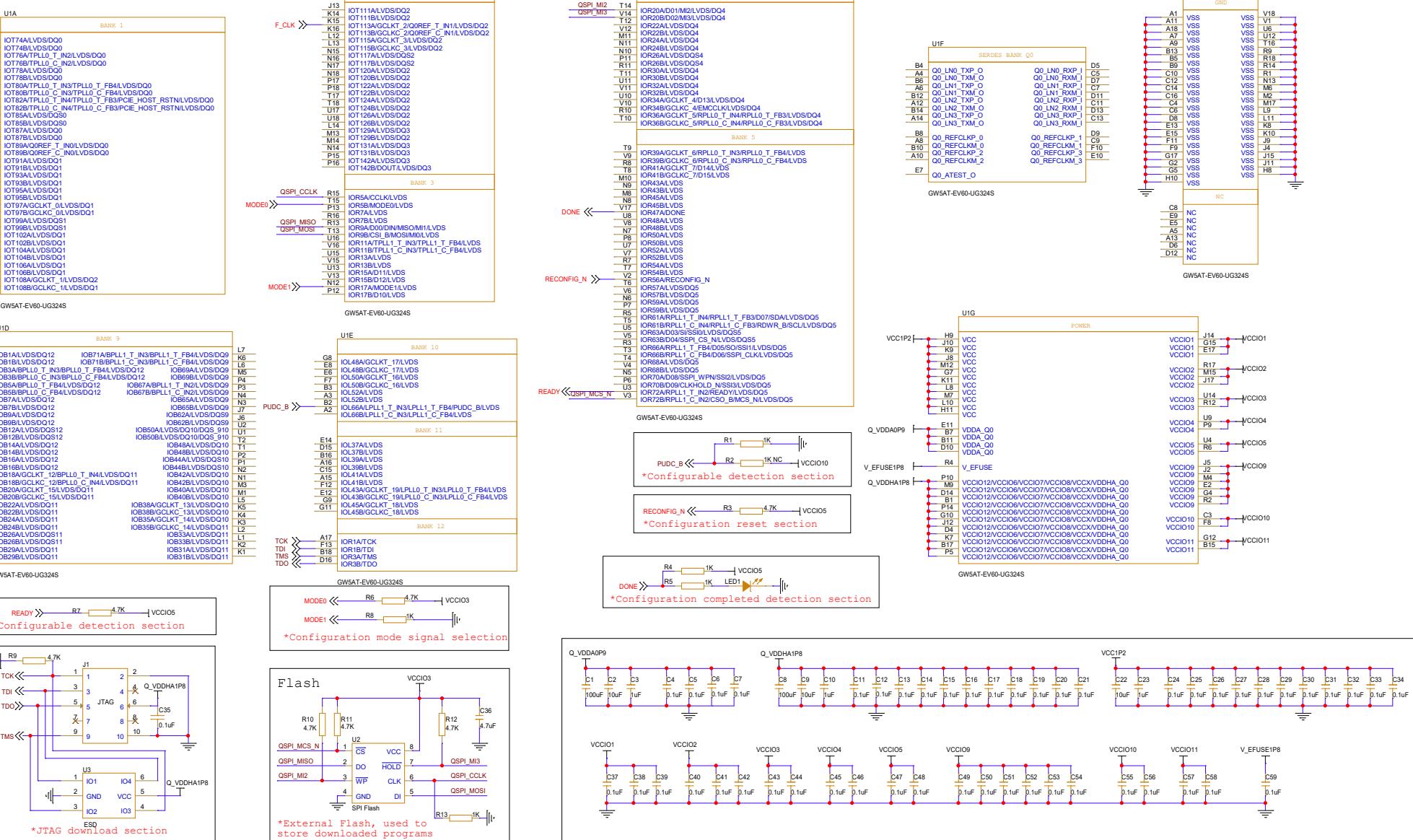


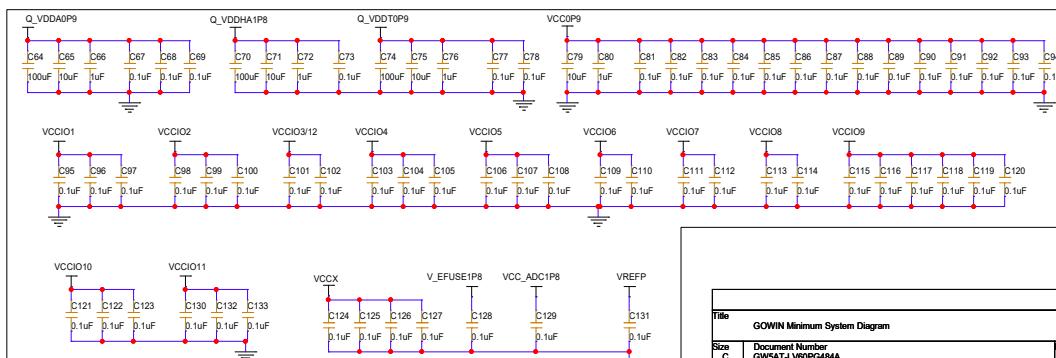
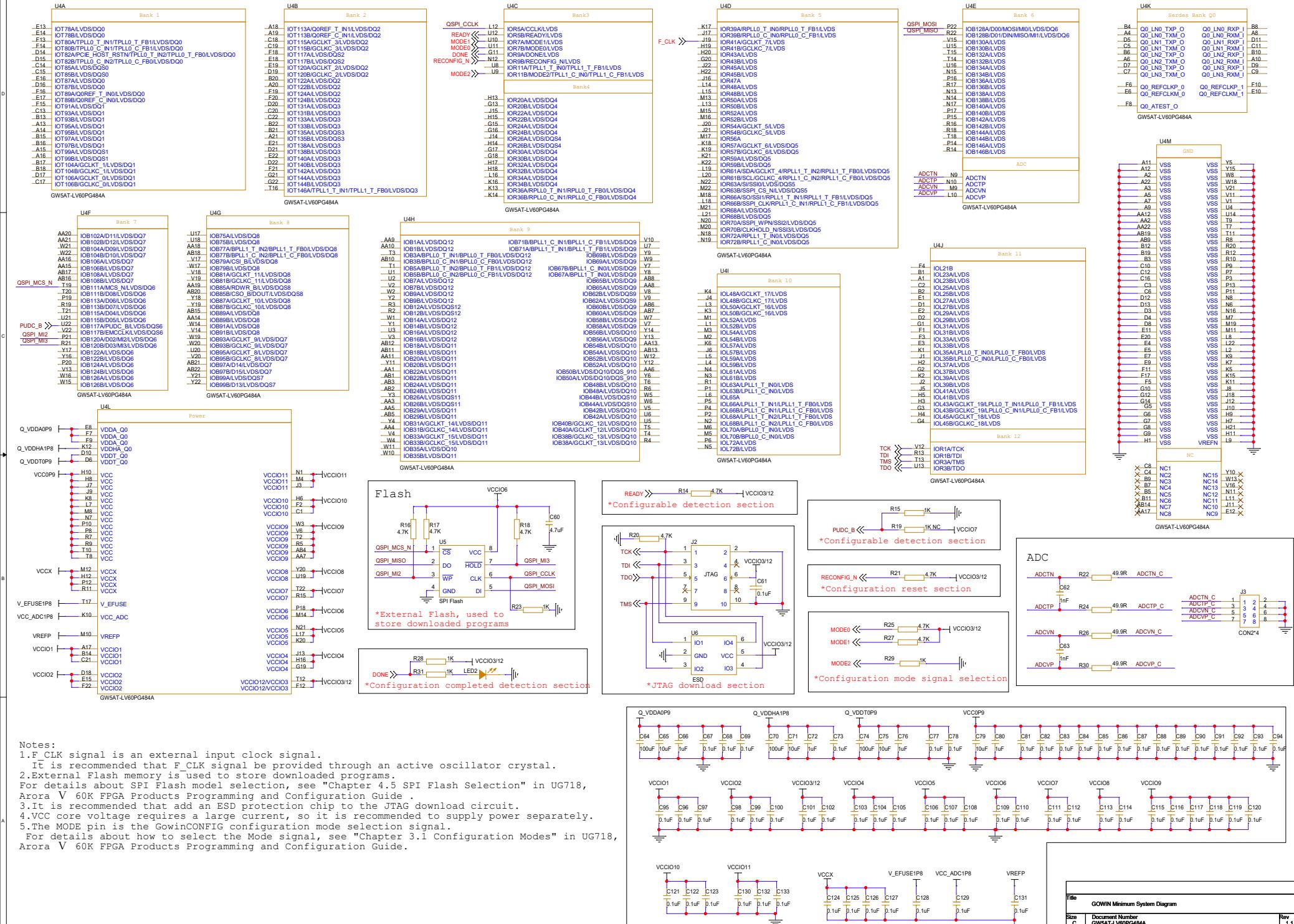
**GW5AT-EV60UG324S**



### Notes:

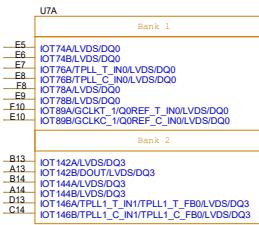
1. F<sub>CLK</sub> signal is an external input clock signal.  
It is recommended that F<sub>CLK</sub> signal be provided through an active oscillator crystal.
  2. External Flash memory is used to store downloaded programs.  
For details about SPI Flash model selection, see "Chapter 4.5 SPI Flash Selection" in UG718, Arora V 60K 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 UG718, Arora V 60K FPGA Products Programming and Configuration Guide.
  6. This package does not support the use of internal differential termination resistors.

Title	GOWIN Minimum System Diagram		
Size C	Document Number GW5SAT-EV60UG324S		Rev 1.1.1
Date	Tuesday, September 10, 2024	Sheet 1	of 3

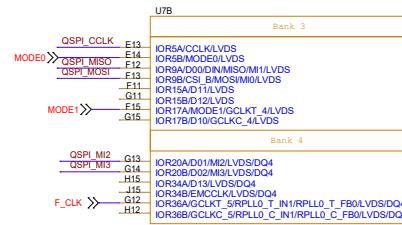


Title		GOWIN Minimum System Diagram	
Size	Document Number		
C	GW5AT-LV60PG484A	Rev 1.1	
Date:	Tuesday, September 10, 2024	Sheet	2 of 3

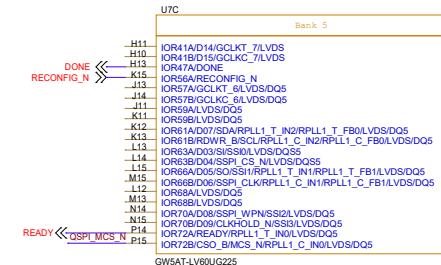
*GW5AT-LV60UG225*



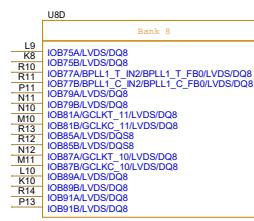
W5AT-LV60UG21



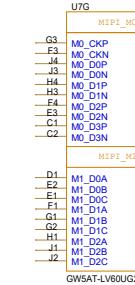
GW5AT-LV60UG225



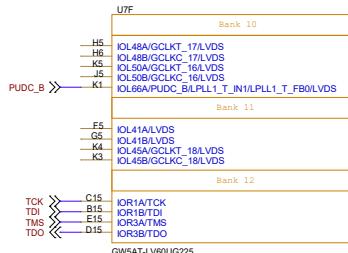
GW5AT-LV6UUUG225



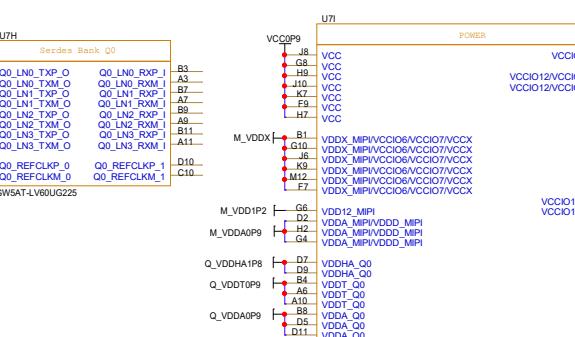
GW5AT-LV60UG225



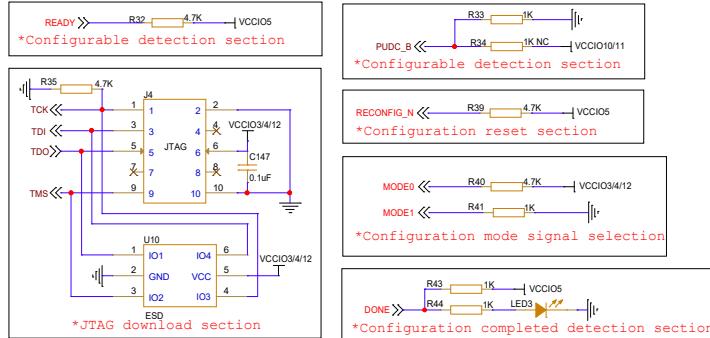
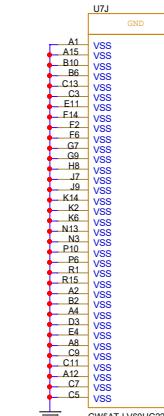
GW5AT-EV000G.



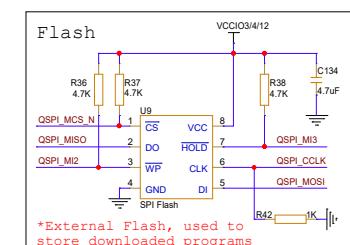
WSAT-LV60UG2



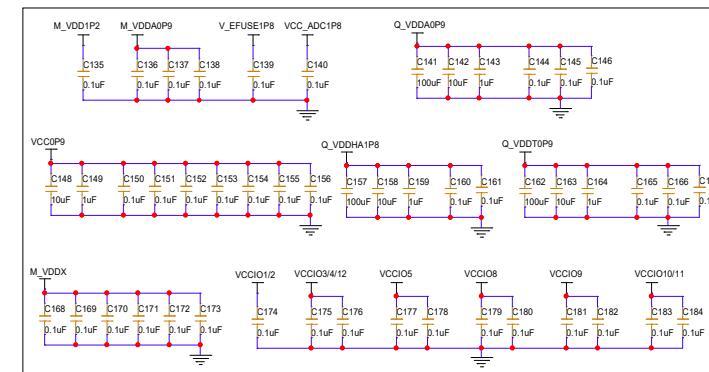
八上第10课



\*Configuration completed detection section



## Store downloaded programs



Notes:

- 1.F<sub>CLK</sub> signal is an external input clock signal.  
It is recommended that F<sub>CLK</sub> 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 UG718, Arora V 60K 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 UG718, Arora V 60K FPGA Products Programming and Configuration Guide.

Title	GOWIN Minimum System Diagram	
Size C	Document Number GW5AT-LV60UG225	Rev 1.1.1
Date:	Tuesday, September 10, 2024	Sheet 3 of 3