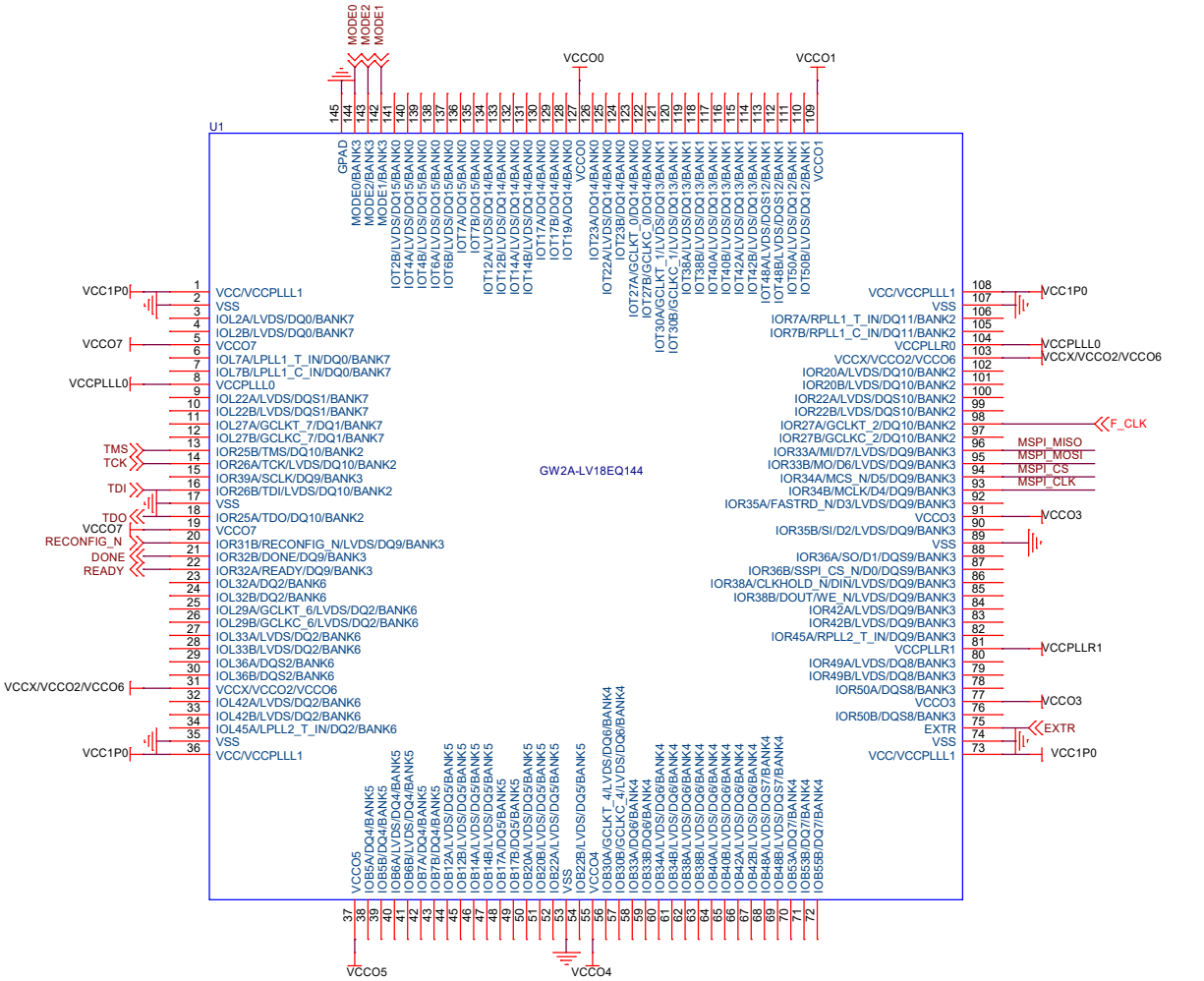
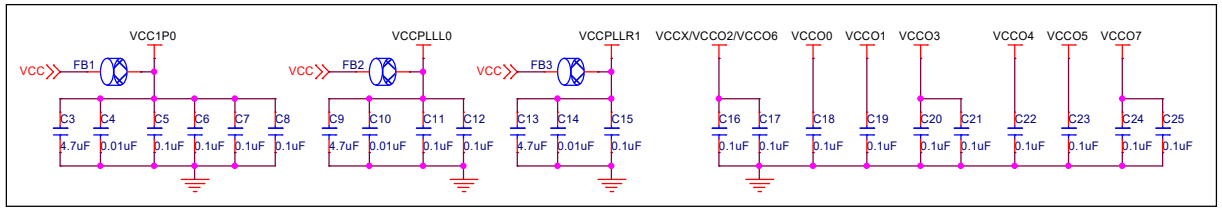
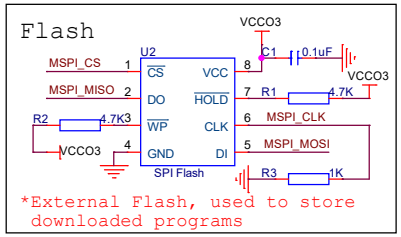
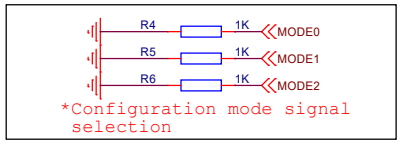
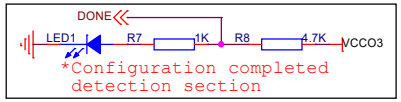
GW2A-LV18EQ144

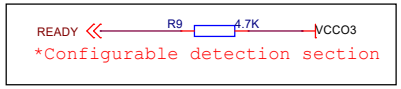


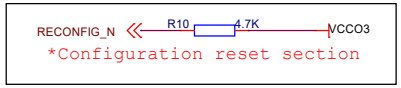


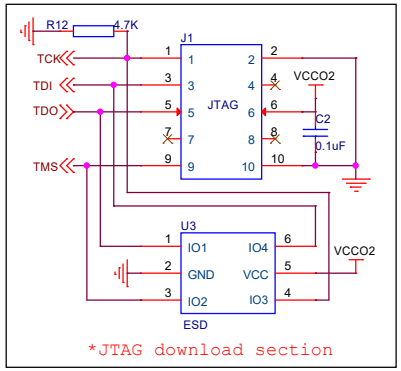












Notes:
1.F_CLK signal is an external input clock signal.
  It is recommended that F_CLK signal be provided through an active oscillator crystal.
2.External Flash memory is used to store downloaded programs.
  For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3.It is recommended that add an ESD protection chip to the JTAG download circuit.

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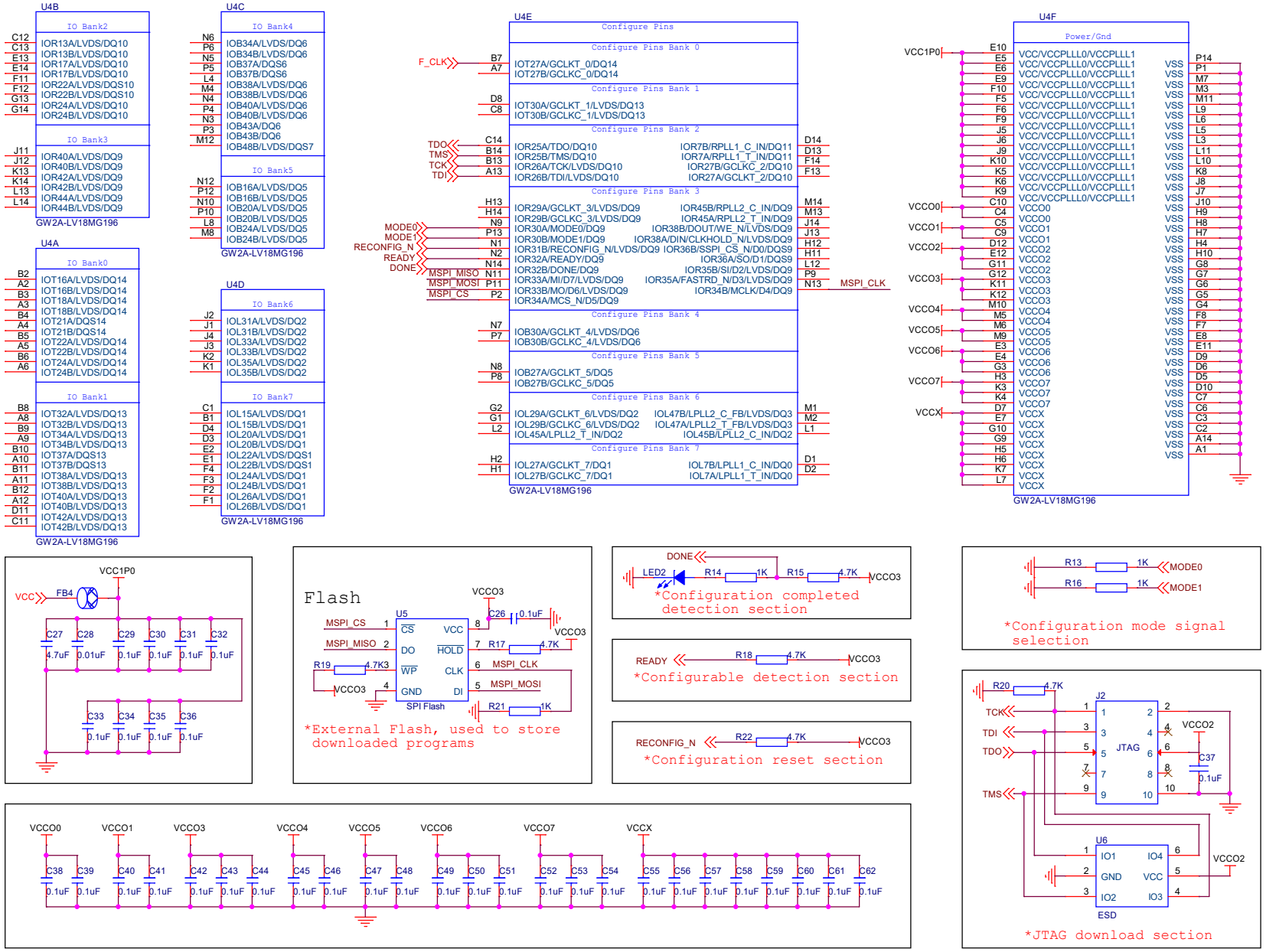
GW2A-LV18MG196



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. External Flash memory is used to store downloaded programs.
   For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3. It is recommended that add an ESD protection chip to the JTAG download circuit.

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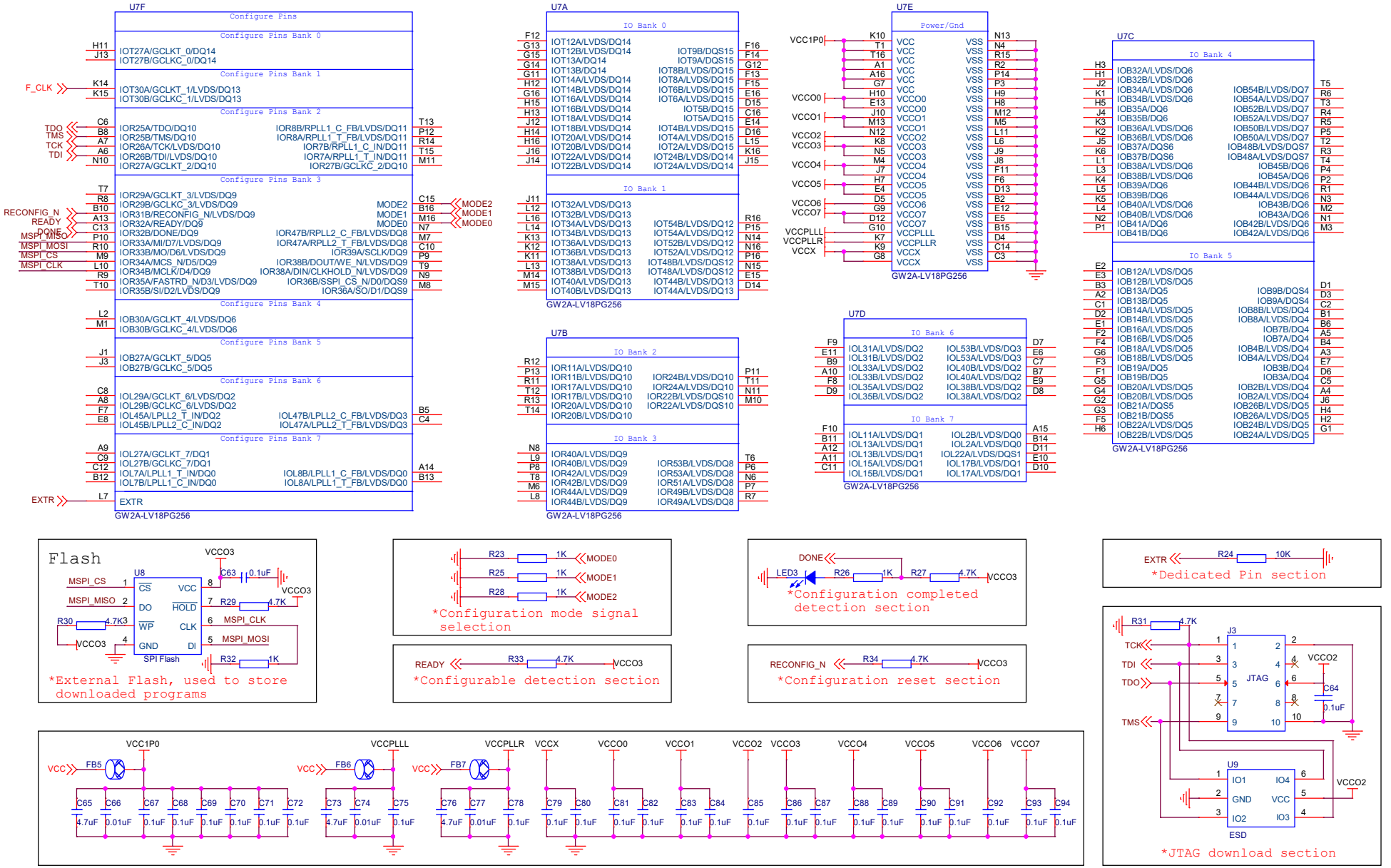
GW2A-LV18PG256



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. External Flash memory is used to store downloaded programs.
   For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3. It is recommended that add an ESD protection chip to the JTAG download circuit.

Title: GOWIN Minimum System Diagram		
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GW2A-LV18PG256C

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. External Flash memory is used to store downloaded programs.
   For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3. It is recommended that add an ESD protection chip to the JTAG download circuit.

Title	GOWIN Minimum System Diagram	
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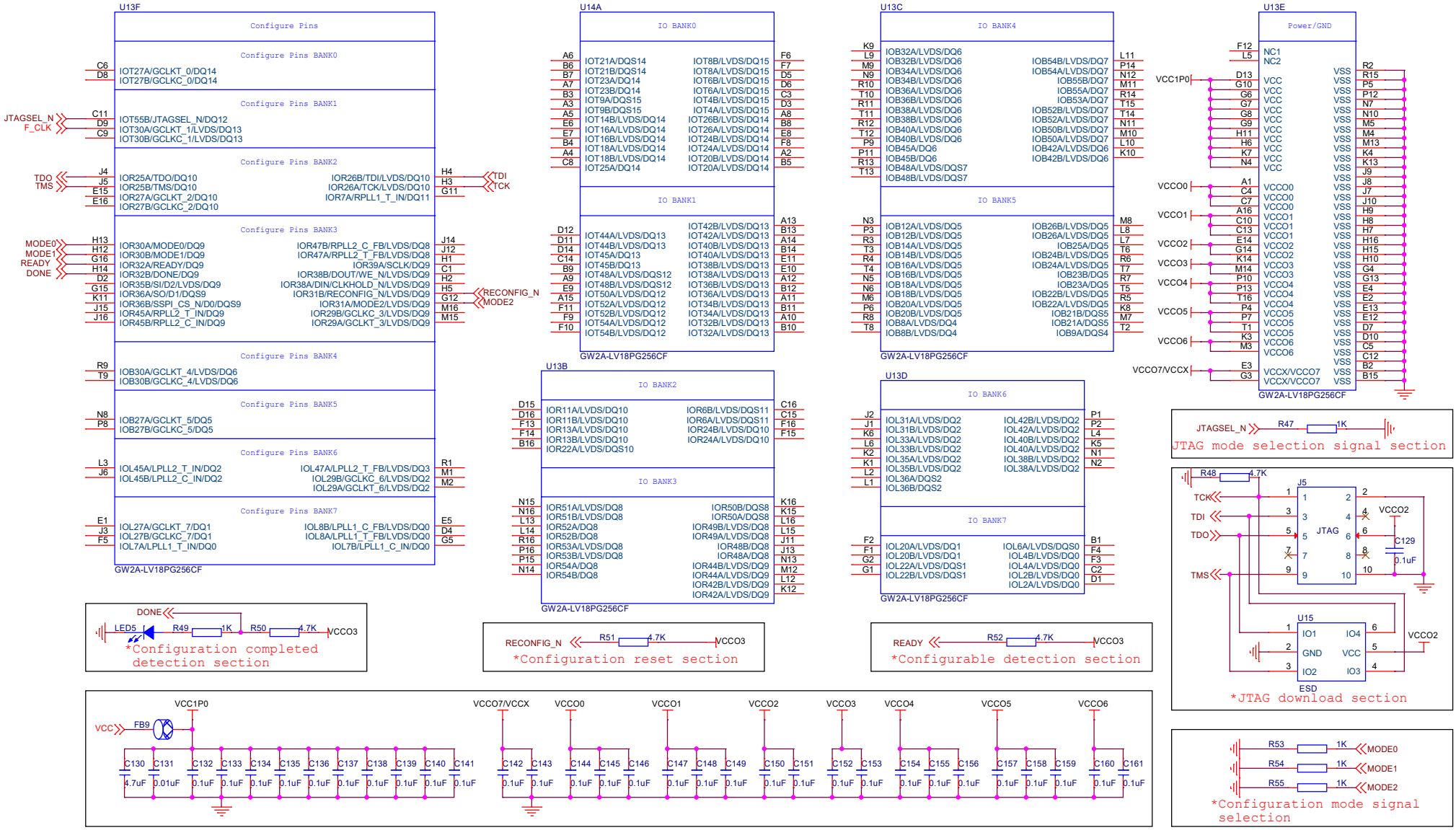
GW2A-LV18PG256CF



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.External Flash memory is used to store downloaded programs.
  For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title: GOWIN Minimum System Diagram		
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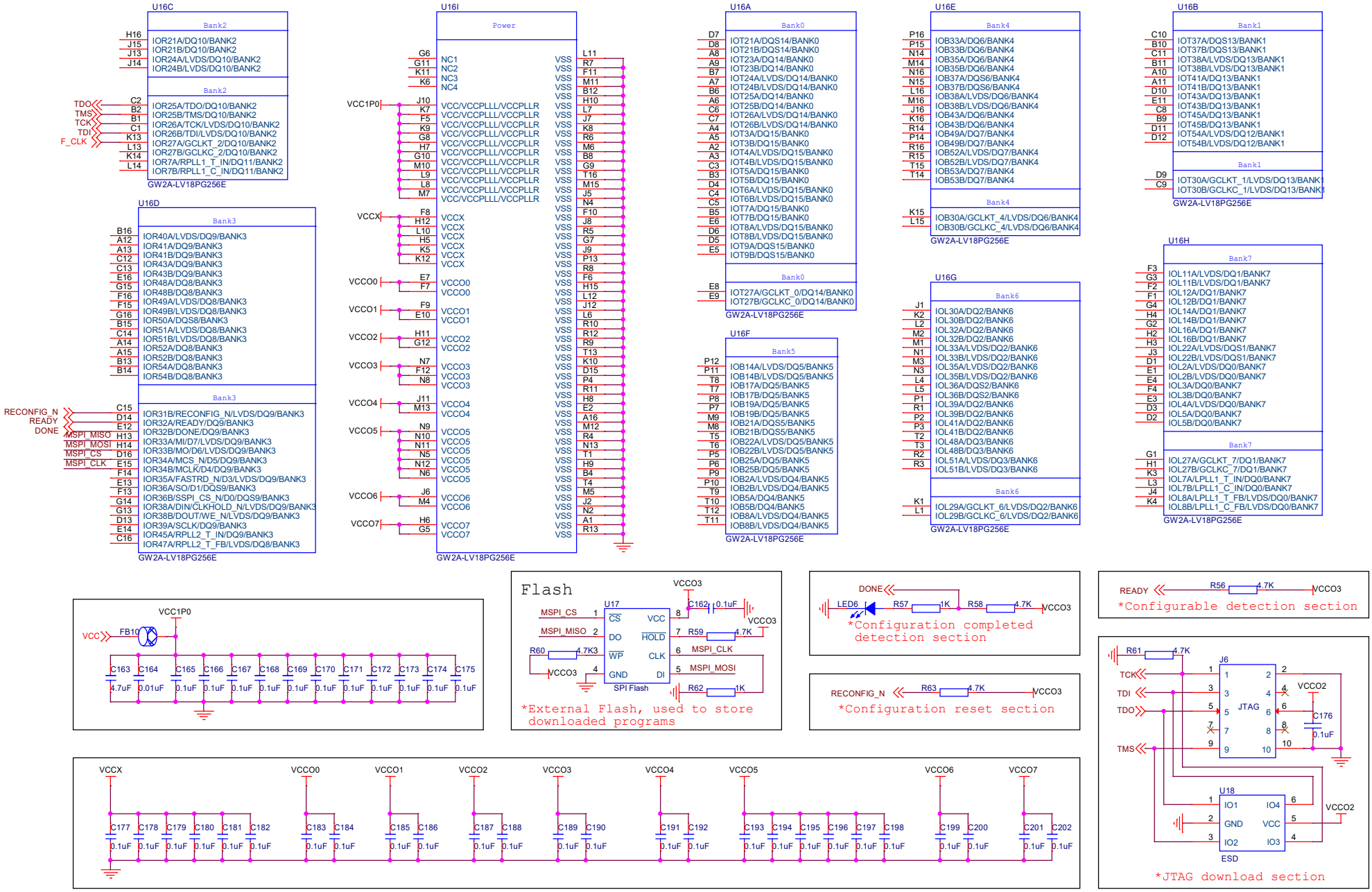
GW2A-LV18PG256E



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.External Flash memory is used to store downloaded programs.
  For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title	GOWIN Minimum System Diagram	
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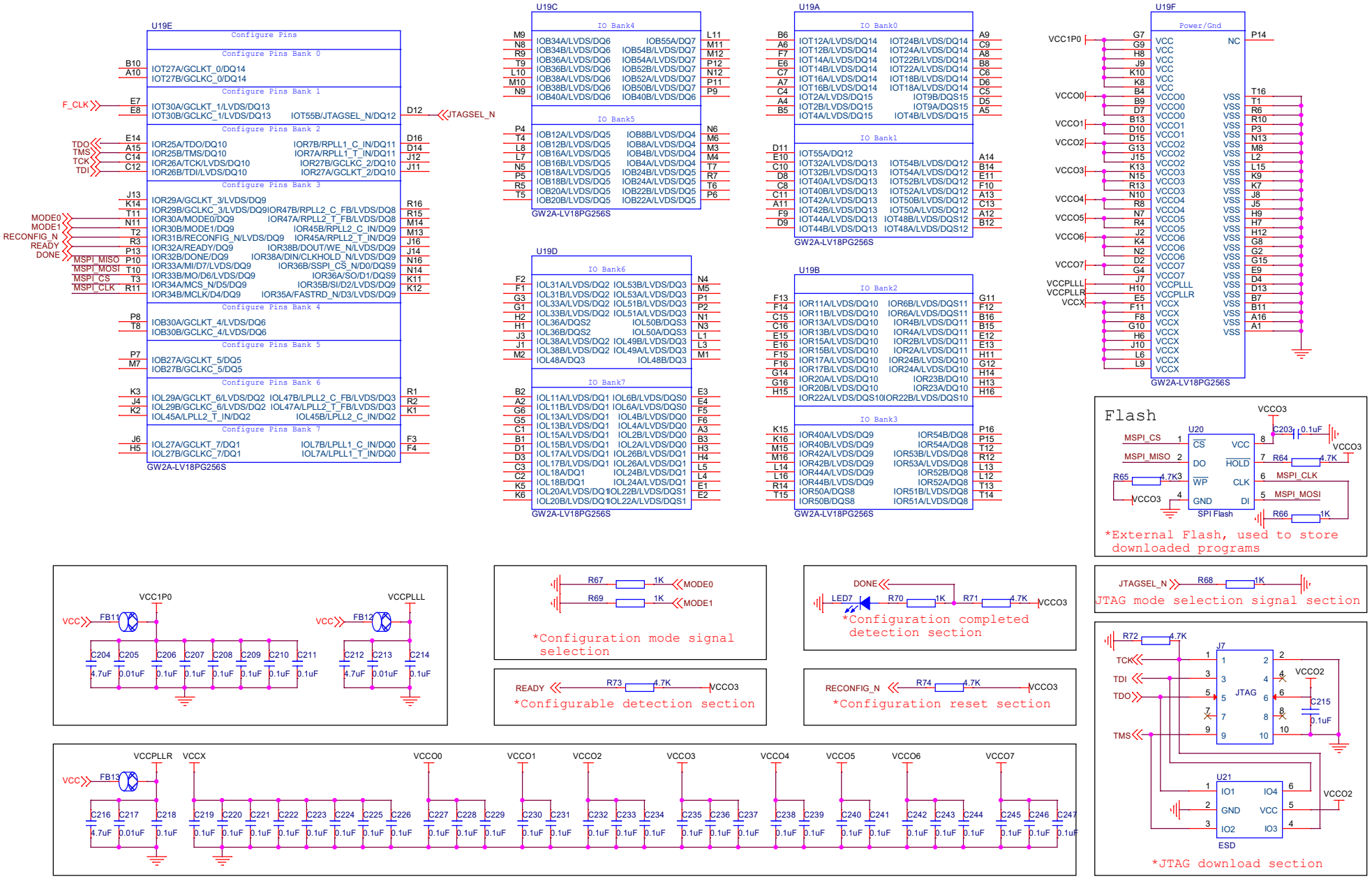

Notes:
1.F_CLK signal is an external input clock signal.
  It is recommended that F_CLK signal be provided through an active oscillator crystal.
2.External Flash memory is used to store downloaded programs.
  For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title: GOWIN Minimum System Diagram		
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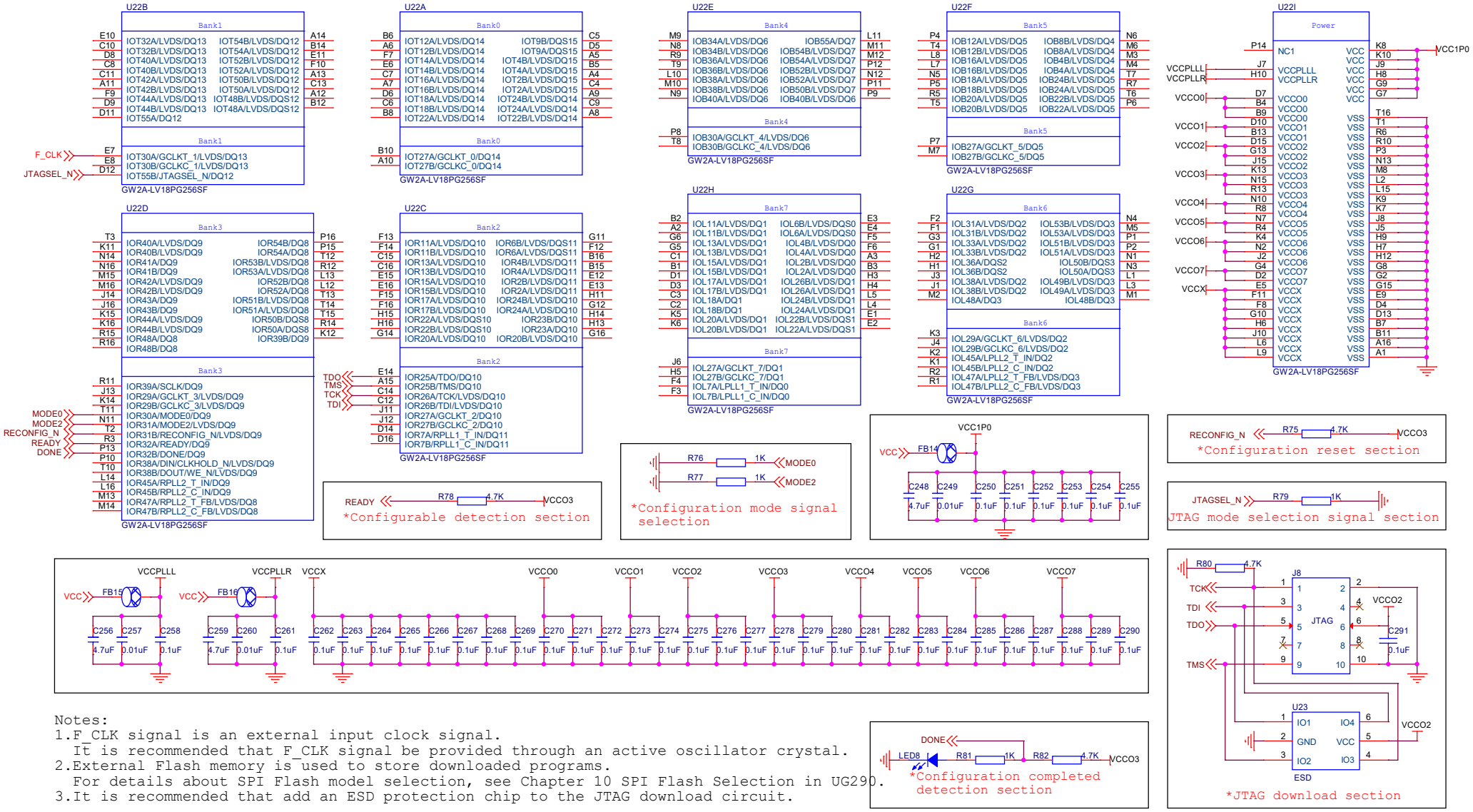

Notes:

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.External Flash memory is used to store downloaded programs.
  For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title	GOWIN Minimum System Diagram	
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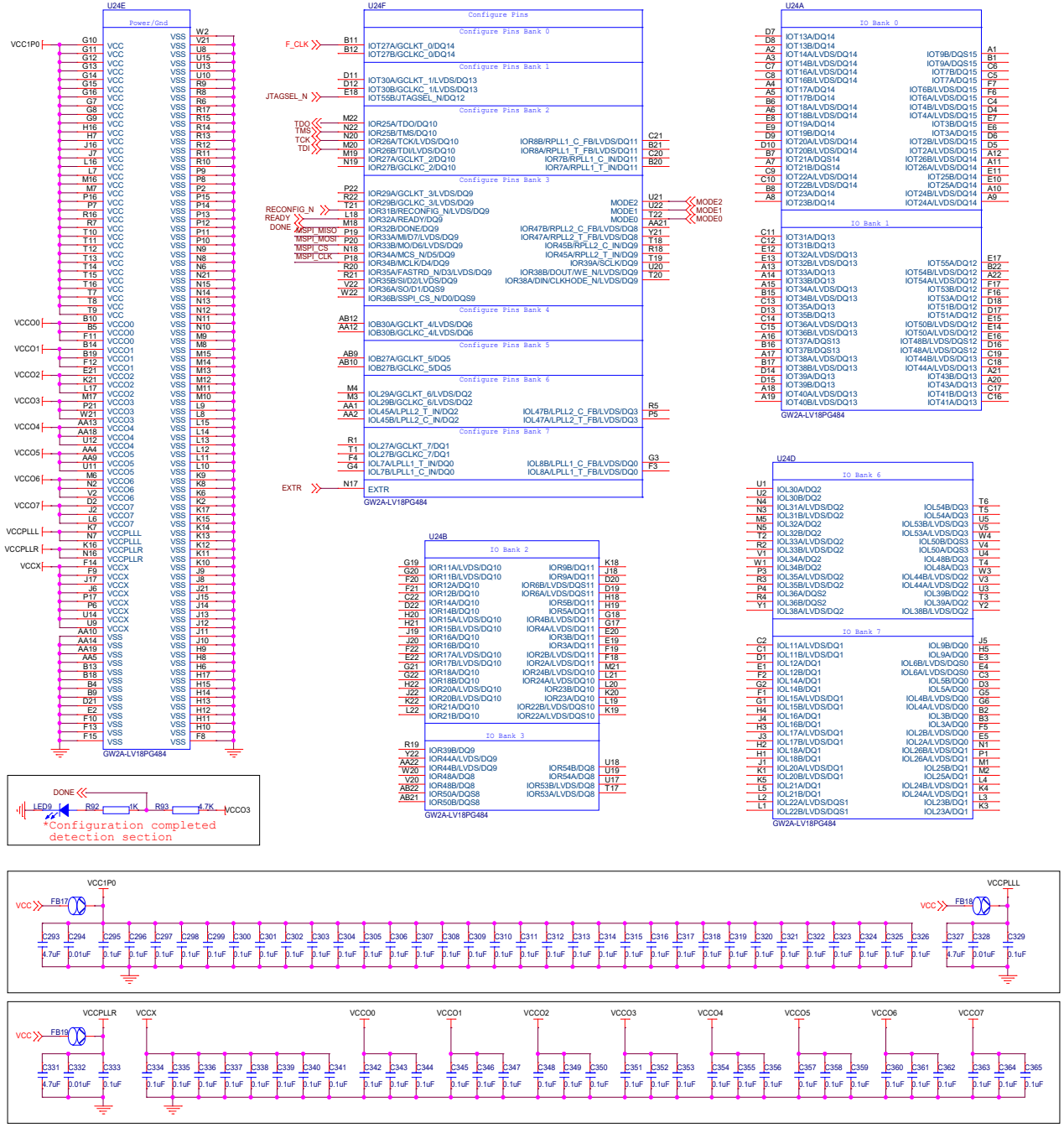

Notes:
1.F_CLK signal is an external input clock signal.
  It is recommended that F_CLK signal be provided through an active oscillator crystal.
2.External Flash memory is used to store downloaded programs.
  For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title	GOWIN Minimum System Diagram	
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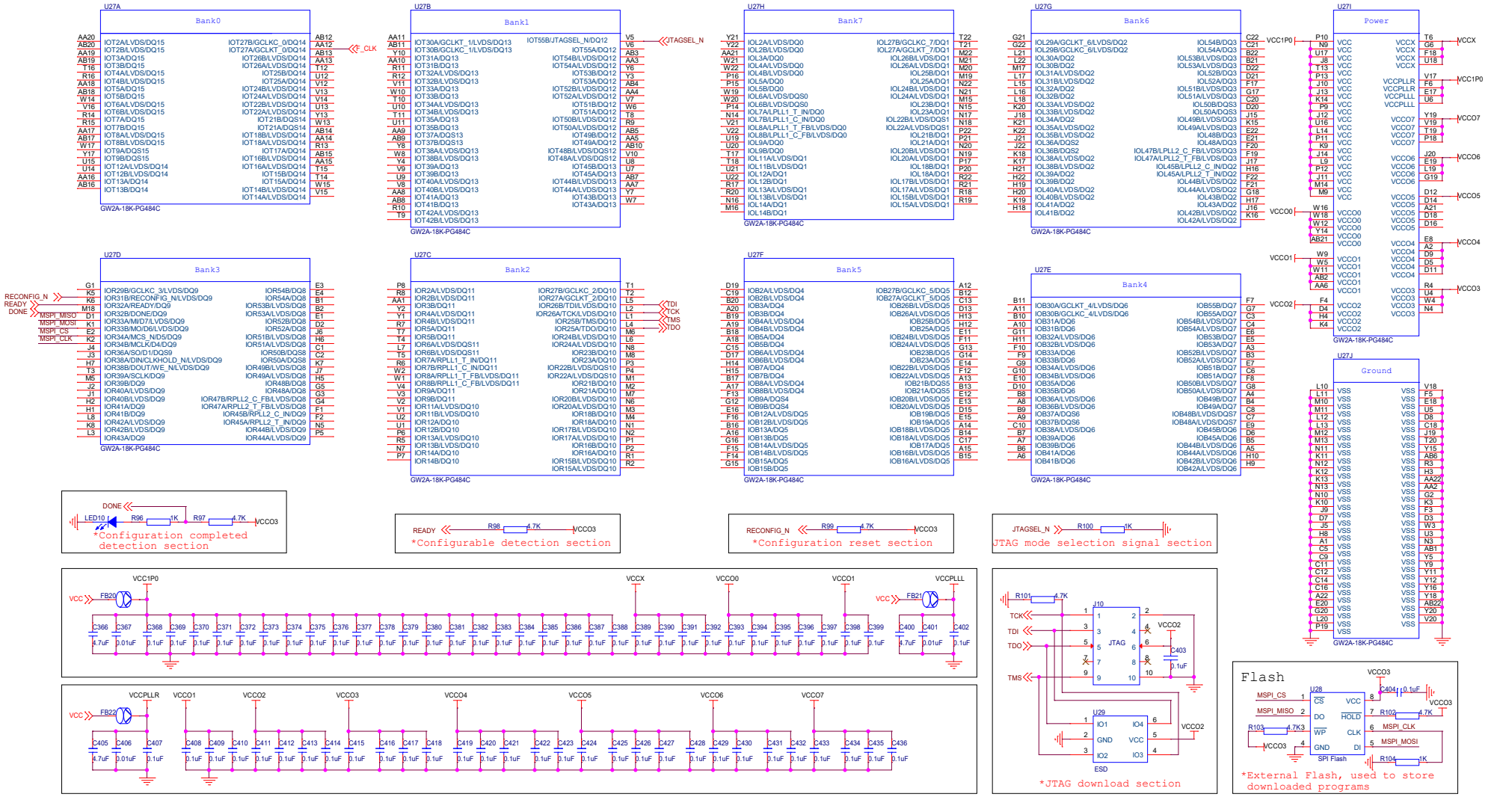

Notes:
1.F_CLK signal is an external input clock signal.
  It is recommended that F_CLK signal be provided through an active oscillator crystal.
2.External Flash memory is used to store downloaded programs.
  For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title	GOWIN Minimum System Diagram	
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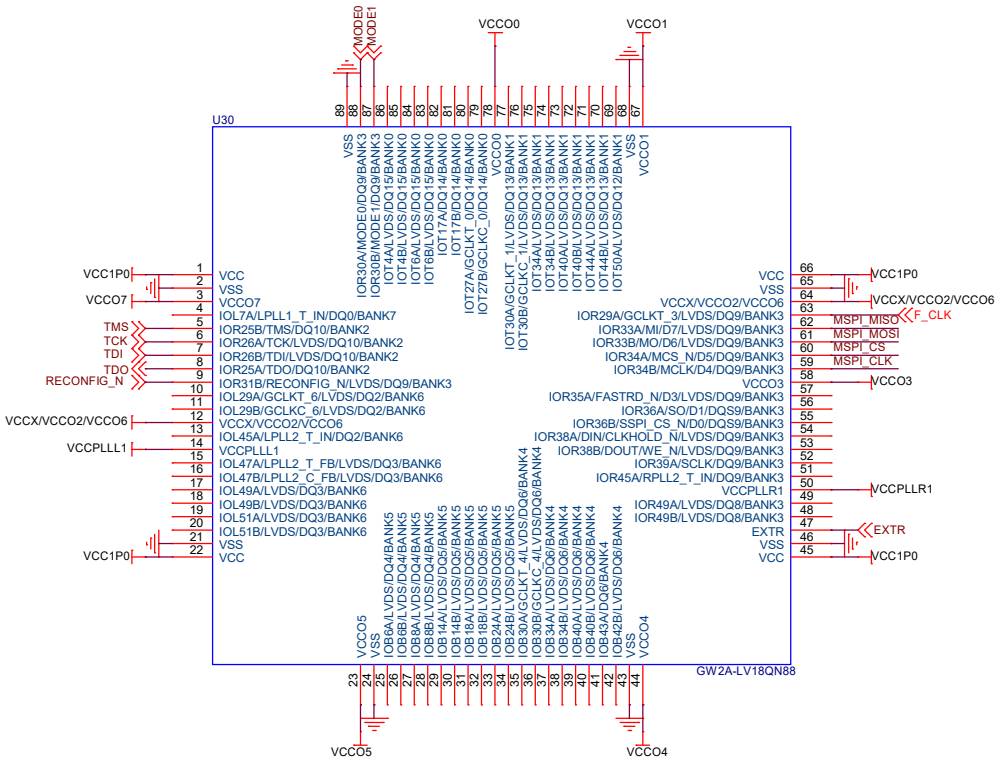

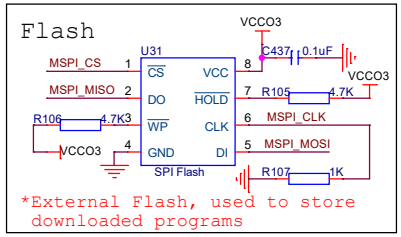

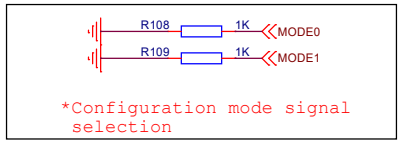

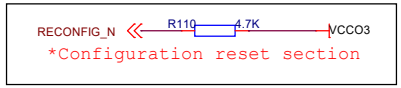

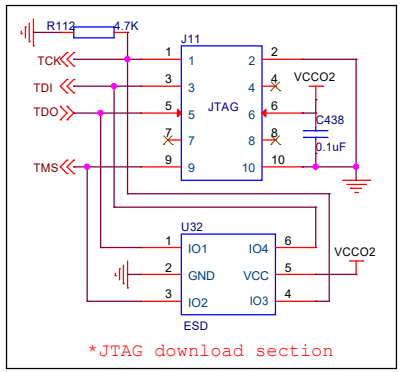

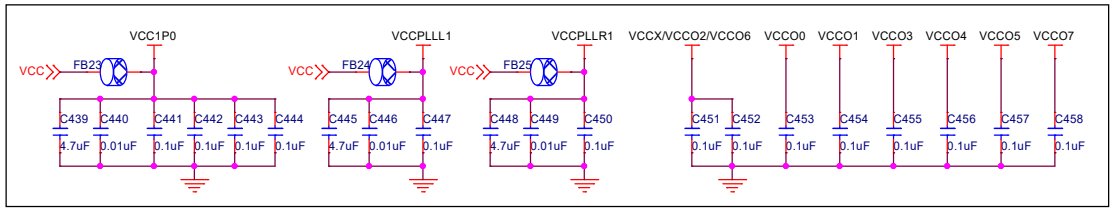

Notes:
1.F_CLK signal is an external input clock signal.
  It is recommended that F_CLK signal be provided through an active oscillator crystal.
2.External Flash memory is used to store downloaded programs.
  For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3.It is recommended that add an ESD protection chip to the JTAG download circuit.

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Size: A3	Document Number: GW2A-LV18QN88	Rev: 2.0
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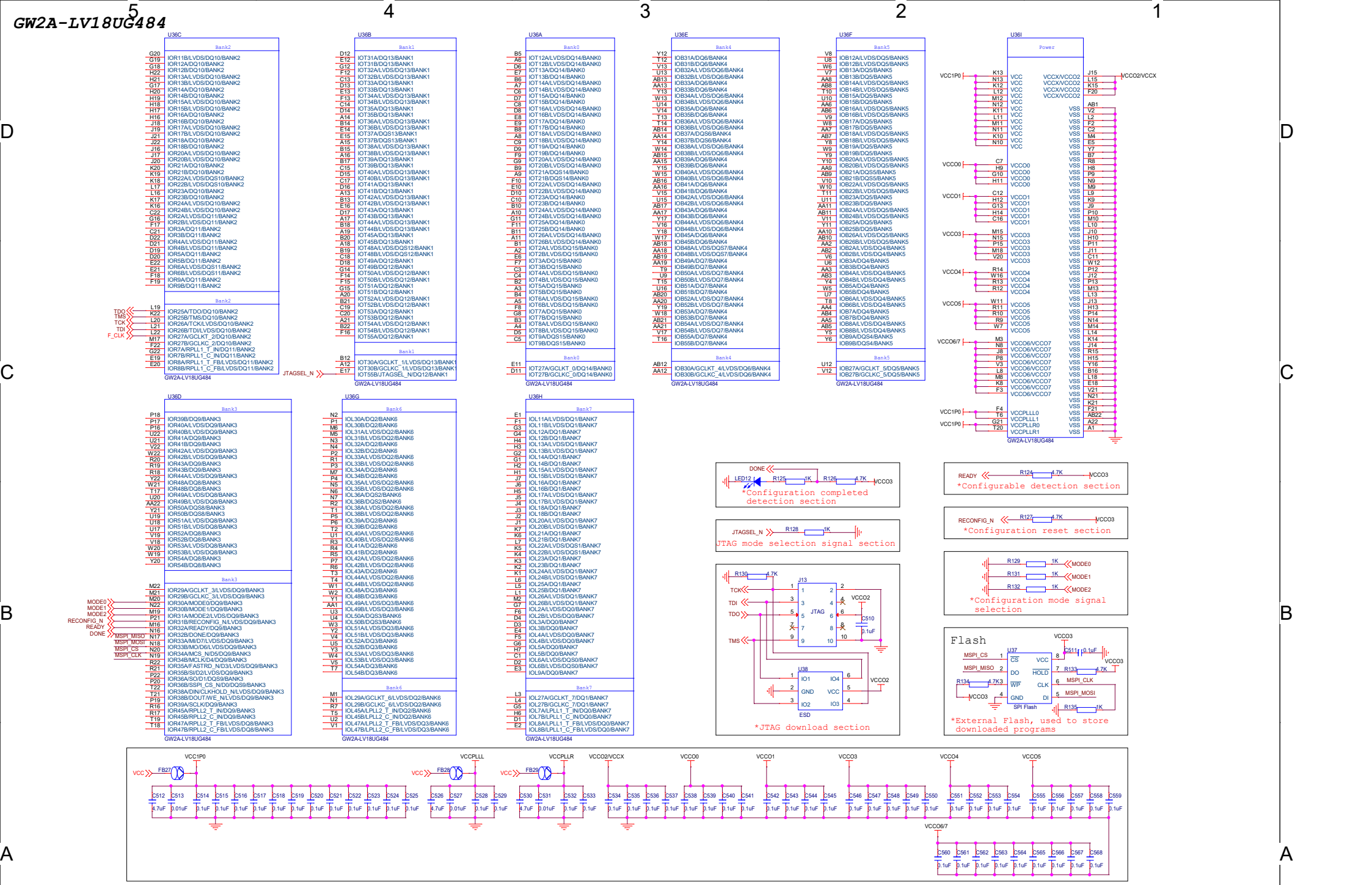
GW2A-LV18UG324

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. External Flash memory is used to store downloaded programs.
   For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3. It is recommended that add an ESD protection chip to the JTAG download circuit.

Title	GOWIN Minimum System Diagram	
Size A3	Document Number GW2A-LV18UG324	Rev 2.0
Date: Friday, March 31, 2023	Sheet 12 of 13	



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.External Flash memory is used to store downloaded programs.
  For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
3.It is recommended that add an ESD protection chip to the JTAG download circuit.

Title	GOWIN Minimum System Diagram	
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