

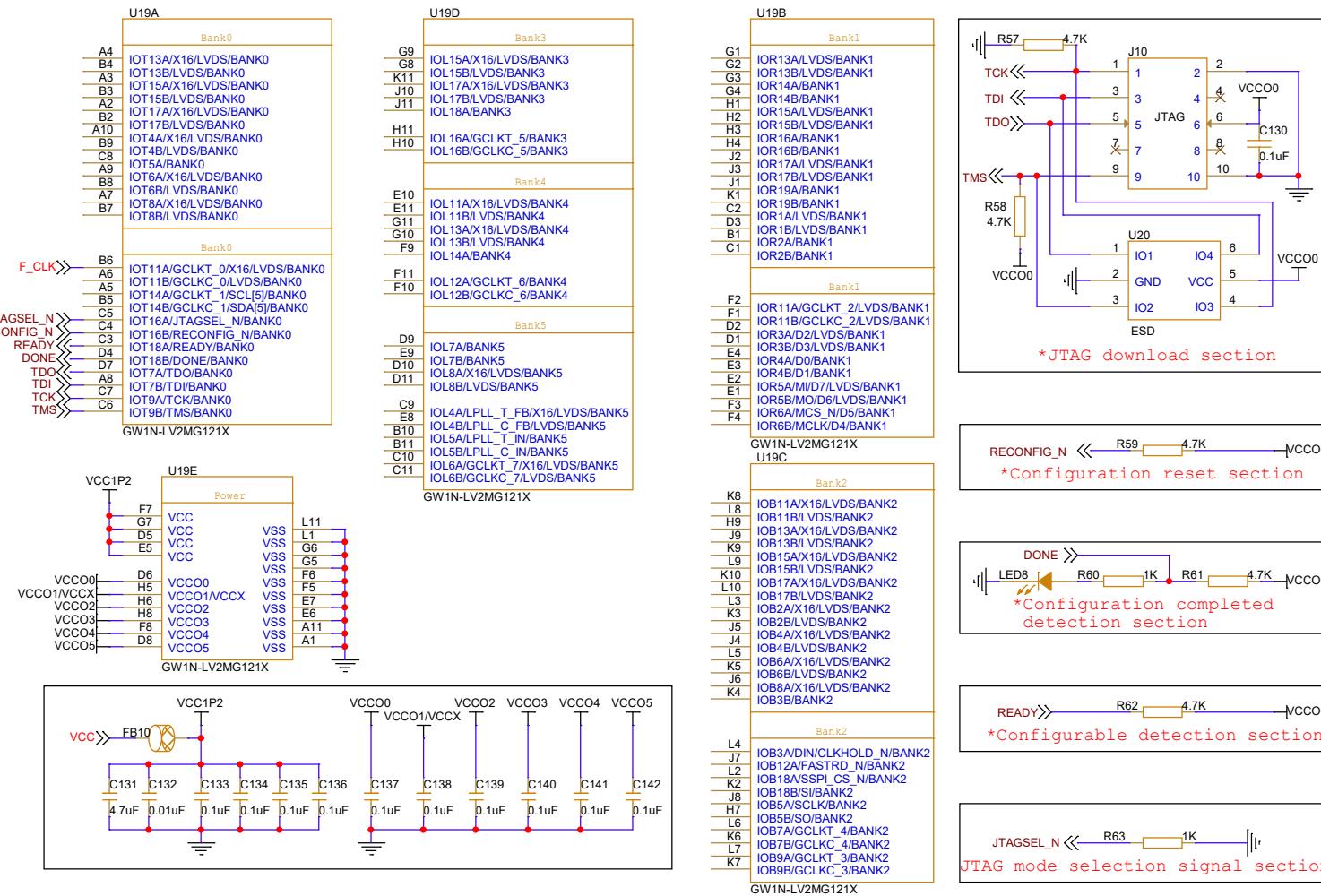
2.It is recommended that add an ESD protection chip to the JTAG download circuit.



Title		GOWIN Minimum System Diagram	
Size	Document Number	Rev 2.2	
A3	GW1N-LV2LQ144X		
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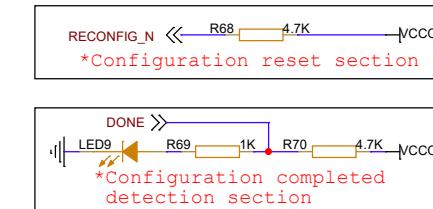
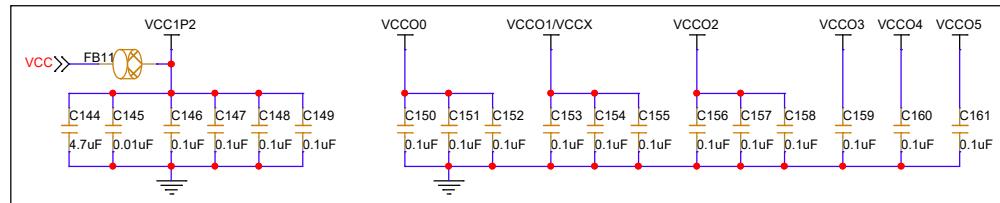
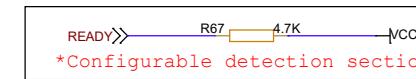
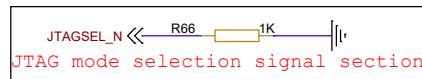
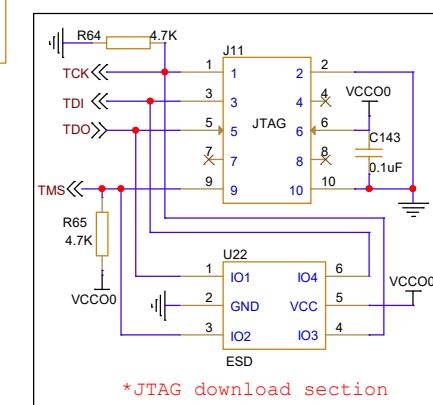
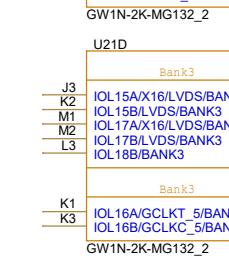
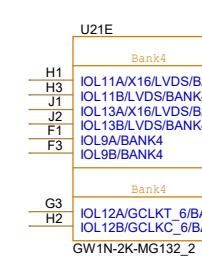
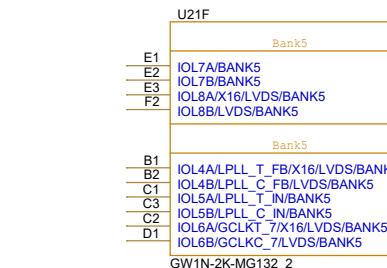
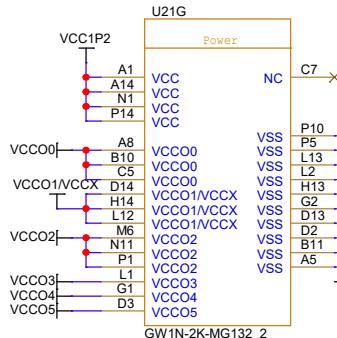
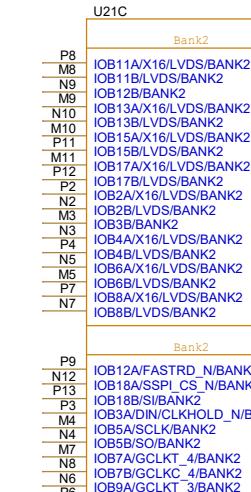
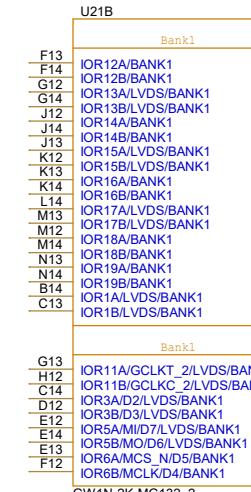
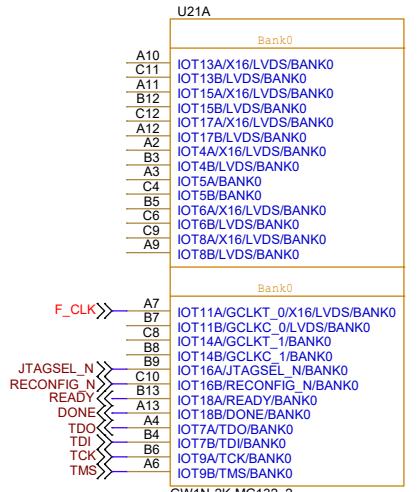


Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2MG121	2.2

**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.

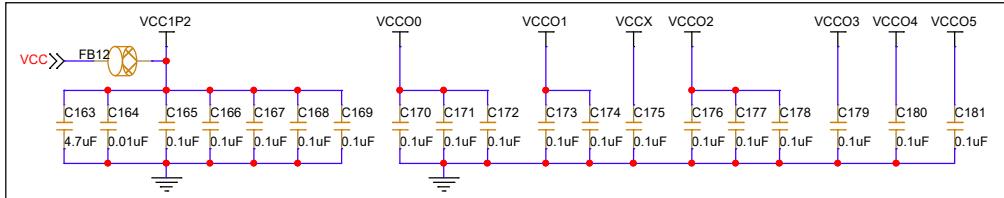
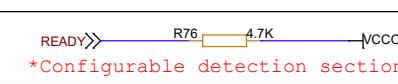
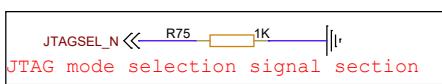
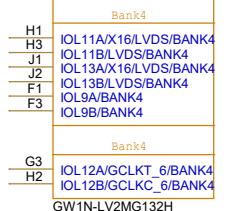
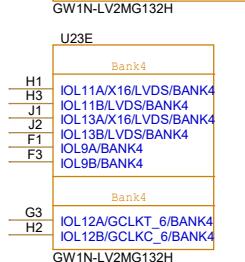
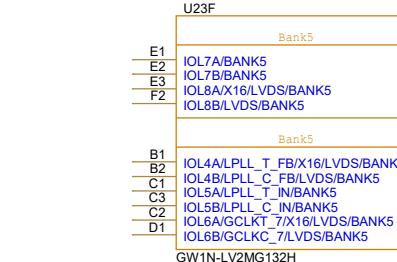
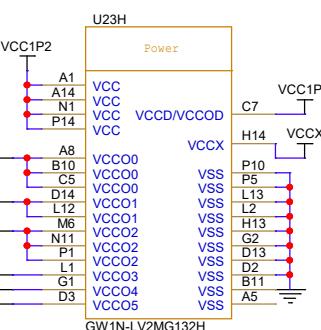
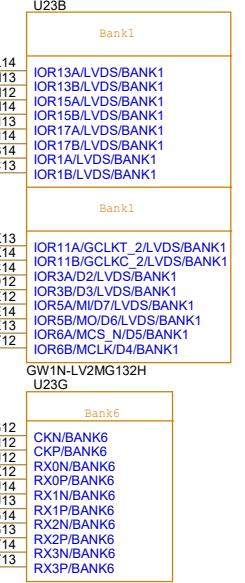
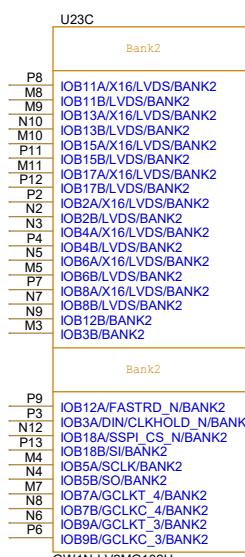
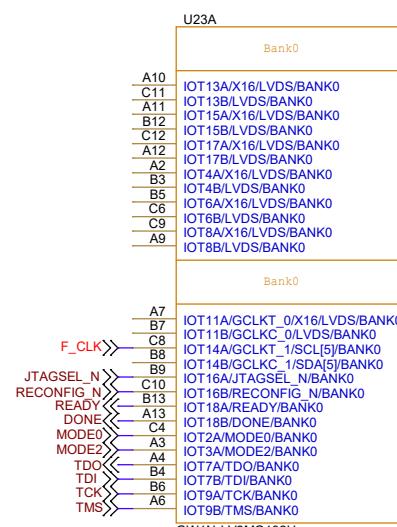
Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2MG121X	2.2



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.

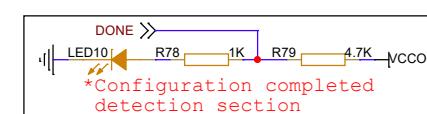
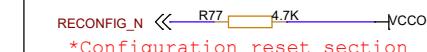
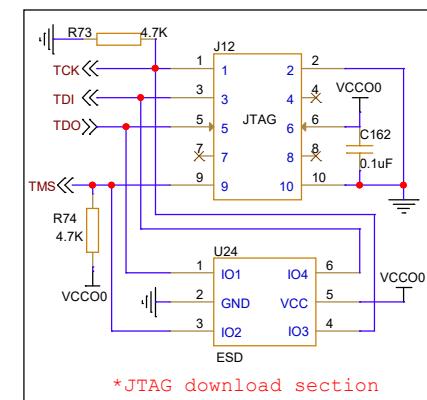
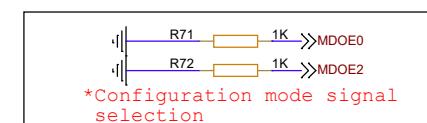
Title		
GOWIN Minimum System Diagram		
Size B	Document Number GWIN-LV2MG132	Rev 2.2

**Notes:**

1. F_CLK signal is an external input clock signal.

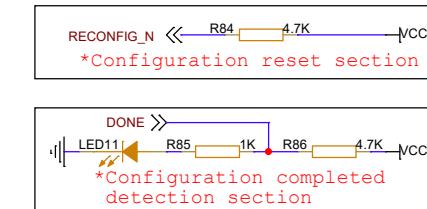
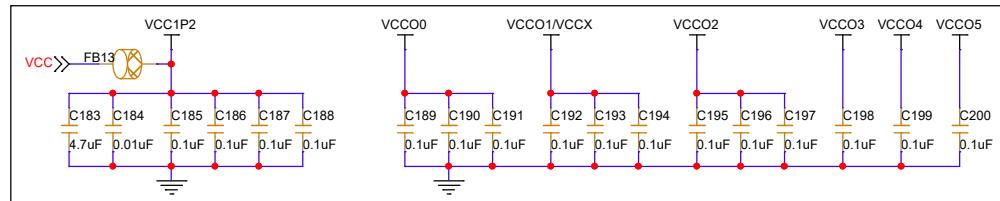
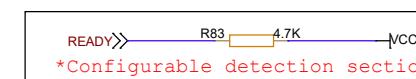
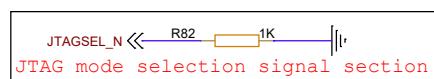
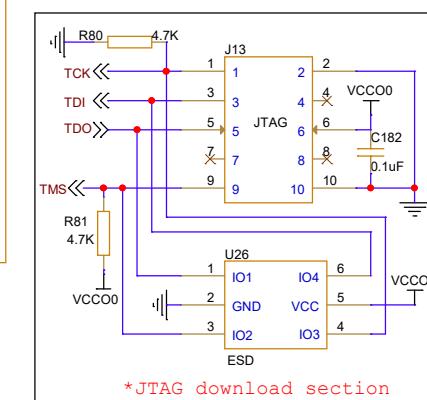
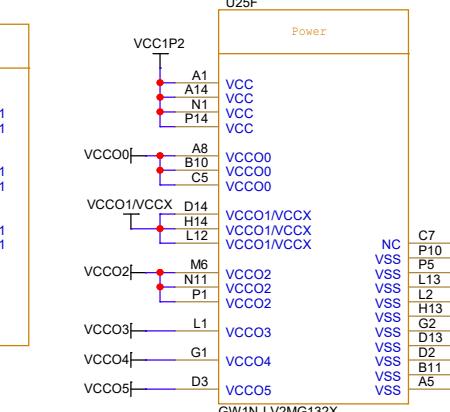
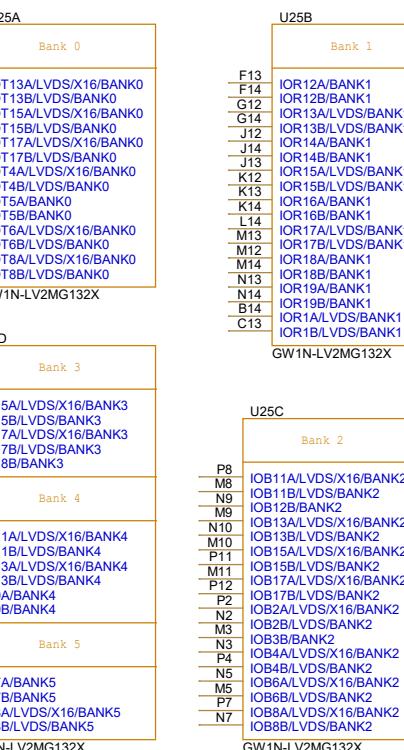
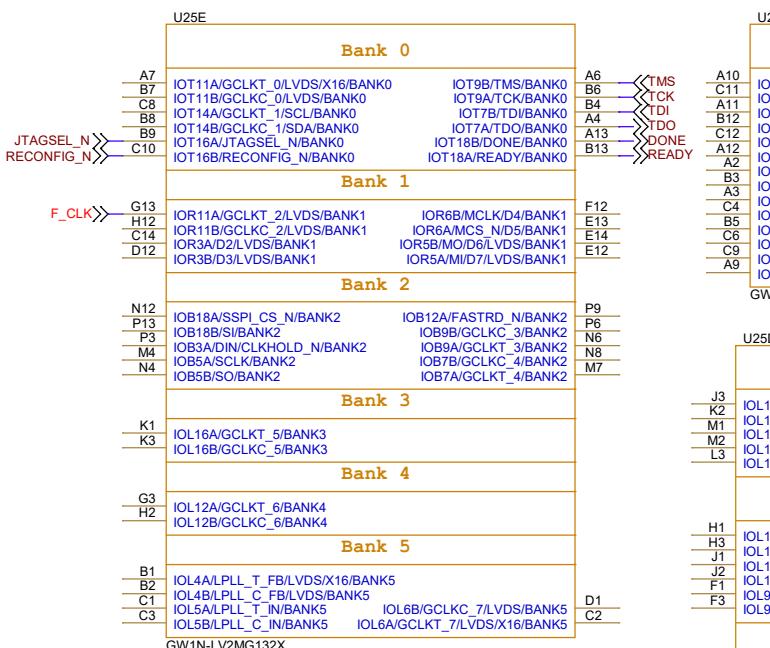
It is recommended that F_CLK signal be provided through an active oscillator crystal.

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-LV2MG132H	2.2
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GW1N-LV2MG132X

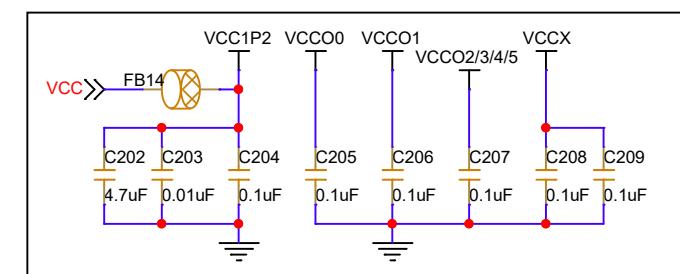
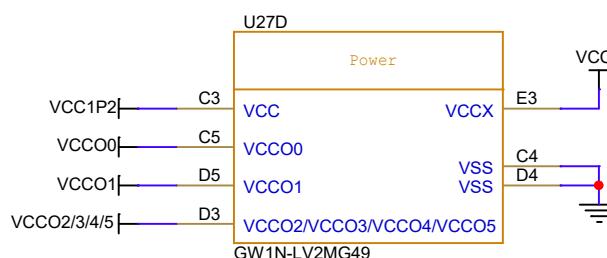
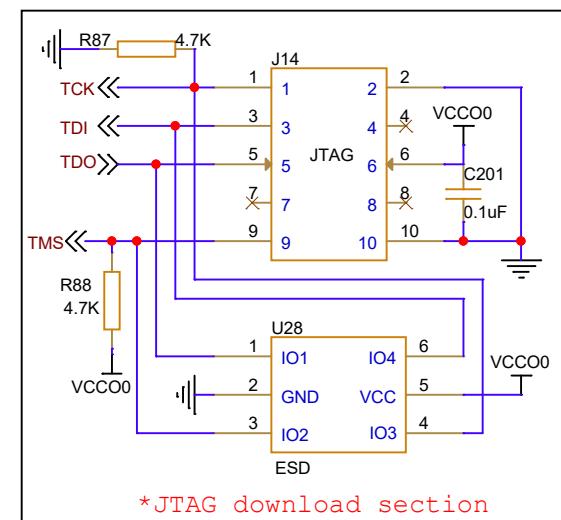
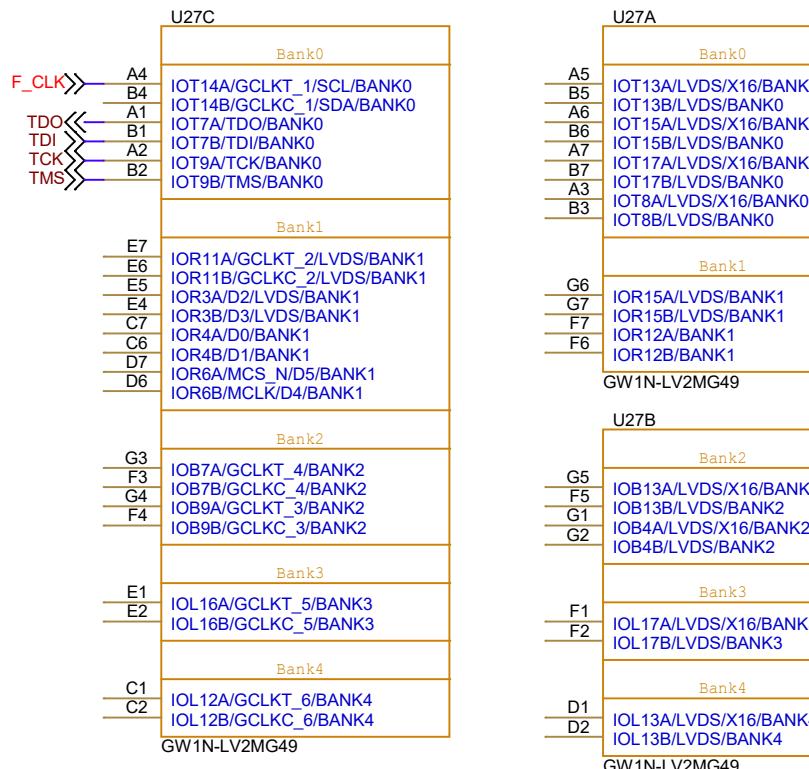


Notes:

- 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		
B		GW1N-LV2MG132X		Rev 2.2
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GW1N-LV2MG49

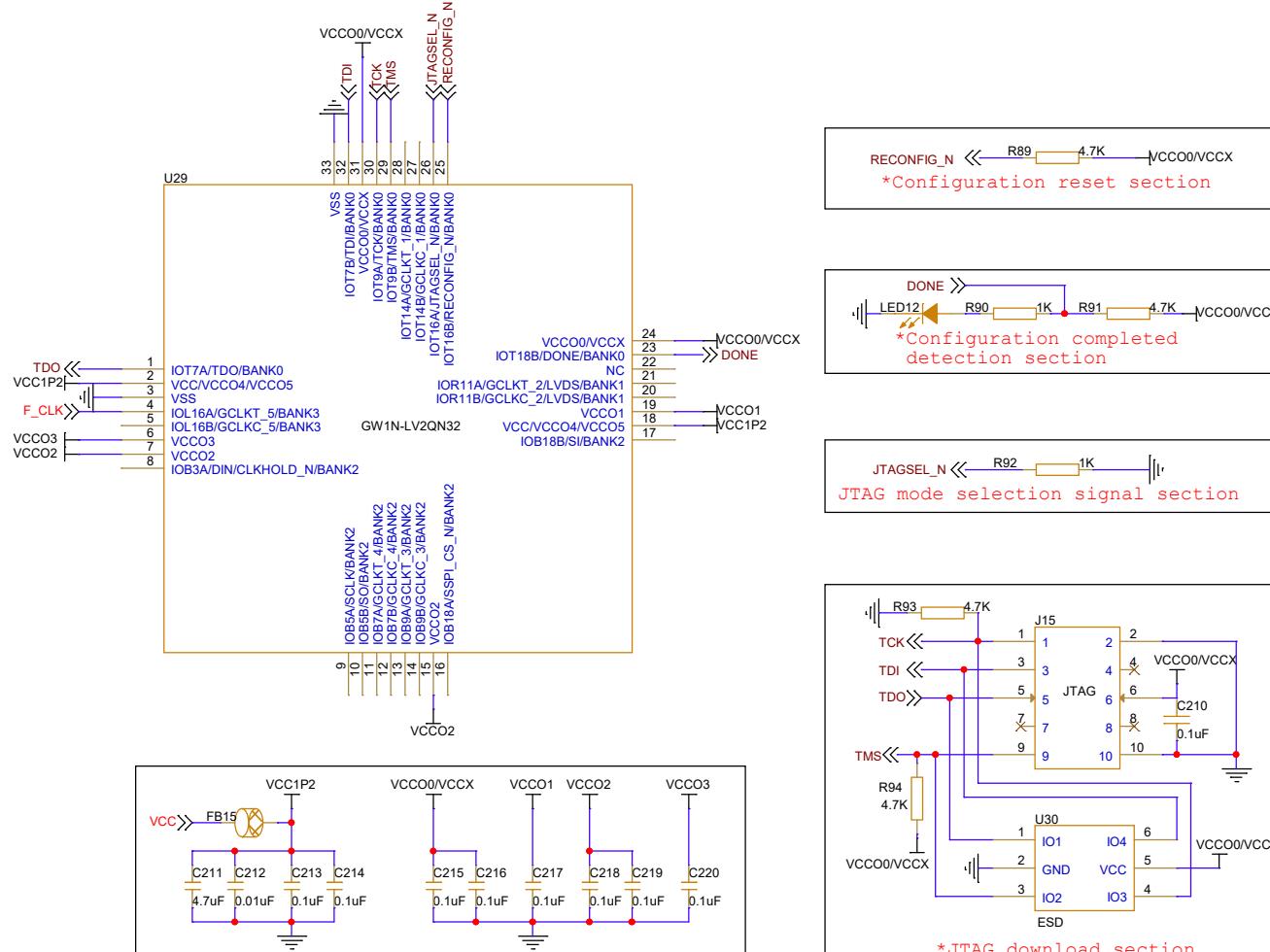


Notes:

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	2.2
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GW1N-LV2QN32



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 B	Document Number GW1N-LV2QN32			Rev 2.2
Date Thursday, July 04, 2024	Sheet 16	of 22		

D

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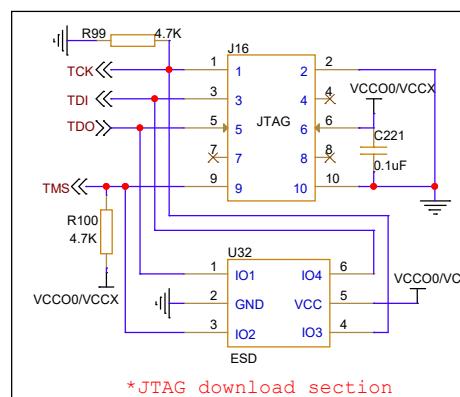
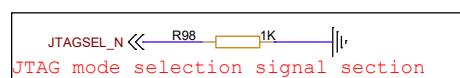
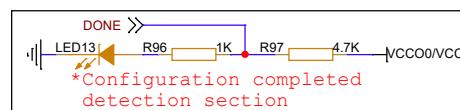
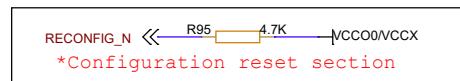
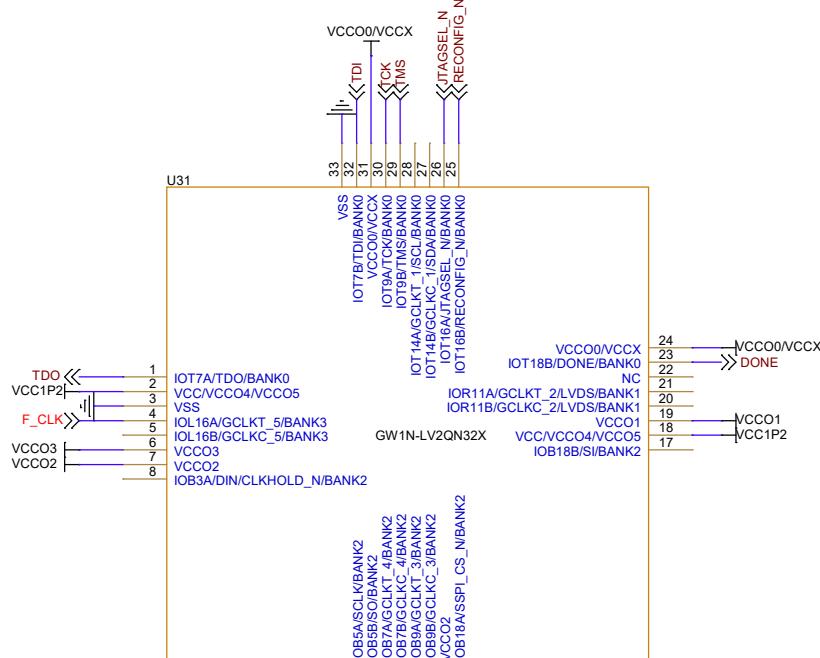
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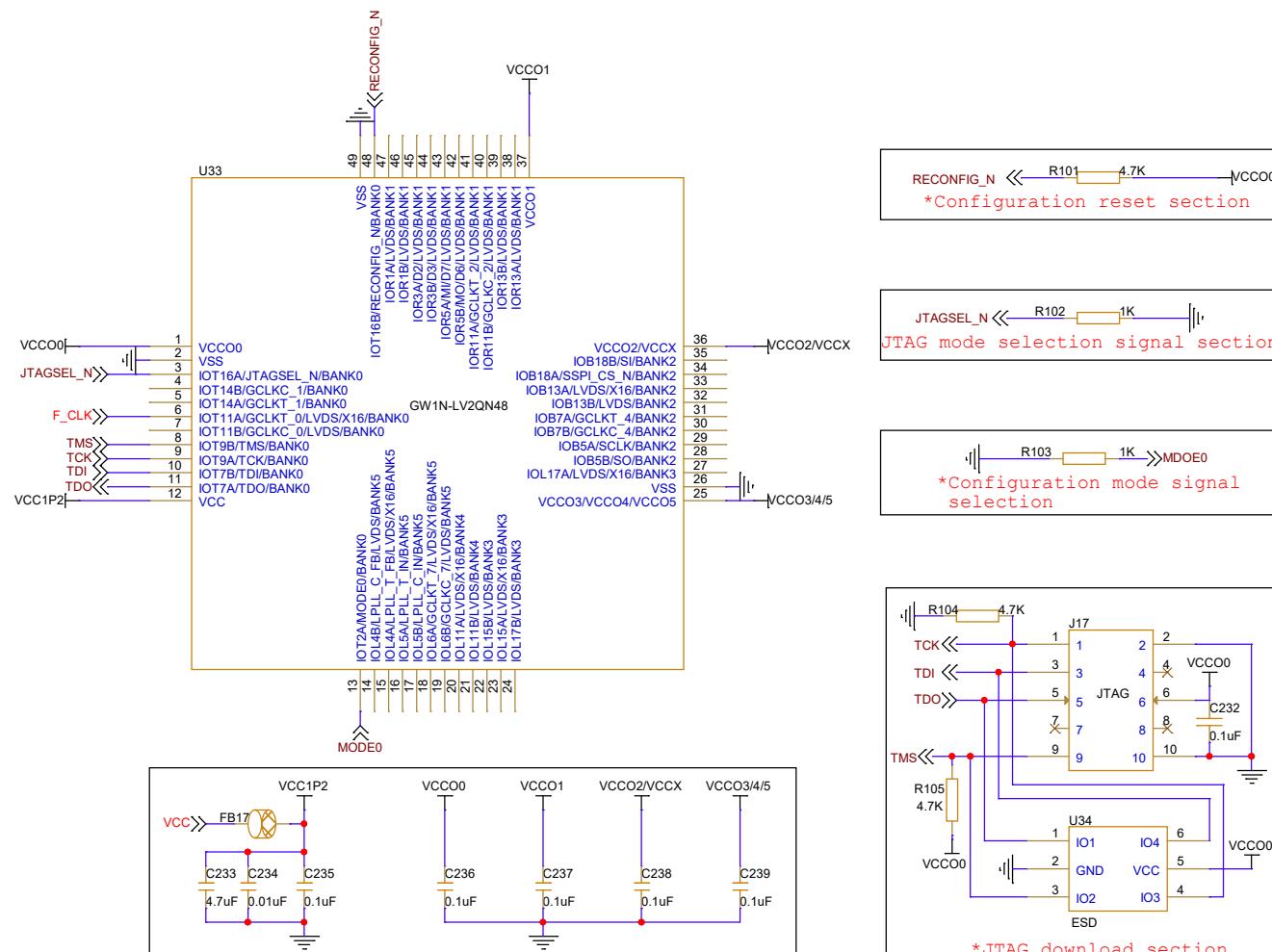
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**Notes:**

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.

Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2QN32X	2.2

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**Notes:**

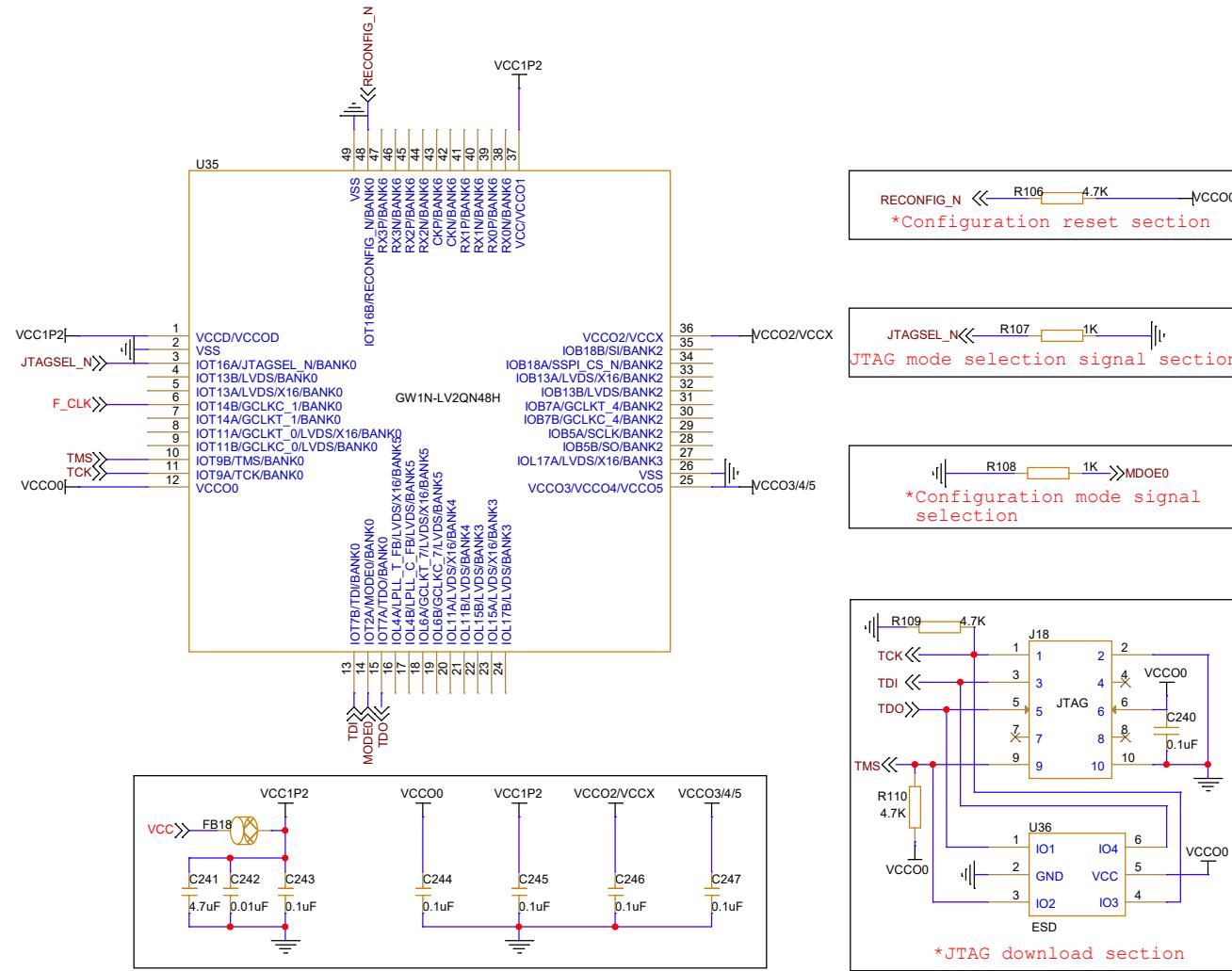
1. F_CLK signal is an external input clock signal.

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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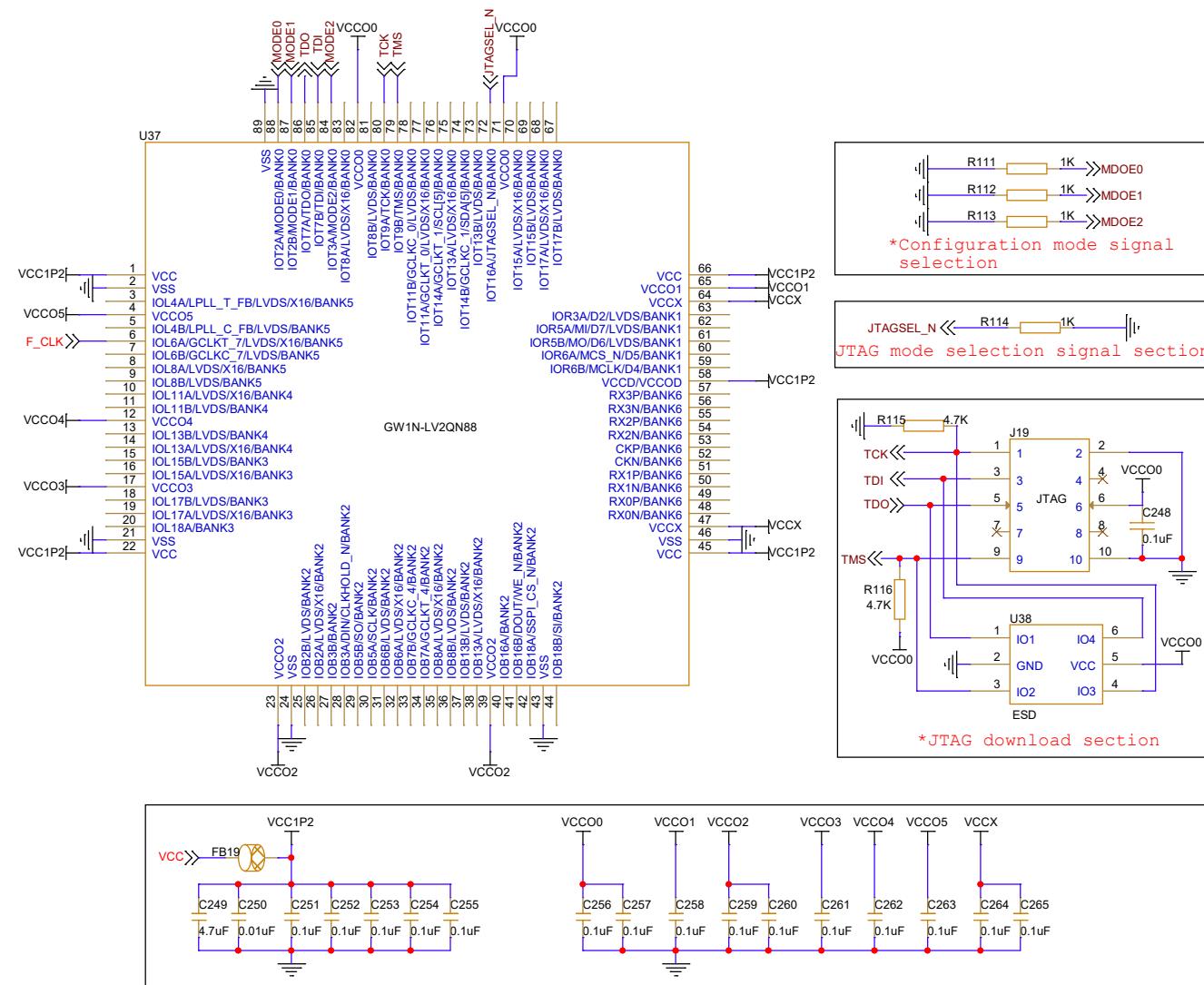
**Notes:**

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.

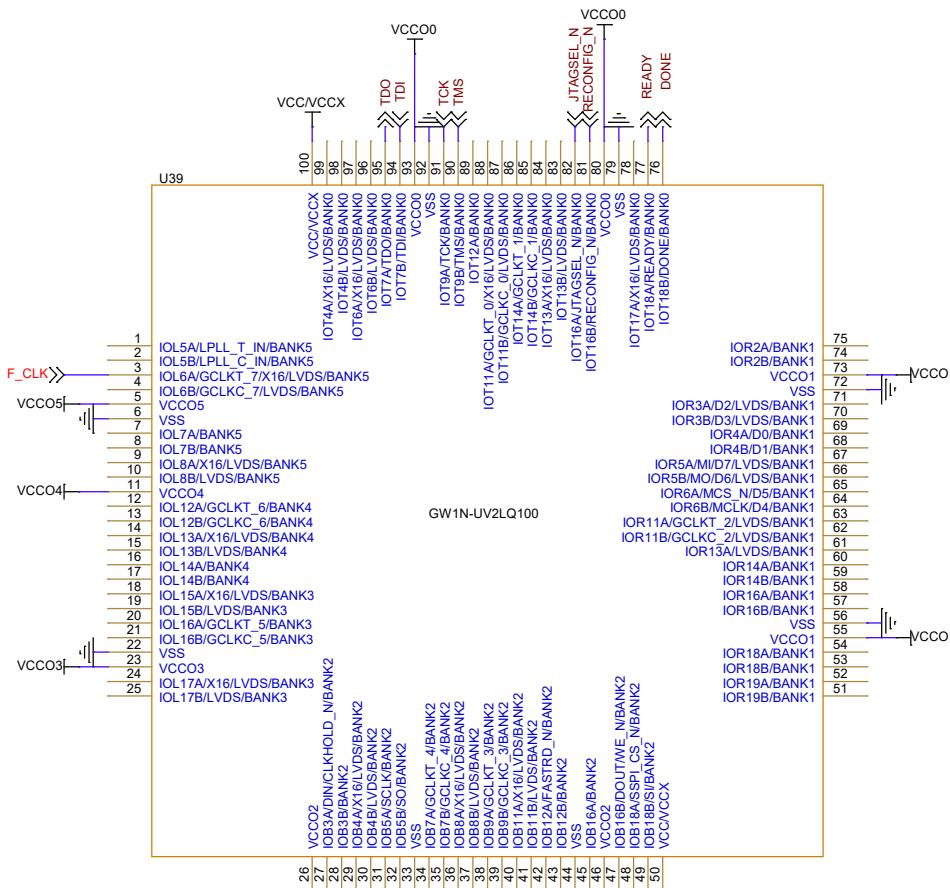
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Size B	Document Number GW1N-LV2QN48H	Rev 2.2
Date: Thursday, July 04, 2024	Sheet 18	of 33

**Notes:**

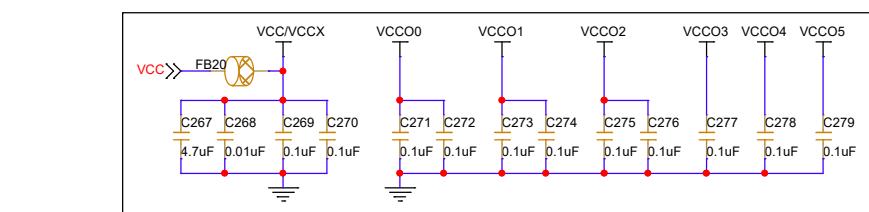
- F CLK signal is an external input clock signal.
It is recommended that F CLK signal be provided through an active oscillator crystal.
- It is recommended that add an ESD protection chip to the JTAG download circuit.

Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-LV2QN88	2.2
	Date: Thursday, July 04, 2024	Sheet 19 of 33

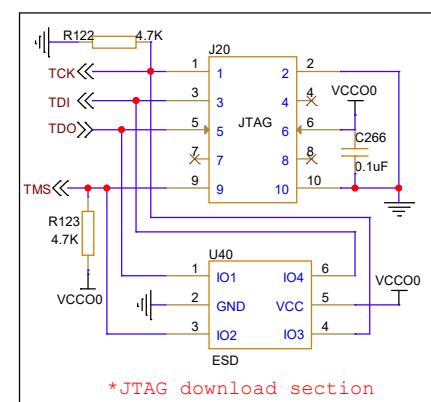
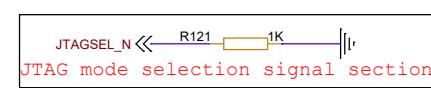
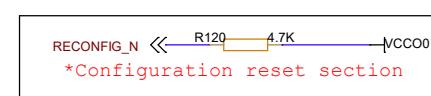
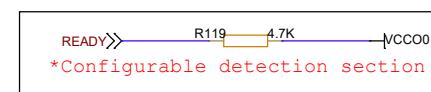
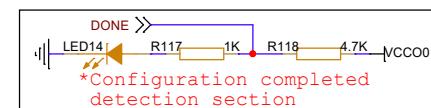
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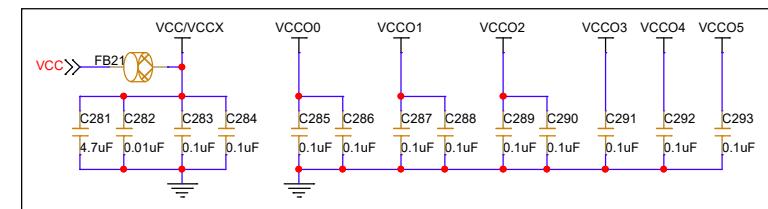
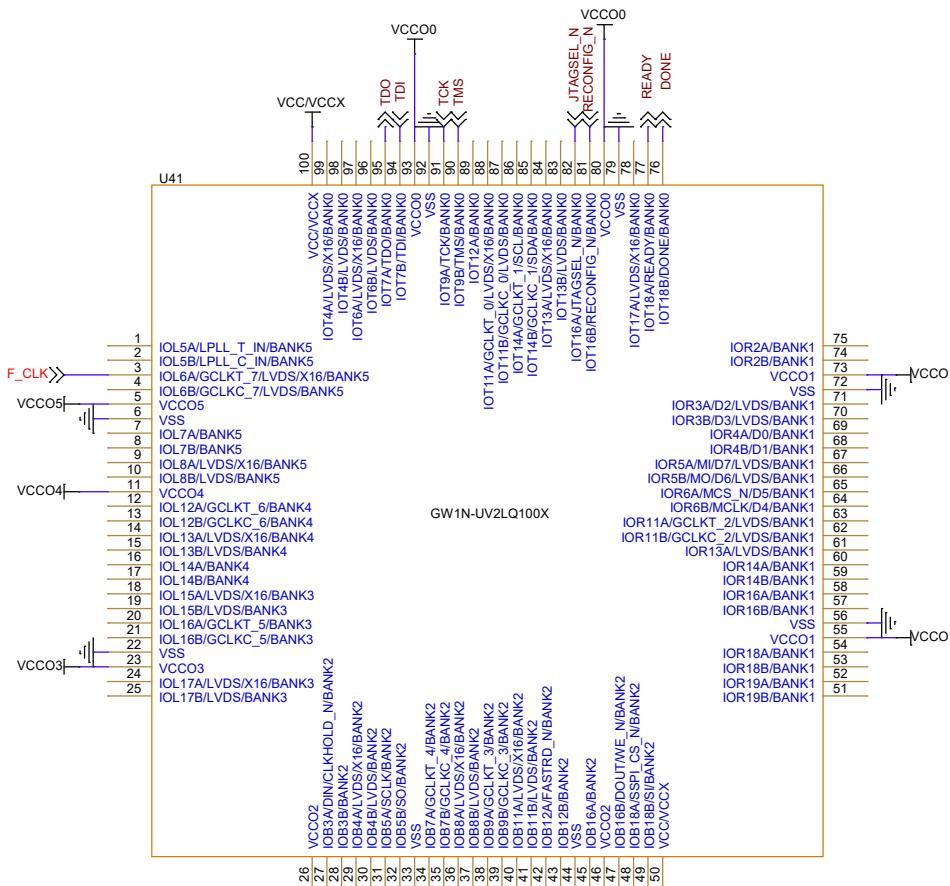
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Notes:

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.

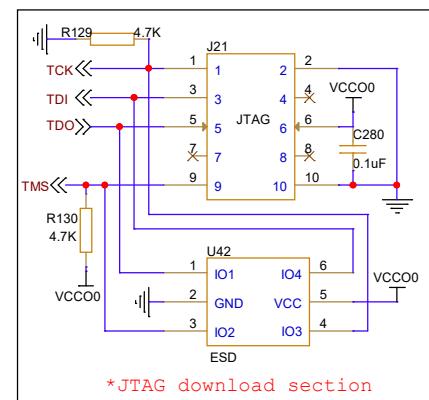
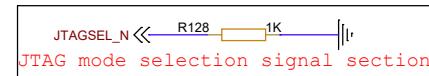
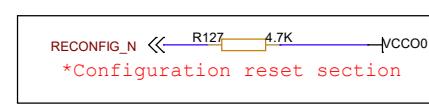
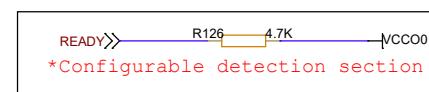
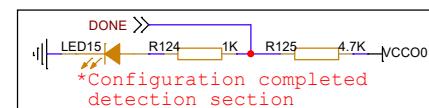
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Size	Document Number
B	GW1N-UV2LQ100
Rev	2.2
Date:	Thursday, July 04, 2024
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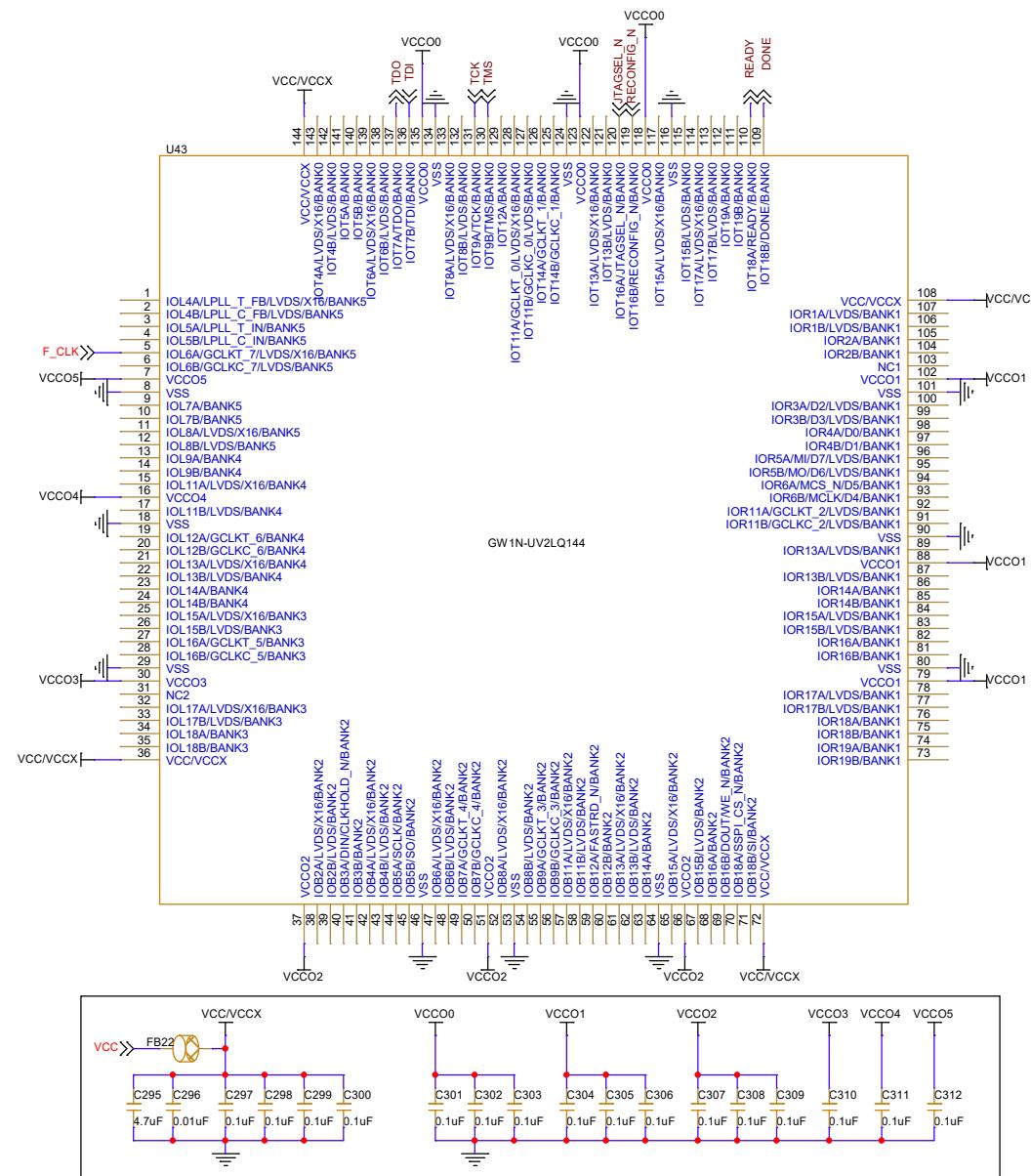
Notes:

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.

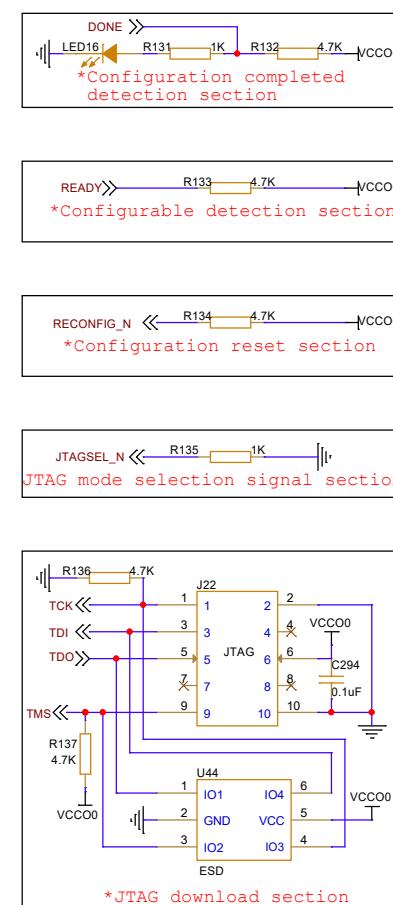


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Size	Document Number	GW1N-UV2LQ100X
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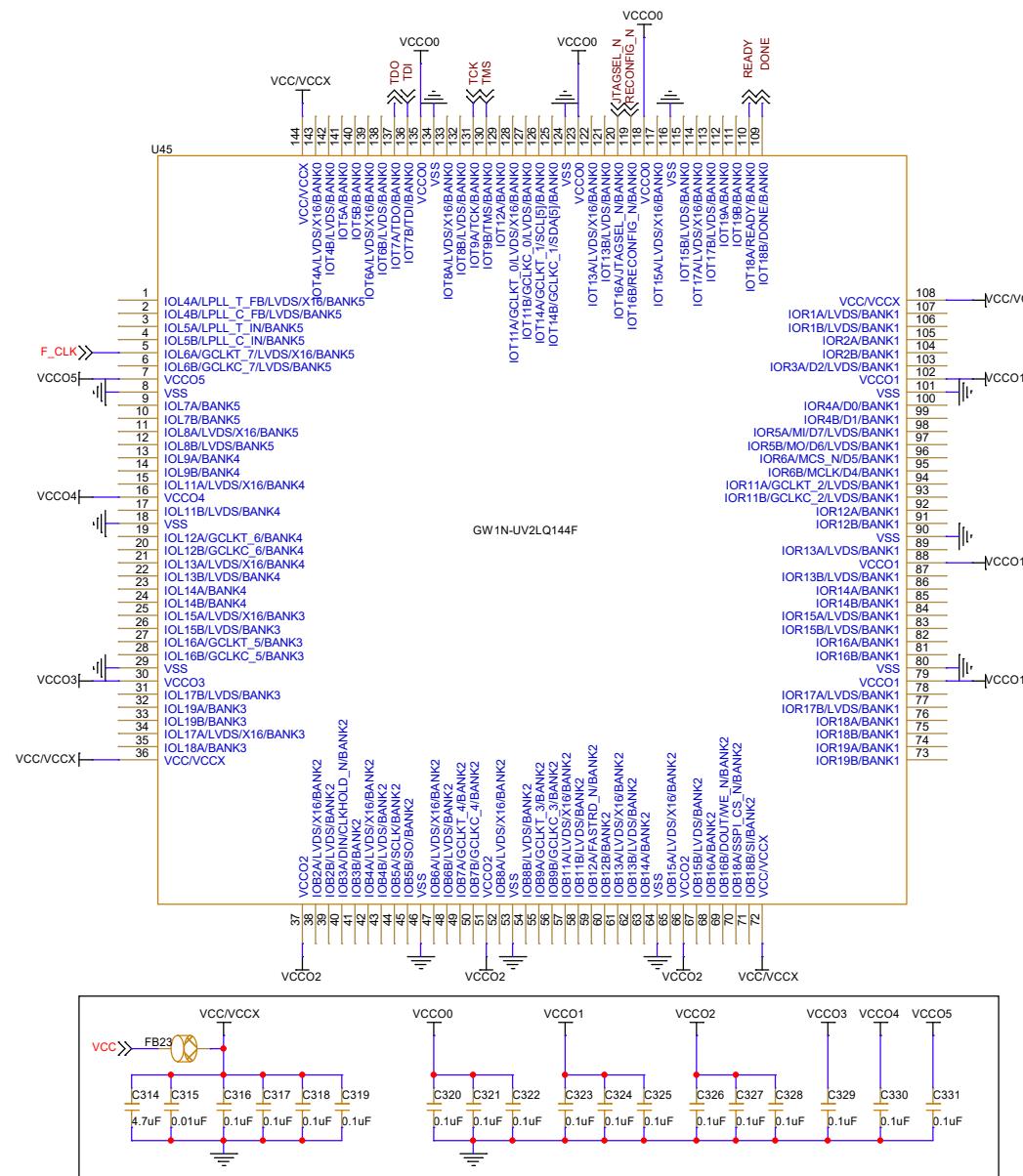
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**Notes:**

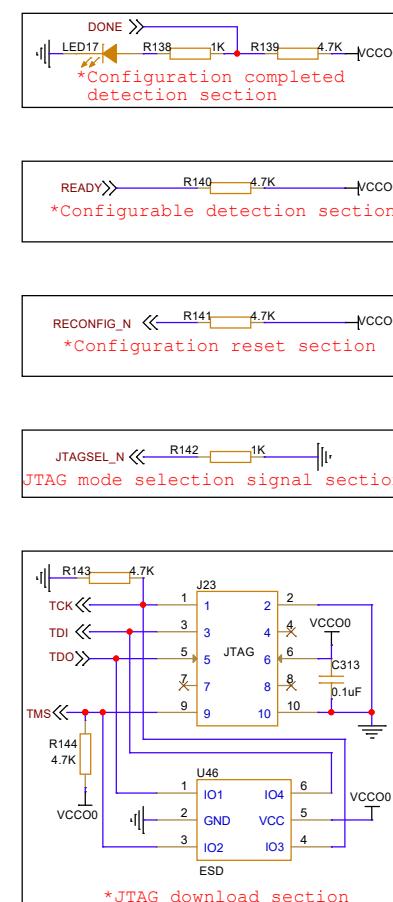
1. F CLK signal is an external input clock signal.
It is recommended that F CLK signal be provided through an active oscillator crystal.
2. It is recommended that add an ESD protection chip to the JTAG download circuit.



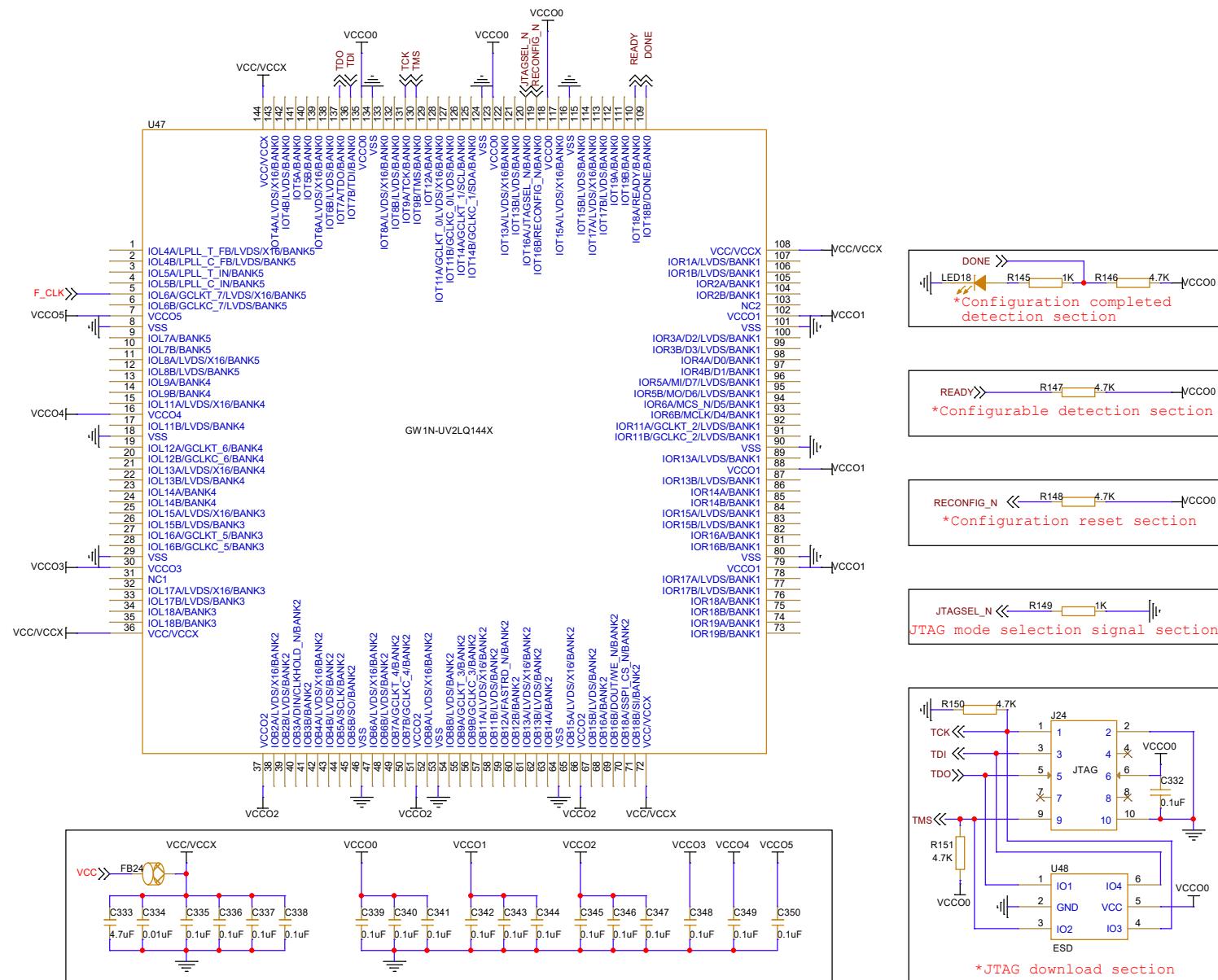
Title GOWIN Minimum System Diagram		
Size A3	Document Number GW1N-UV2LQ144	Rev 2.2
Date: Thursday, July 04, 2024		Sheet 22 of 33

**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.

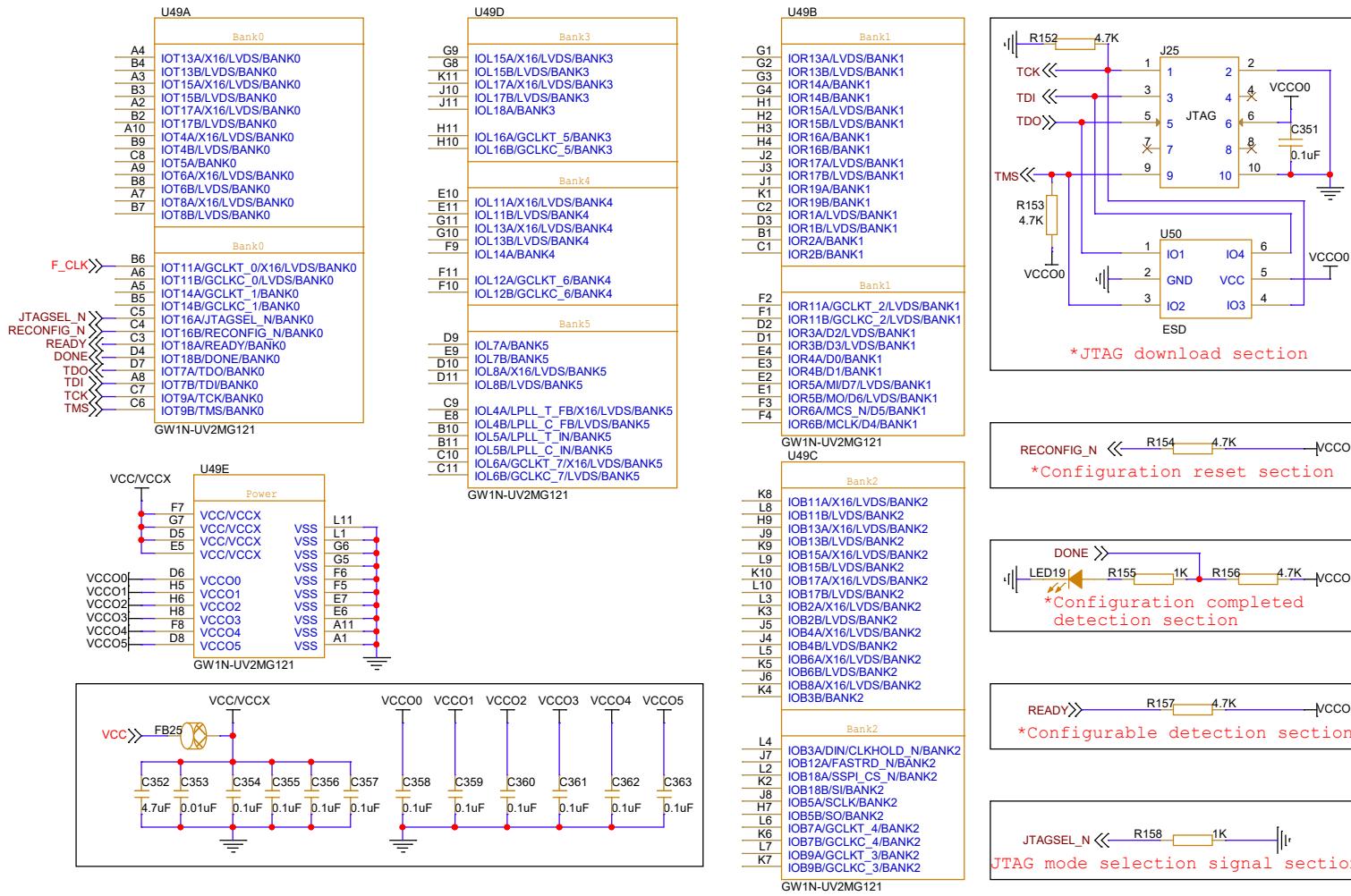


Title	
GOWIN Minimum System Diagram	
Size A3	Document Number GW1N-UV2LQ144F
Date: Thursday, July 04, 2024	Rev 2.2
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**Notes:**

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.

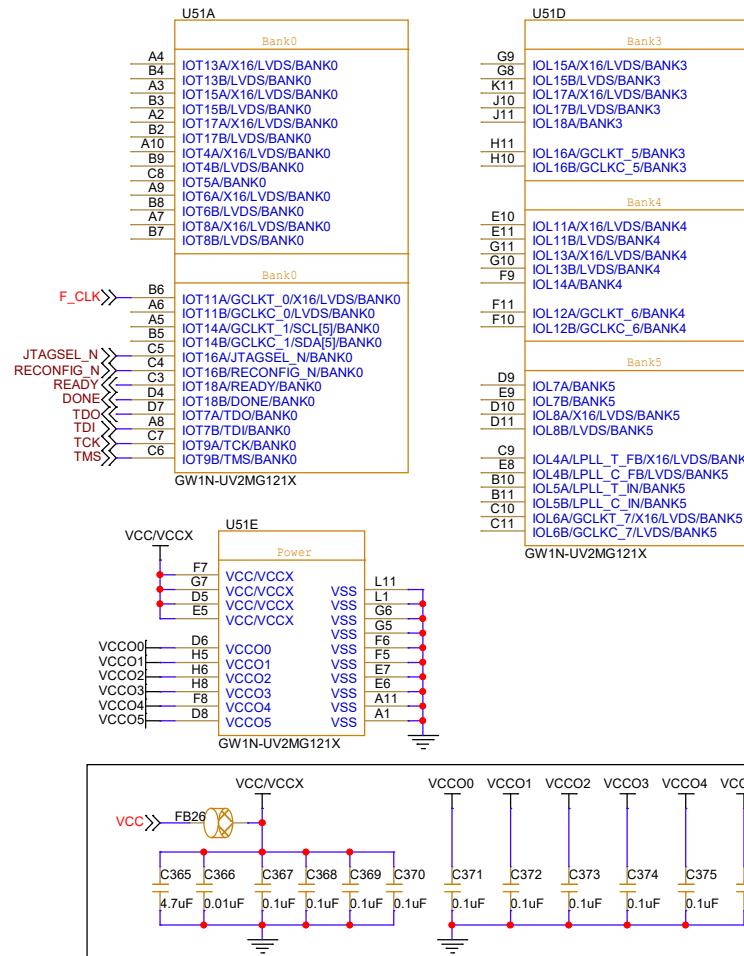
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Size	Document Number
A3	GW1N-UV2LQ144X
Date:	Thursday, July 04, 2024
Rev	2.2

**Notes:**

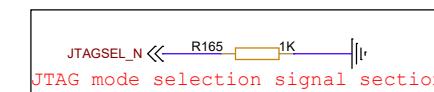
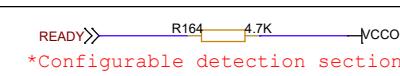
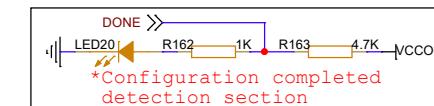
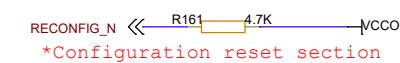
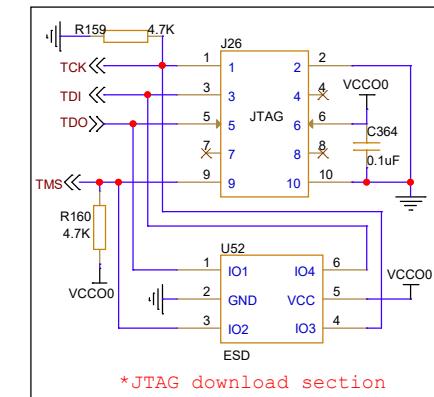
1. F_CLK signal is an external input clock signal.
It is recommended that F_CLK signal be provided through an active oscillator crystal.
2. It is recommended that add an ESD protection chip to the JTAG download circuit.

Title		
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Size	Document Number	Rev
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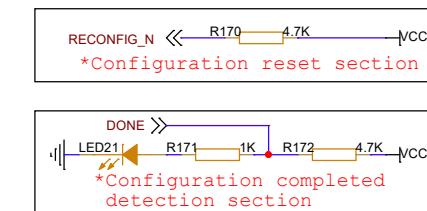
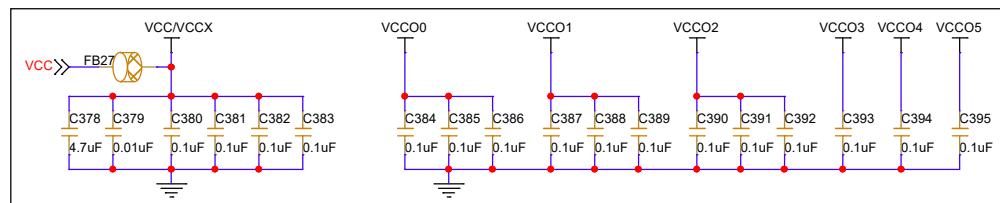
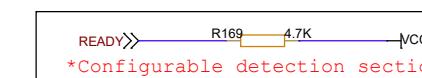
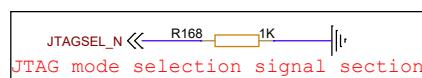
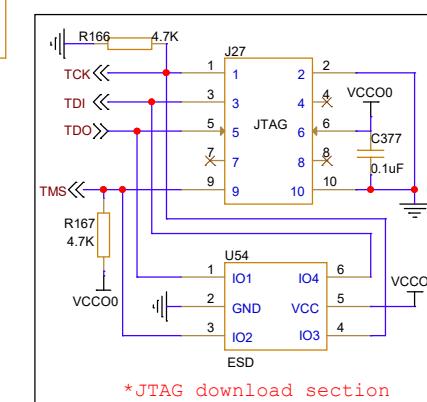
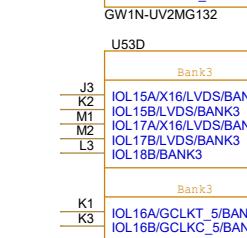
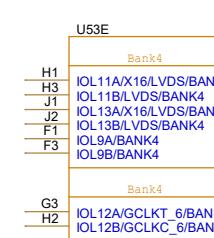
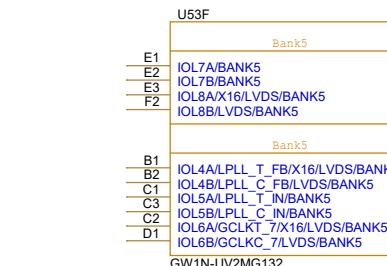
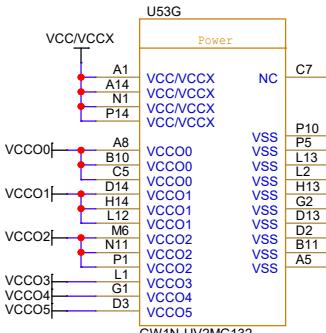
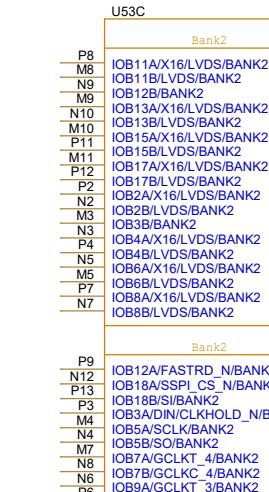
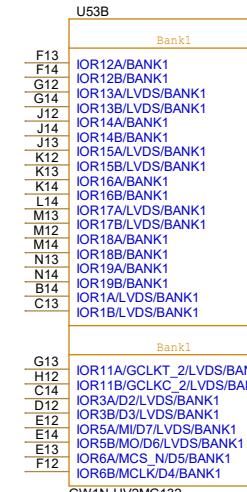
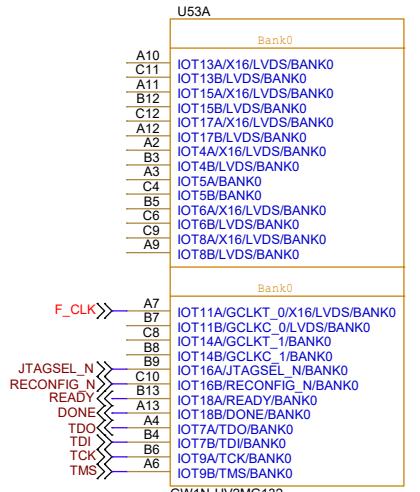
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**Notes:**

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.



Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-UV2MG121X	2.2
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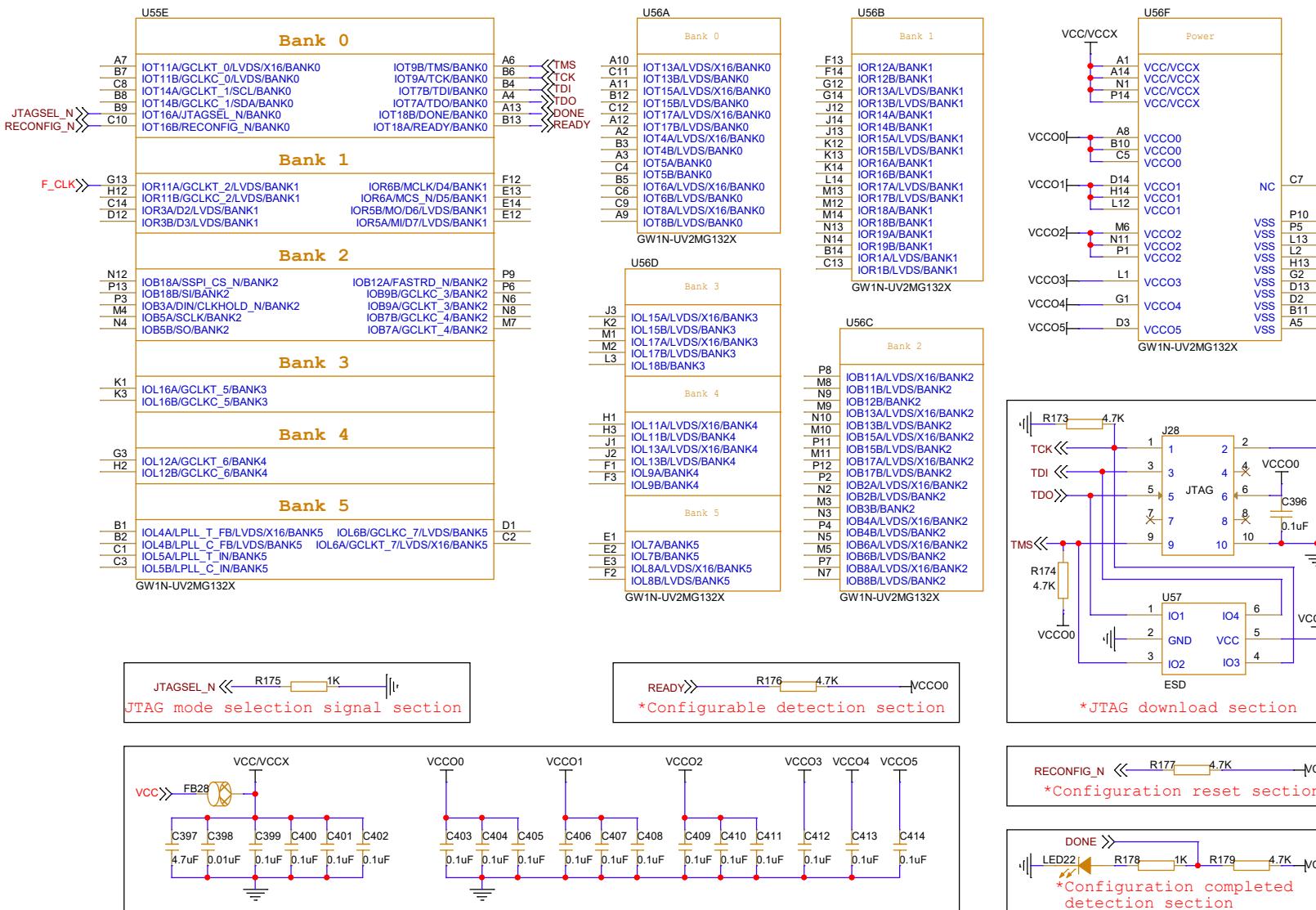
Notes:

- 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-UV2MG132X



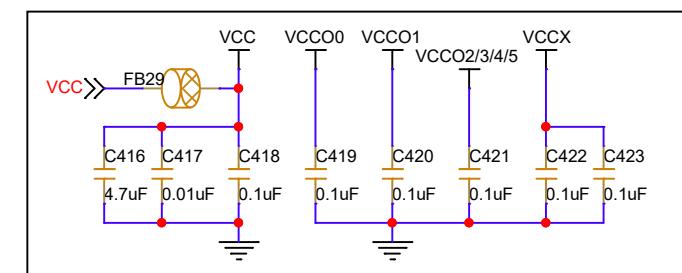
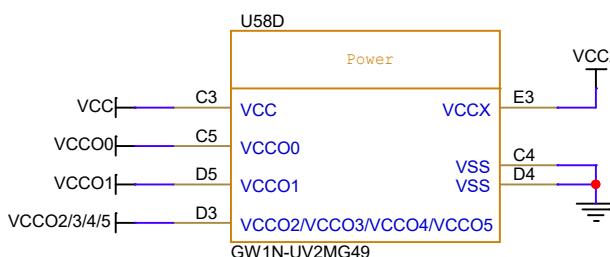
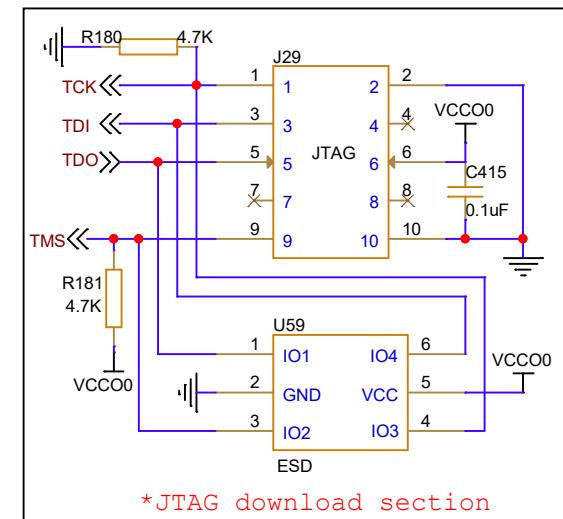
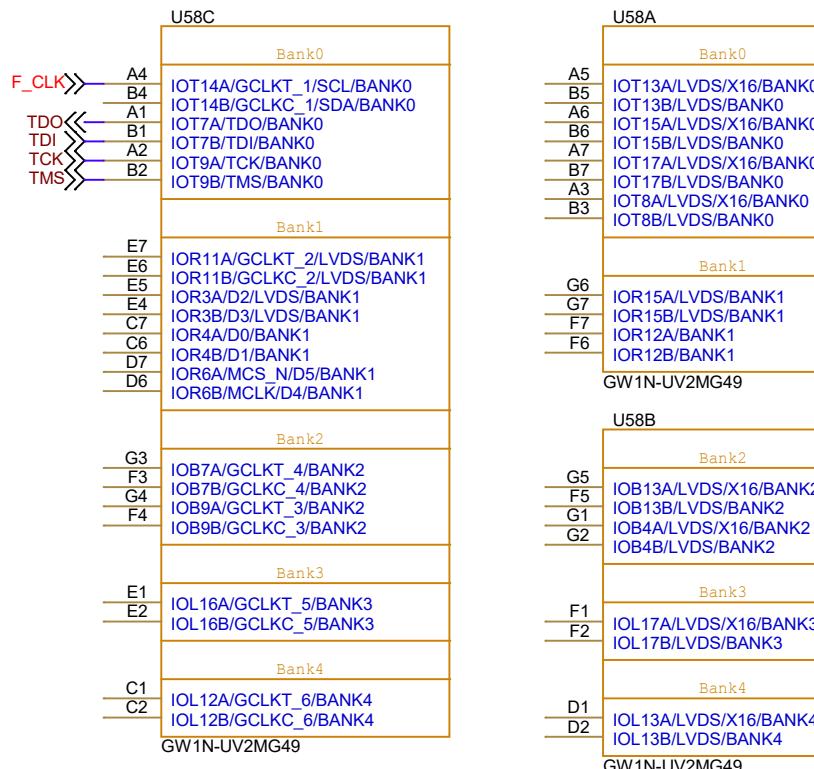
Notes:

- 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 B	Document Number GW-IN-UV2MG132X			Rev 2.2
Date:	Thursday, July 04, 2024	Sheet	28	of 33

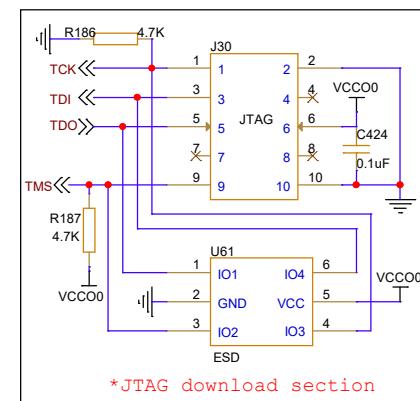
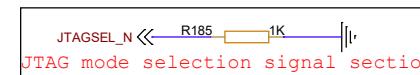
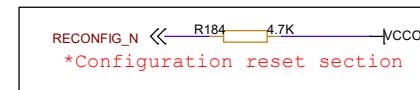
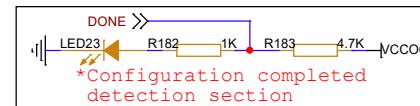
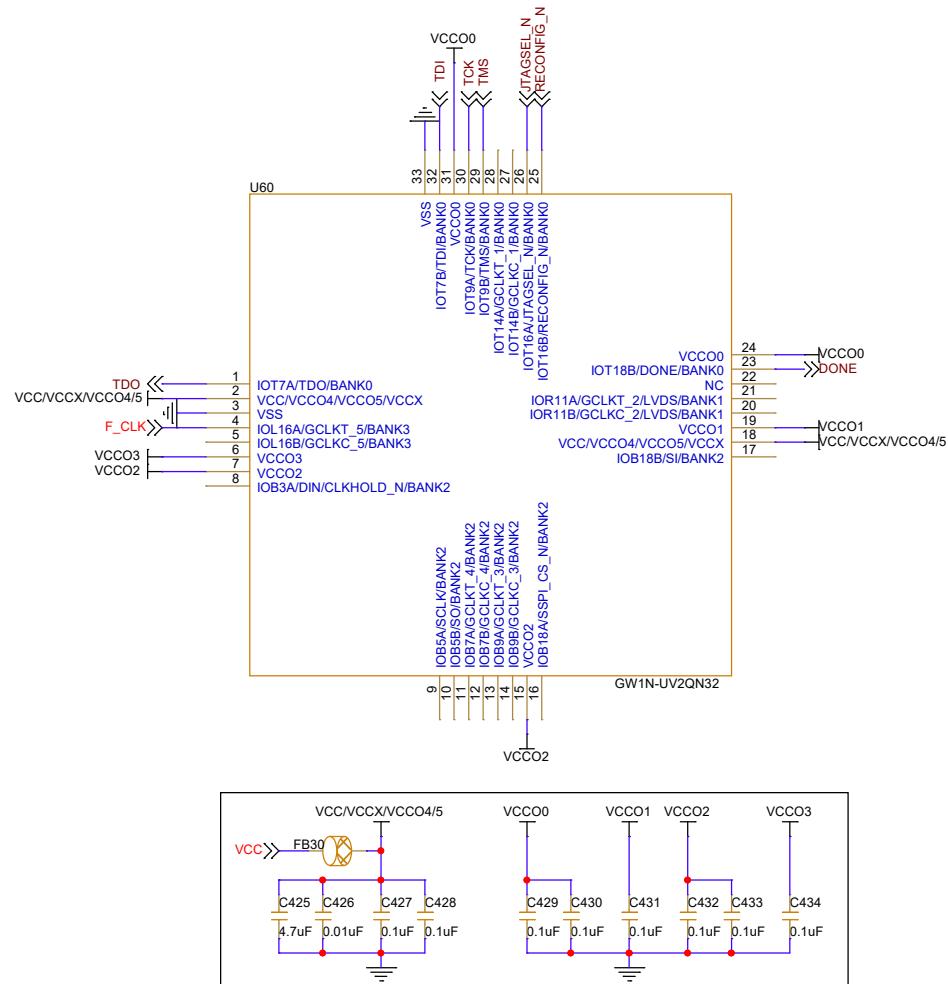
GW1N-UV2MG49



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	
Size A4 Document Number GW1N-UV2MG49	
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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-UV2QN32	2.2

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GW1N-UV2QN32X

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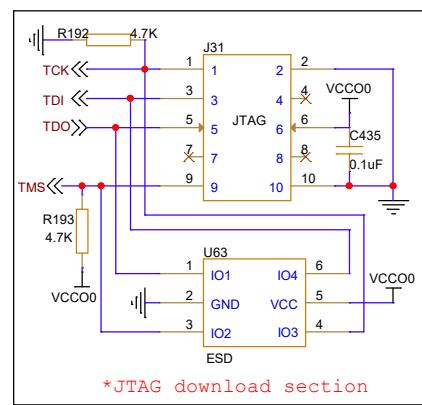
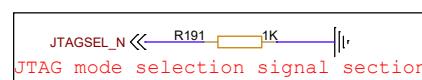
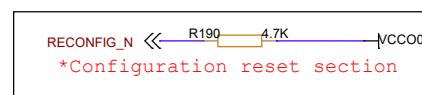
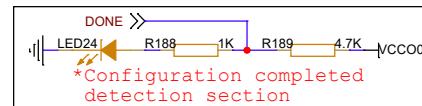
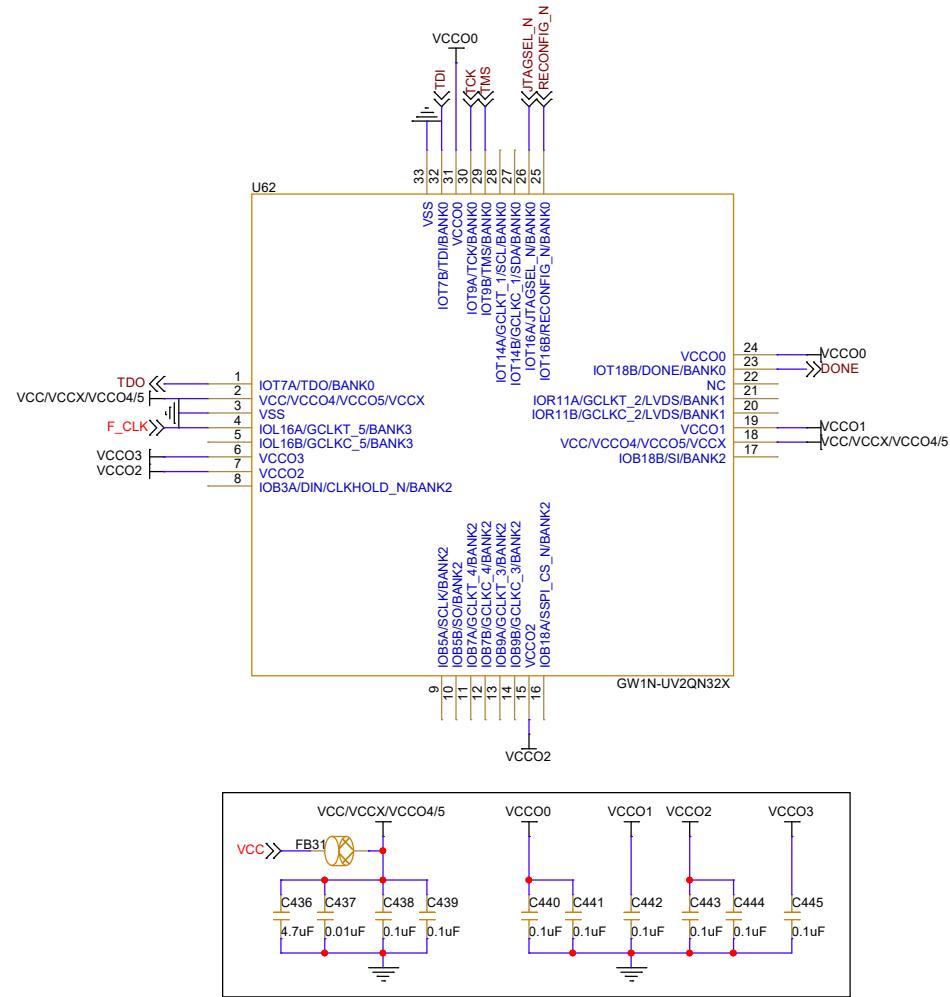
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Notes:

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.

Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
B	GW1N-UV2QN32X	2.2
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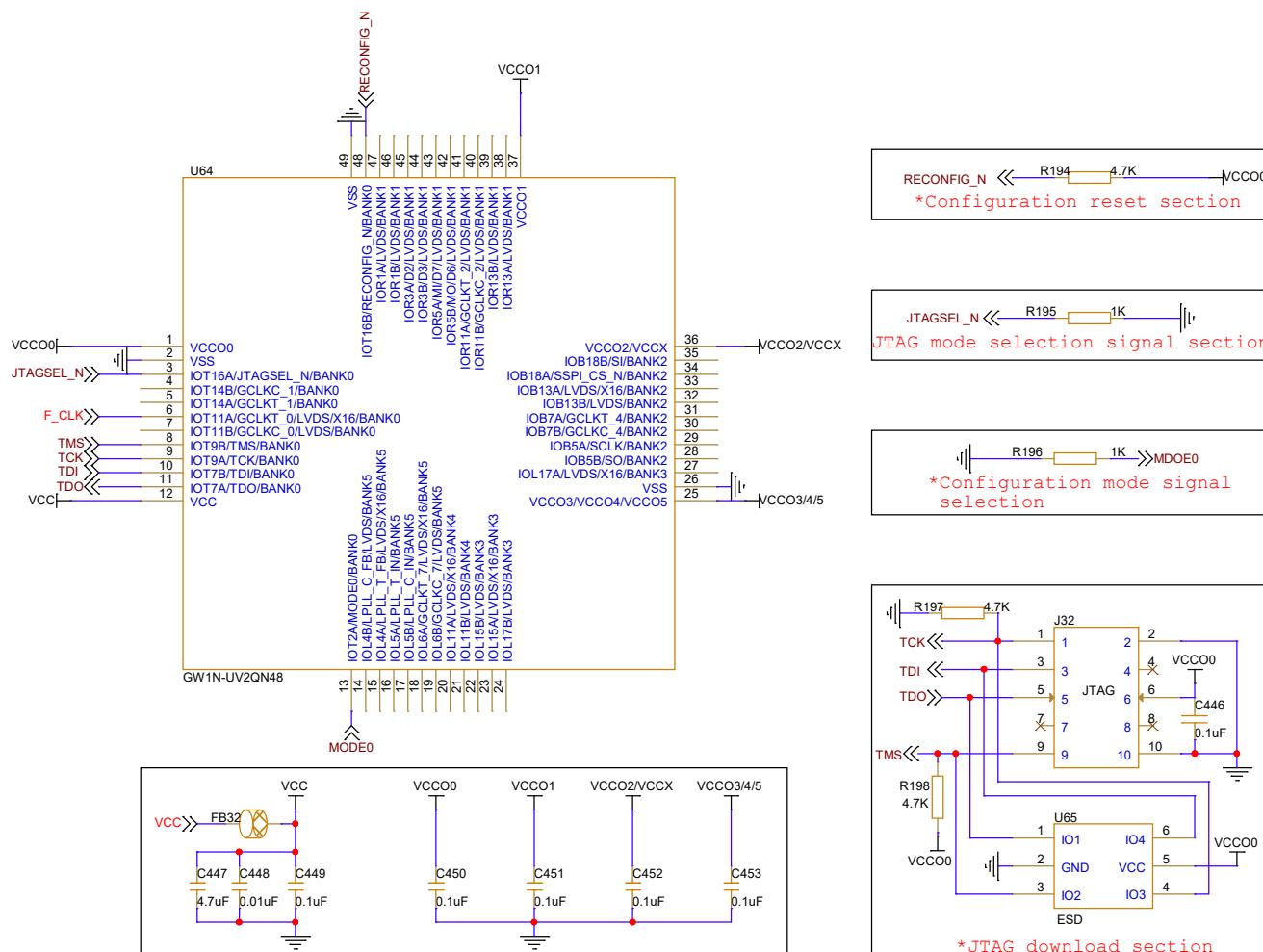
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GW1N-UV2QN48



Notes:

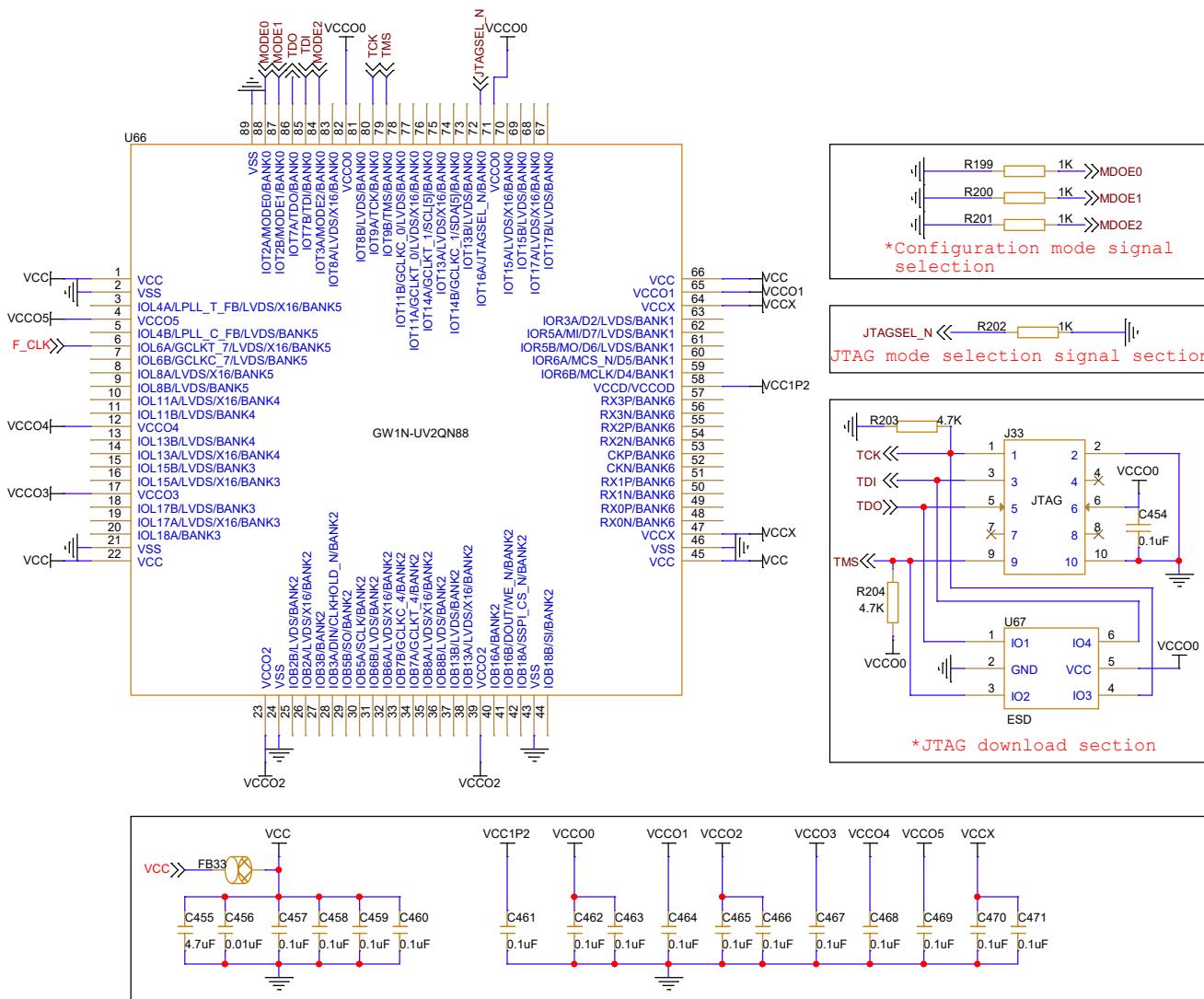
1.F CLK signal is an external input clock signal.

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-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		
Size	Document Number	Rev
B	GW1N-UV2QN88	2.2
	Date: Thursday, July 04, 2024	Sheet 33 of 33