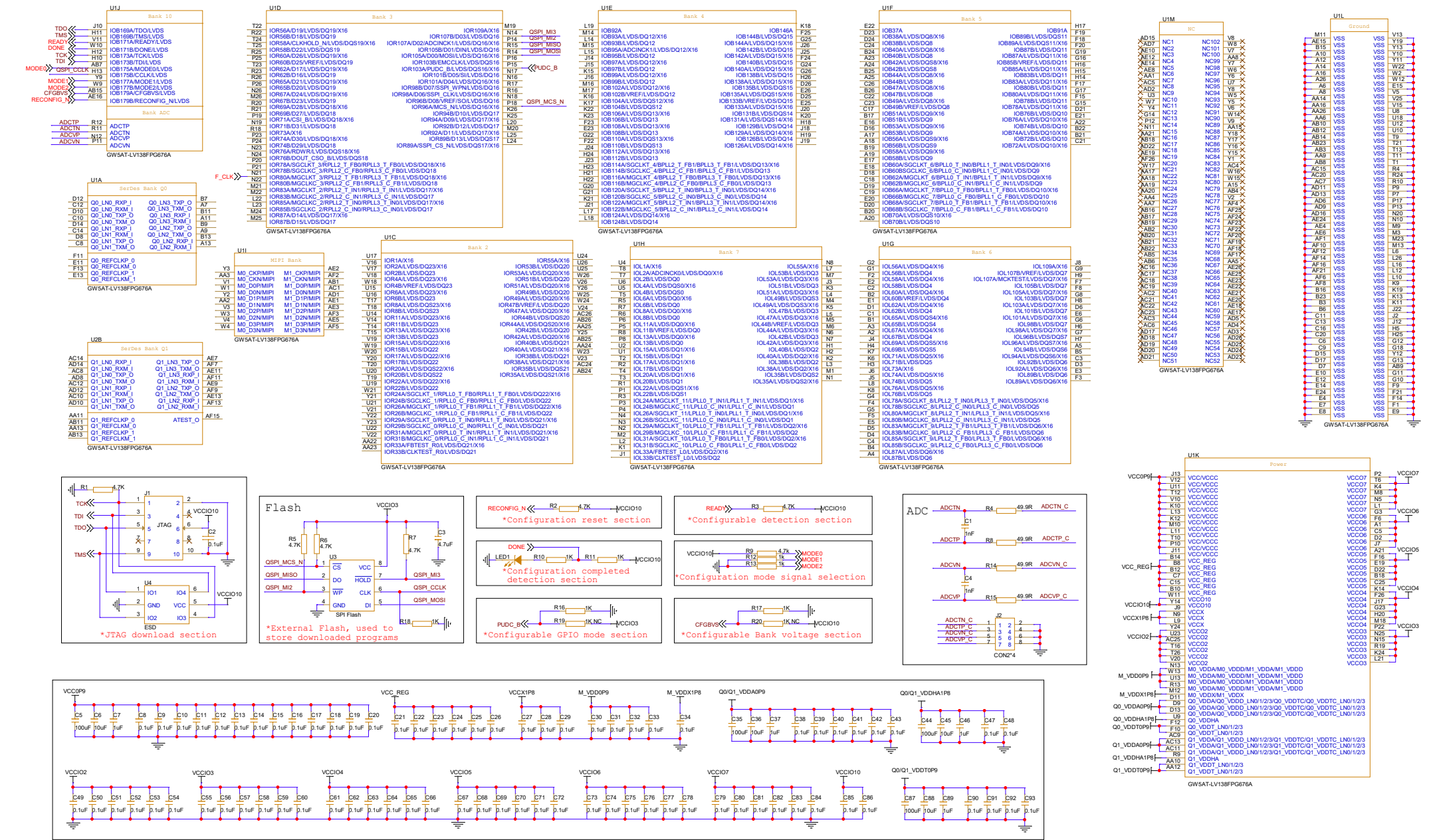


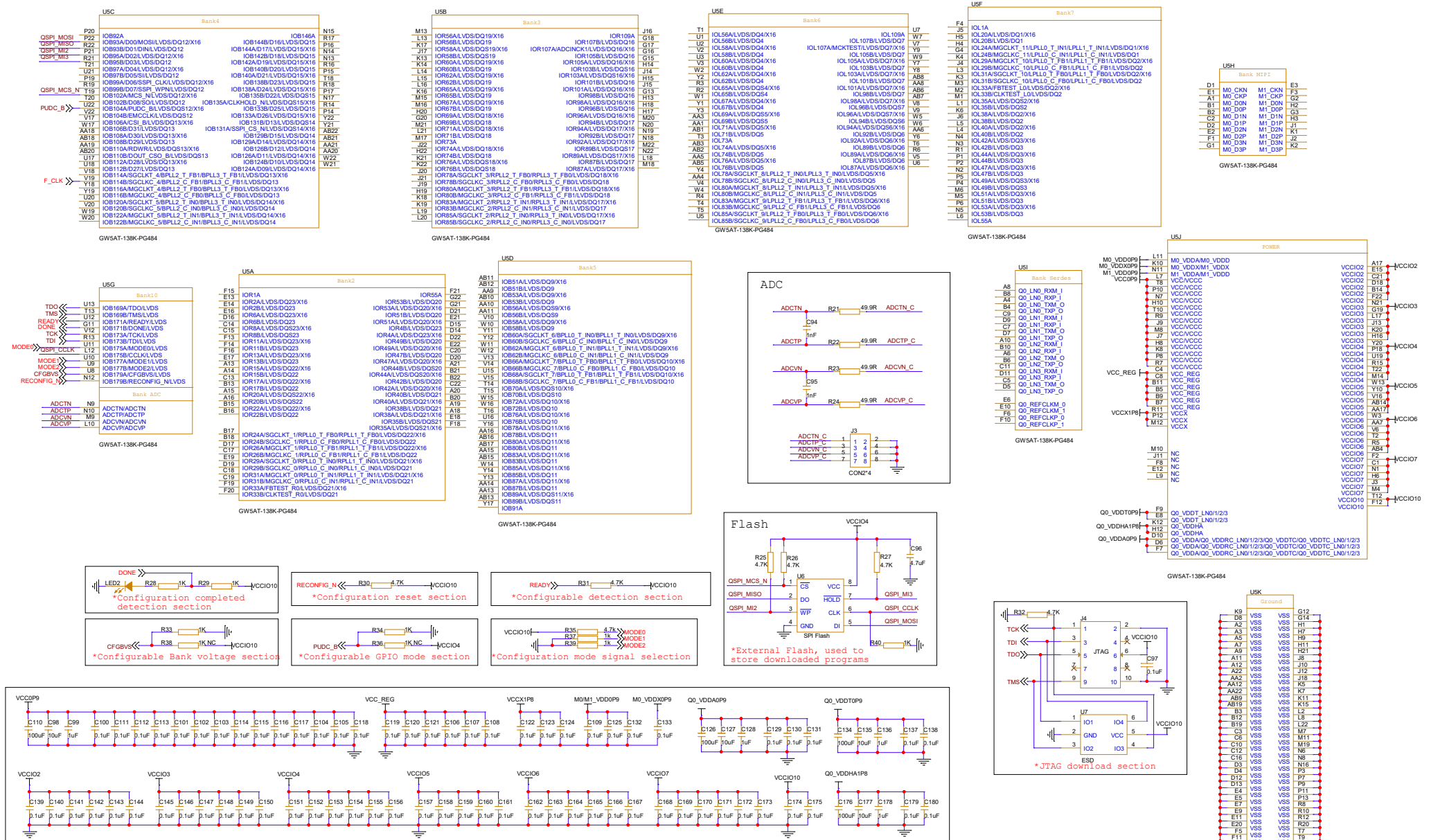
GW5AT-IV138FPG676A



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.
- External Flash memory is used to store downloaded programs.
- For details about SPI Flash model selection, see "Chapter 4.5 SPI Flash" in UG704, Arora V FPGA Products Programming and Configuration Guide .
- 3.It is recommended that add an ESD protection chip to the JTAG download circuit.
- 4.VCC core voltage requires a large current, so it is recommended to supply power separately.
- 5.The MODE pin is the GowinCONFIG configuration mode selection signal.
- For details about how to select the Mode signal, see "Chapter 3.1 Configuration Modes" in UG704, Arora V FPGA Products Programming and Configuration Guide.

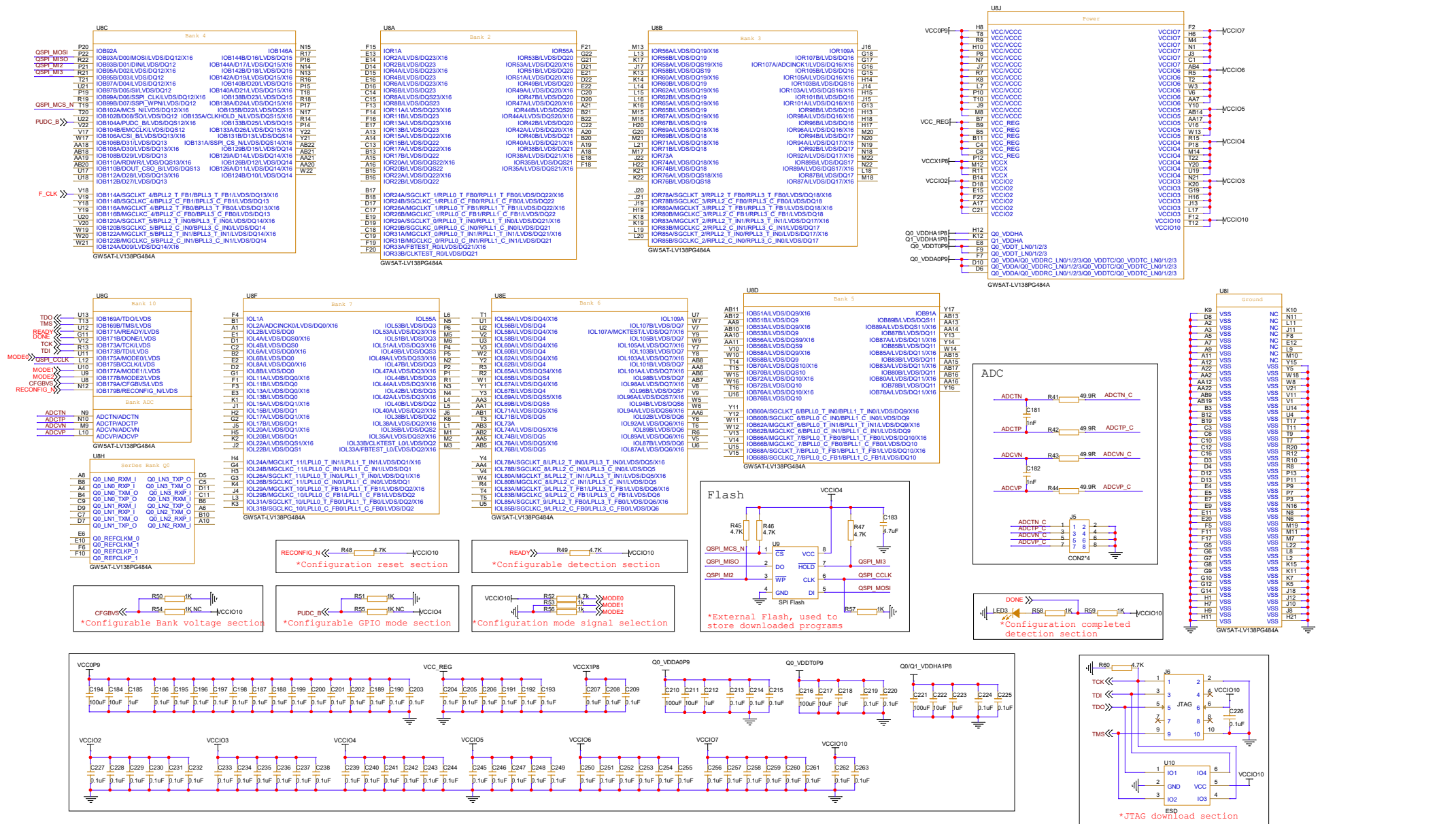
GW5AT-LV138PG484



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 4.5 SPI Flash Selection" in UG704, Arara V FPGA Products Programming and Configuration Guide
3. It is recommended that add an ESD protection chip to the JTAG download circuit.
4. VCC core voltage requires a large current, so it is recommended to supply power separately.
5. The MODE pin is the GowinCONFIG configuration mode selection signal.
- For details about how to select the Mode signal, see "Chapter 3.1 Configuration Modes" in UG704, Arara V FPGA Products Programming and Configuration Guide.

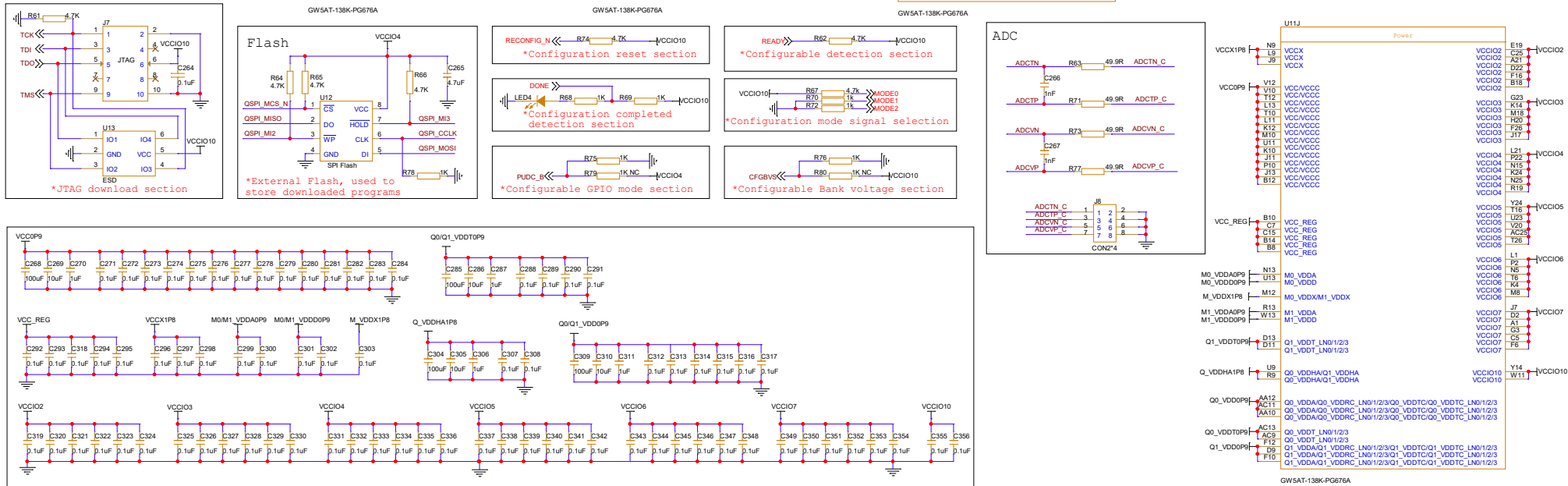
GW5AT-LV138PG484A



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 memory selection, see "Chapter 4.5 SPI Flash Selection" in UG704, Arora V FPGA Products Programming and Configuration Guide.
3. It is recommended that add an ESD protection chip to the JTAG download circuit.
4. VCC core voltage requires a large current, so it is recommended to supply power separately.
5. The Mode pin is the GOWINCONFIG configuration mode selection signal. For details about how to select the Mode signal, see "Chapter 3.1 Configuration Modes" in UG704, Arora V FPGA Products Programming and Configuration Guide.

GW5AT-LV138PG676A



Notes:

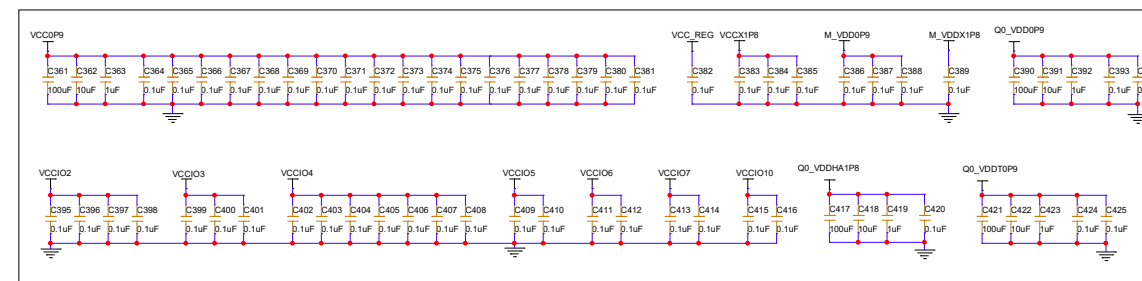
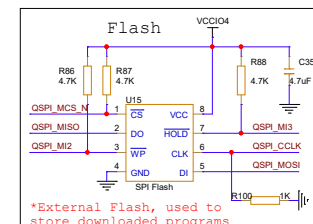
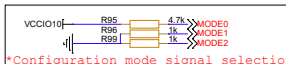
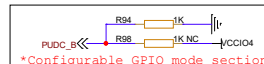
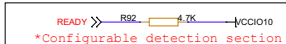
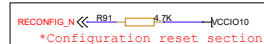
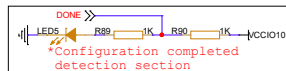
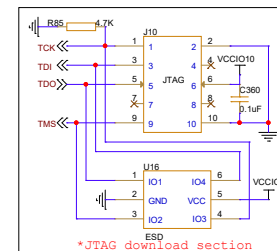
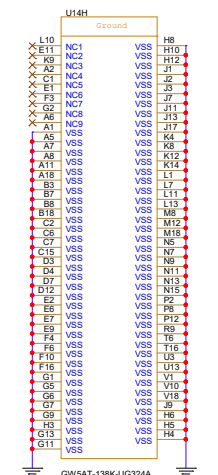
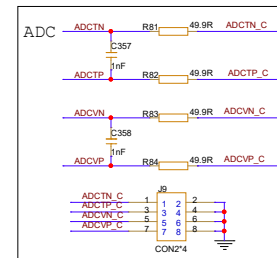
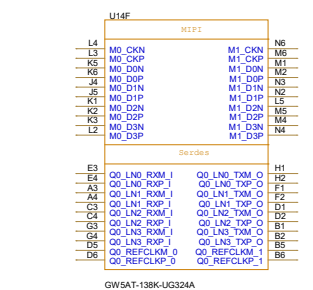
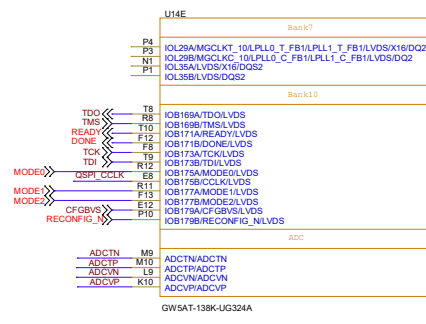
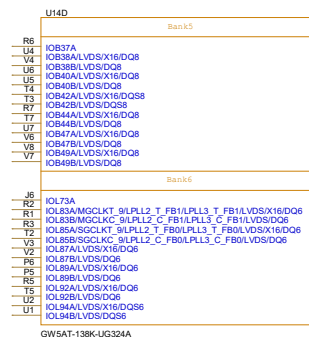
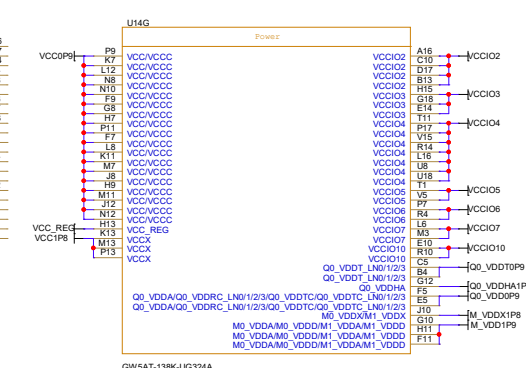
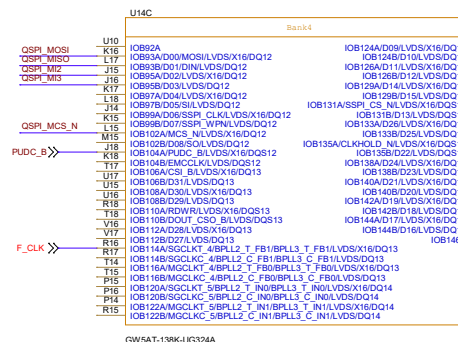
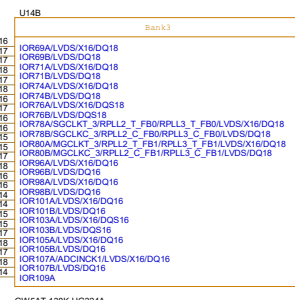
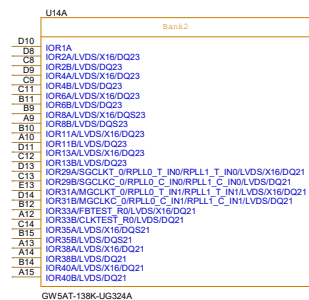
- 1.F_CLK signal is an external input clock signal.
- It is recommended that F_CLK signal be provided through an active oscillator crystal.
- 2.External Flash memory is used to store downloaded programs.

For details about SPI Flash model selection, see "Chapter 4.5 SPI Flash Selection" in UG704, Arora_V_FPGA_Products_Programming_and_Configuration_Guide .

- 3.It is recommended that add an ESD protection chip to the _TAG download circuit.
- 4.VCC core voltage requires a large current, so it is recommended to supply power separately.
- 5.The MODE pin is the GowinCONFIG configuration mode selection signal.

For details about how to select the Mode signal, see "Chapter 3.1 Configuration Modes" in UG704, Arora_V_FPGA_Products_Programming_and_Configuration_Guide .

GW5AT-LV138UG324A



Notes:

1. F_CLK signal is an external input clock signal.
2. It is recommended that F_CLK signal be provided through an active oscillator crystal.
3. External Flash memory is used to store downloaded programs.
4. For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.
5. It is recommended that add an ESD protection chip to the JTAG download circuit.
6. VCC core voltage requires a large current, so it is recommended to supply power separately.