



#### Notes:

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  - 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.
  - 4.VCC core voltage requires a large current, so it is recommended to supply power separately.