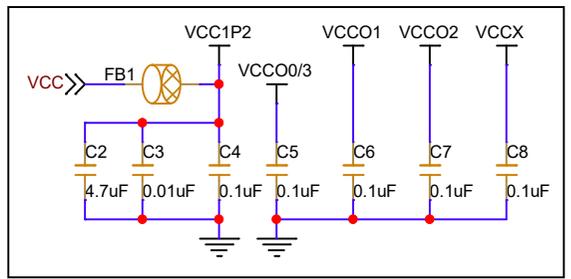
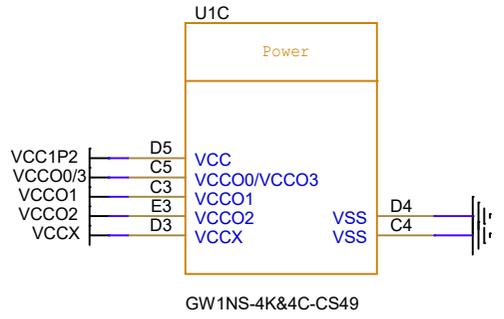
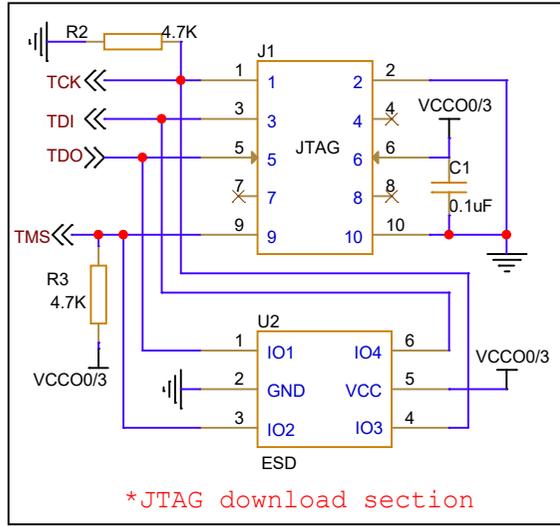
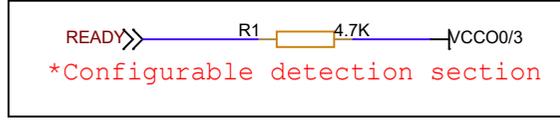
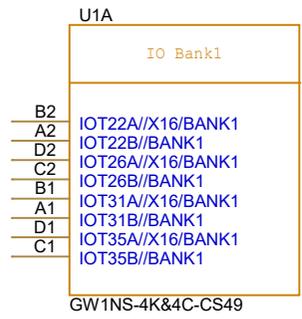
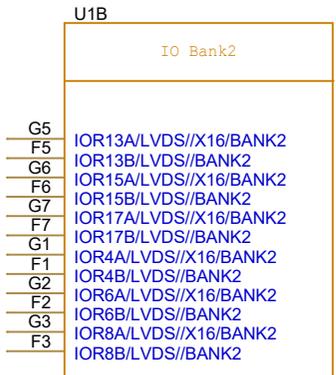
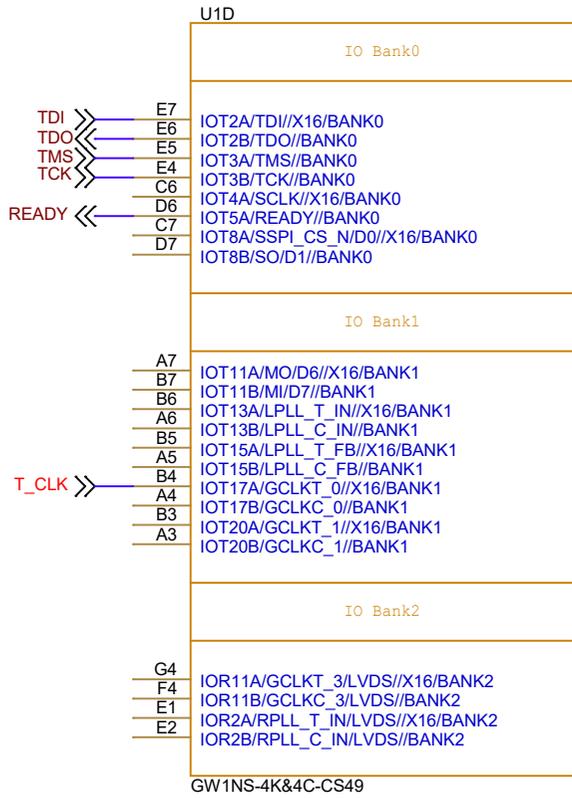


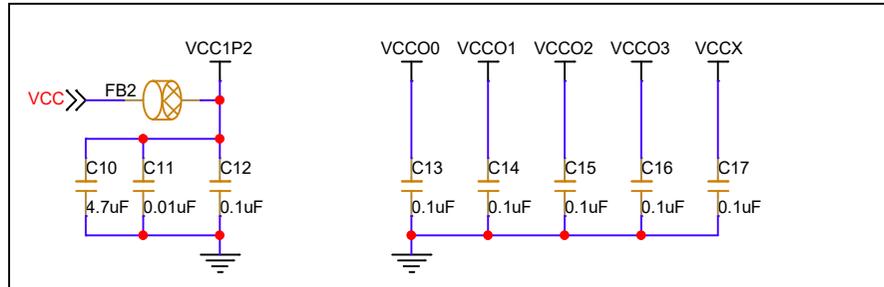
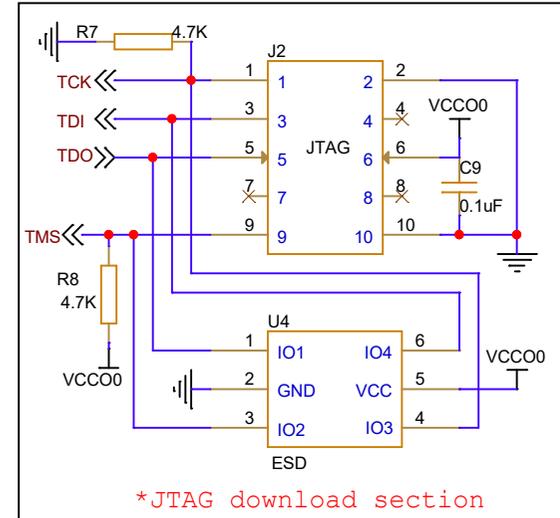
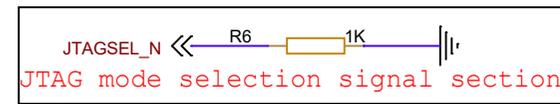
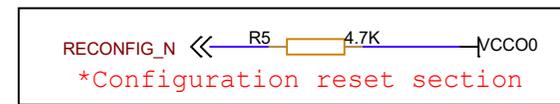
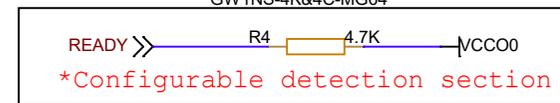
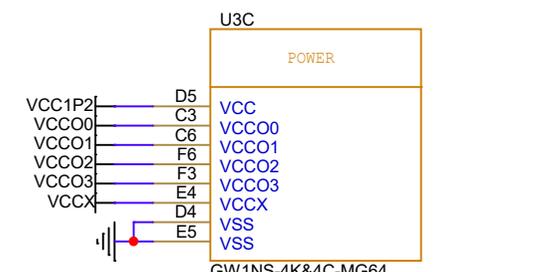
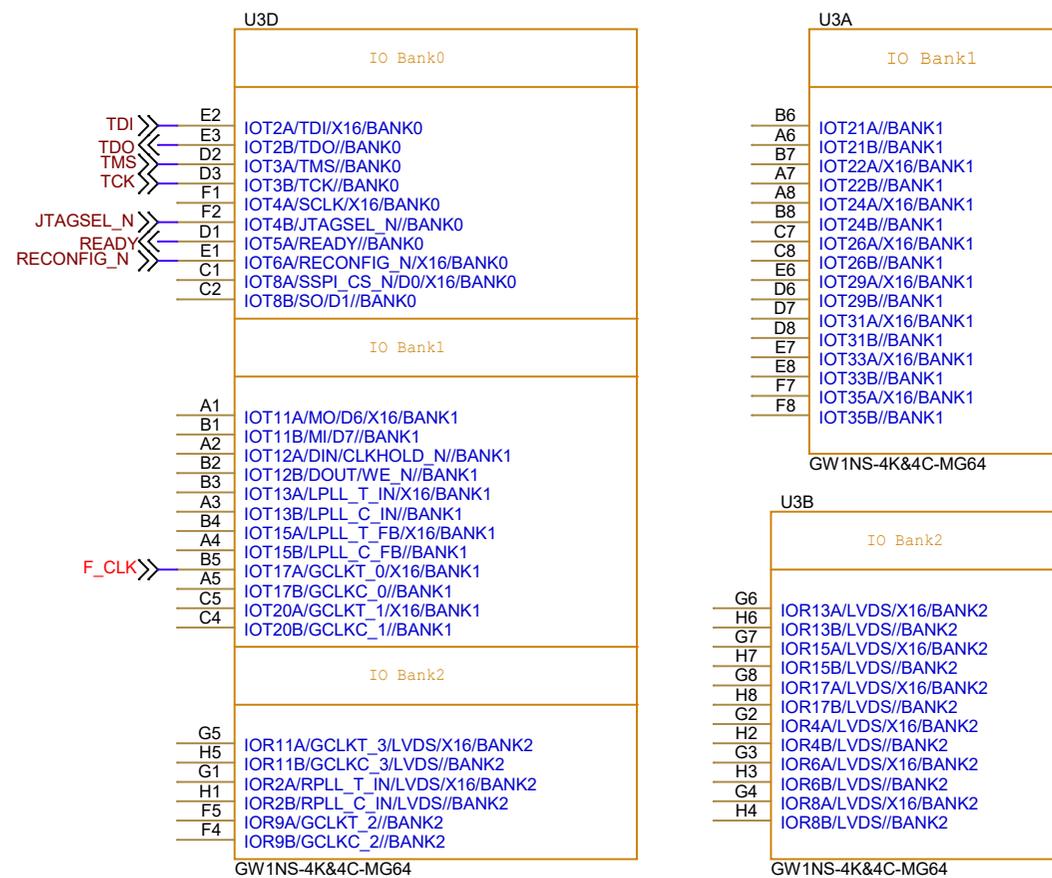
GW1NS-LV4CS49 & GW1NS-LV4CCS49



- 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.
 - 3.The CS49 package supports GW1NS-4 & GW1NS-4C.

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Size A4	Document Number GW1NS-LV4CS49 & GW1NS-LV4CCS49	Rev 2.3
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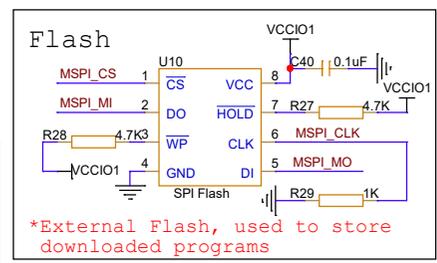
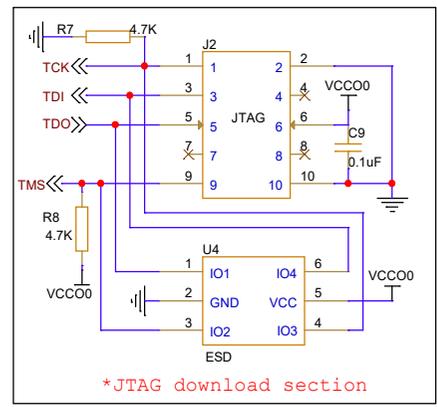
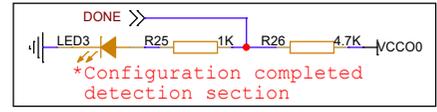
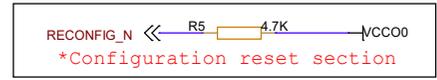
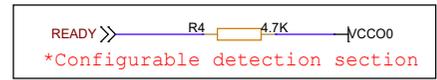
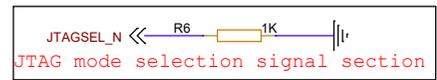
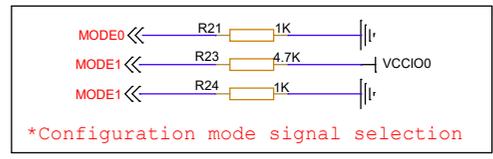
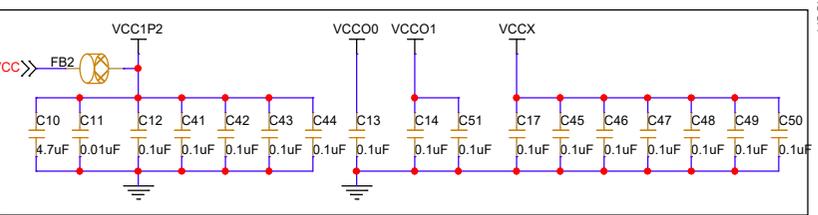
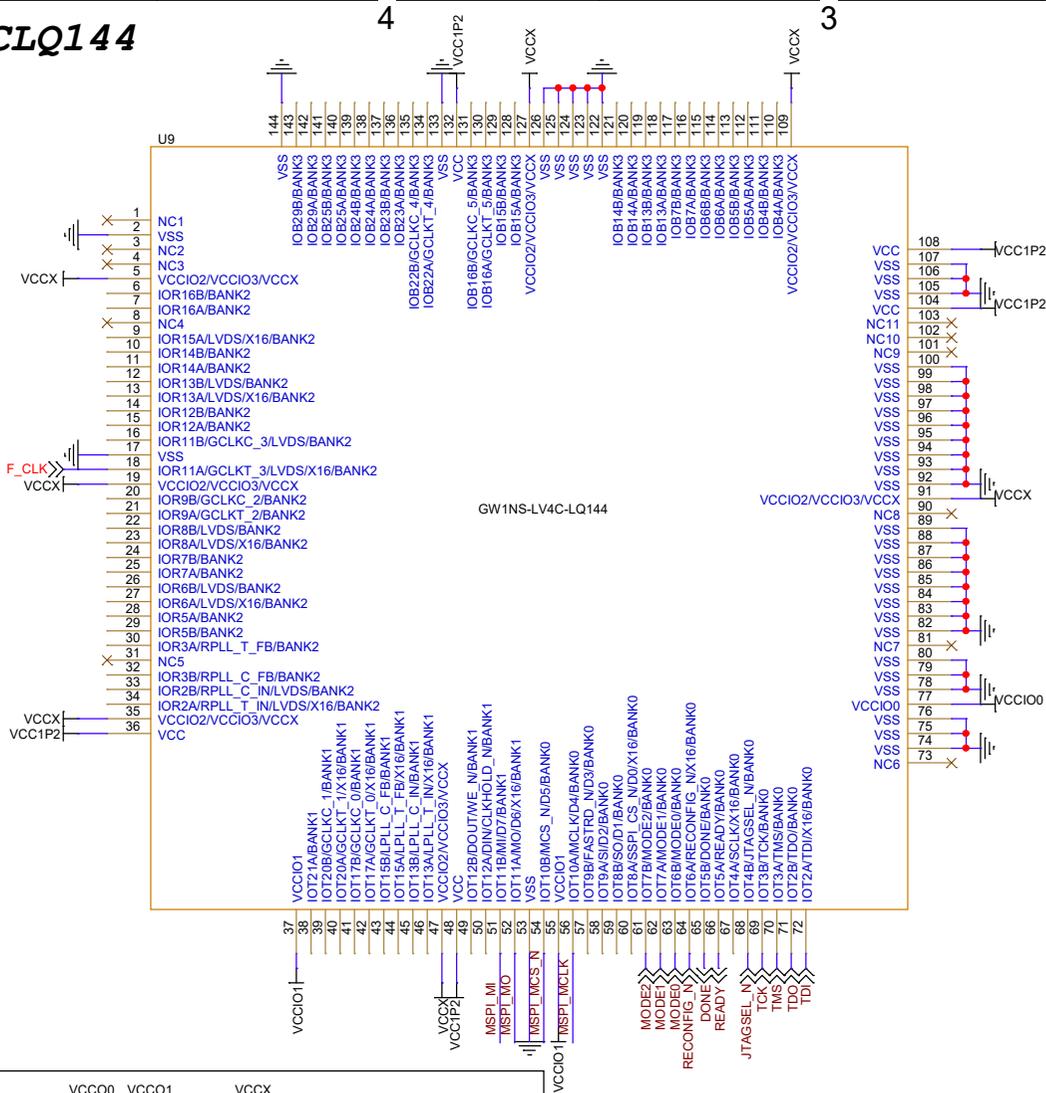
GW1NS-LV4MG64 & GW1NS-LV4CMG64



- 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.
 3. The MG64 package supports GW1NS-4 & GW1NS-4C.

Title		
GOWIN Minimum System Diagram		
Size	Document Number	Rev
A4	GW1NS-LV4MG64 & GW1NS-LV4CMG64	2.3
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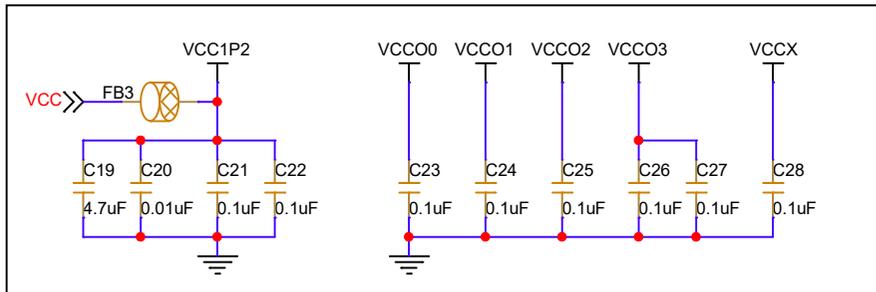
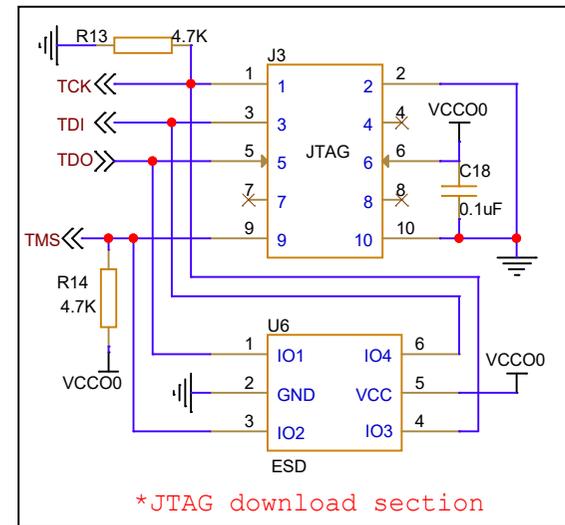
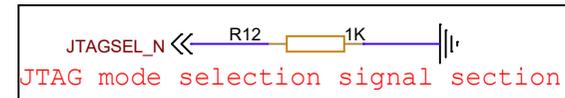
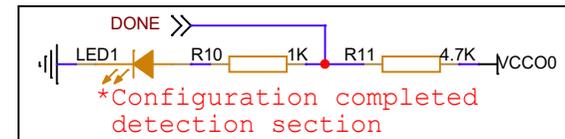
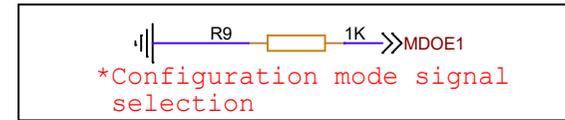
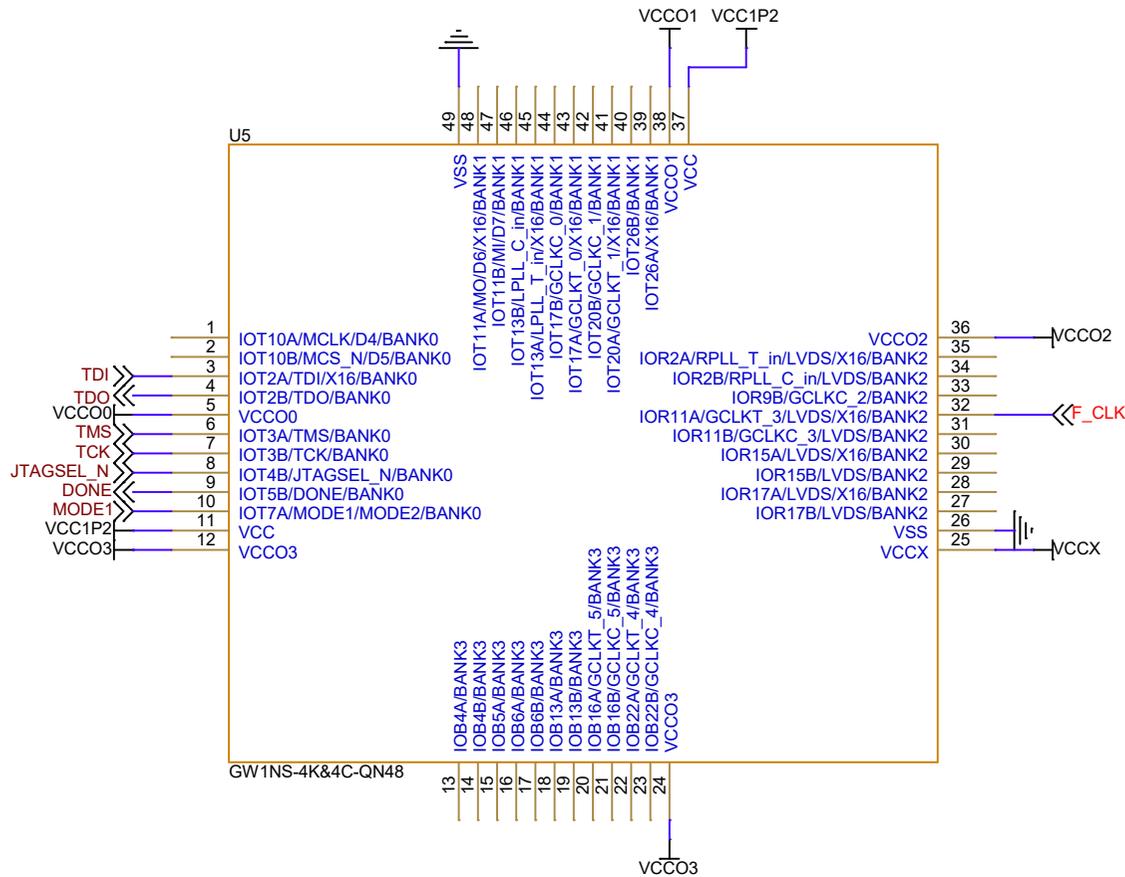
GW1NS-LV4CLQ144



- 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.
 - 3.The MG64 package supports GW1NS-4 & GW1NS-4C.

Title		
GOWIN Minimum System Diagram		
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B	GW1NS-LV4CLQ144	2.3
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GW1NS-LV4QN48 & GW1NS-LV4CQN48

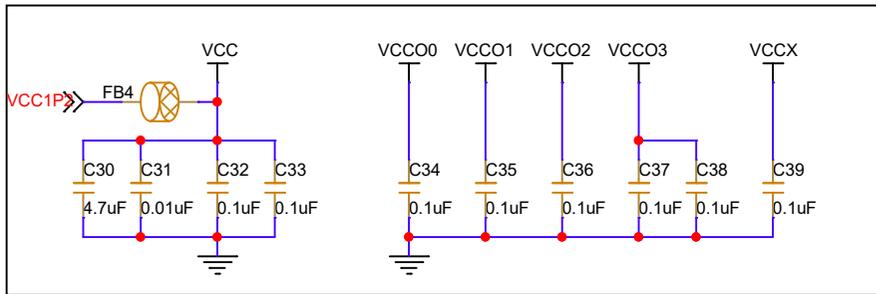
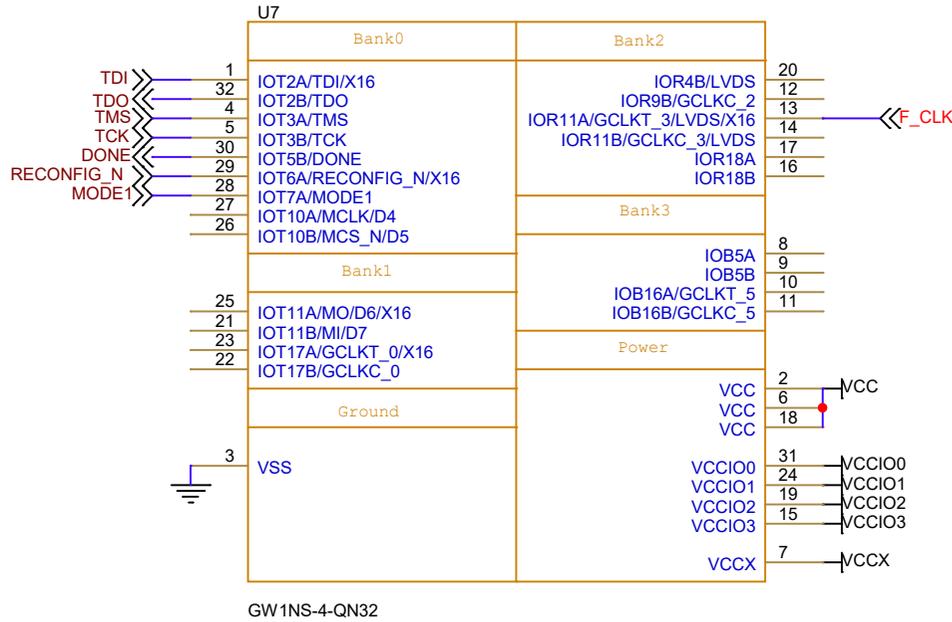


Notes:

- 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.
- 3.The QN48 package supports GW1NS-4 & GW1NS-4C.

Title		
GOWIN Minimum System Diagram		
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A4	GW1NS-LV4QN48 & GW1NS-LV4CQN48	2.3
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GW1NS-LV4QN32

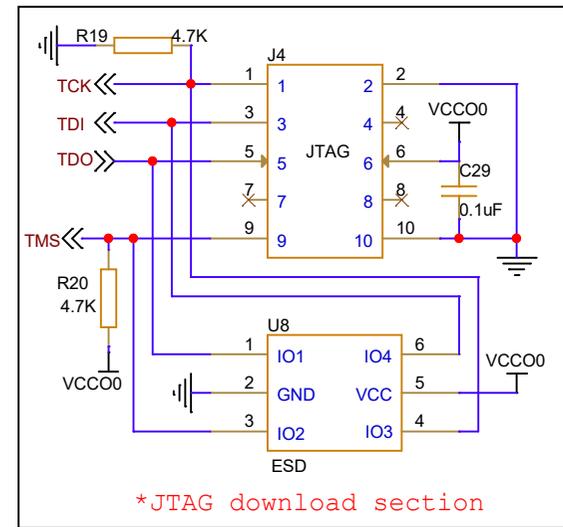
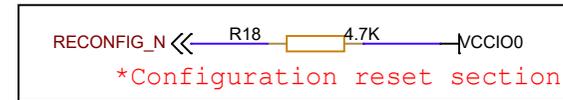
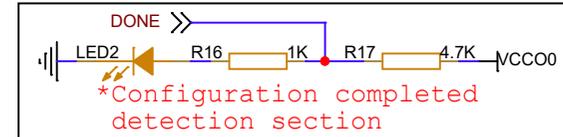
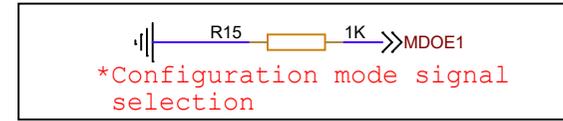


Notes:

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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