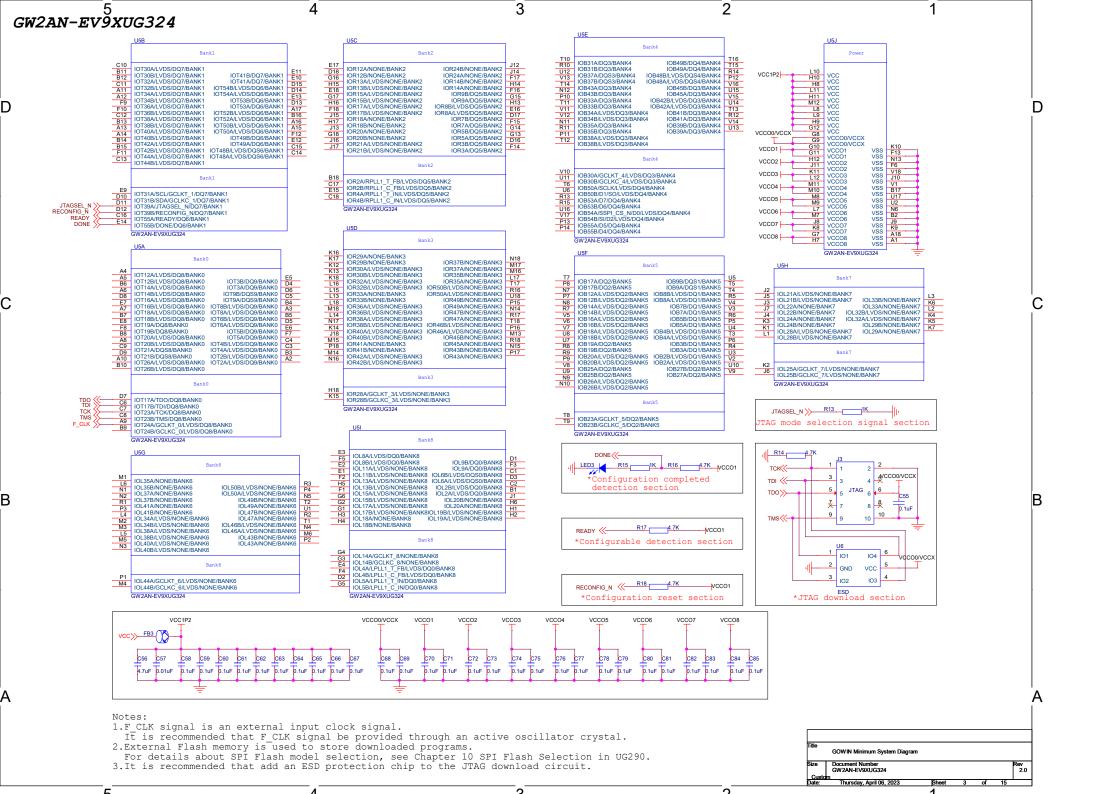
GW2AN-EV9XPG256 Bank3 IOT34A/LVDS/DQ7/BANK1 IOT34B/LVDS/DQ7/BANK1 IOT54B/LVDS/DQ6/BANK1 IOT54A/LVDS/DQ6/BANK1 IOR11A/LVDS/NONE/BANK2 IOR11B/LVDS/NONE/BANK2 IOR8B/LVDS/DQ5/BANK2 IOR8A/LVDS/DQ5/BANK2 IOR29A/NONE/BANK3 VCC1P2 IOR29B/NONE/BANK3 IOR50B/LVDS/NONE/BANK3 vcc VSS IOT36A/LVDS/DQ7/BANK1 IOT52B/LVDS/DQ6/BANK1 IOR13A/LVDS/NONE/BANK2 IOR6B/LVDS/DQS5/BANK2 IOR30A/LVDS/NONE/BANK3 IOR30B/LVDS/NONE/BANK3 IOR50A/LVDS/NONE/BANK3 IOR48B/LVDS/NONE/BANK3 VCC VCC VSS VSS A16 K10 K7 C14 F11 C12 A14 N14 IOT52A/LVDS/DQ6/BANK1 IOR13B/LVDS/NONE/BANK2 IOR6A/LVDS/DQS5/BANK2 IOT36B/LVDS/DQ7/BANK1 IOT38A/LVDS/DQ7/BANK1 IOT50B/LVDS/DQ6/BANK1 IOR15A/LVDS/NONE/BANK2 IOR15B/LVDS/NONE/BANK2 IOR25B/LVDS/NONE/BANK2 IOR25A/LVDS/NONE/BANK2 IOR31A/NONE/BANK3 IOR48A/LVDS/NONE/BANK3 VCC VSS F16 F12 G13 L6 P14 IOR46B/LVDS/NONE/BANK3 IOT38B/I VDS/DQ7/BANK1 IOT50A/I VDS/DQ6/BANK1 IOR31B/NONE/BANK3 VCC VCC VSS VSS IOT40A/LVDS/DQ7/BANK1 IOT48B/LVDS/DQS6/BANK1 IOR17A/LVDS/NONE/BANK2 IOR23B/LVDS/NONE/BANK2 IOR32A/LVDS/NONE/BANK3 IOR46A/LVDS/NONE/BANK3 K15 J11 L12 M15 F6 IOT40B/LVDS/DO7/BANK1 IOT48A/I VDS/DOS6/BANK1 IOR17B/I VDS/NONE/BANK2 IOR23A/I VDS/NONE/BANK2 IOR32B/I VDS/NONE/BANK3 IOR44B/I VDS/NONE/BANK3 VCC VCC VSS E12 J9 R2 M14 IOT42A/LVDS/DQ7/BANK1 IOT44B/LVDS/DQ7/BANK1 IOR21B/LVDS/NONE/BANK2 IOR34A/LVDS/NONE/BANK3 IOR44A/LVDS/NONE/BANK3 VSS VCCO0/VCCX VCCO0/VCCX VCCO0/VCCX VSS VSS IOT42B/LVDS/DQ7/BANK1 IOT44A/LVDS/DQ7/BANK1 IOR19B/LVDS/NONE/BANK2 IOR21A/LVDS/NONE/BANK2 IOR3/IR/LVDS/NONE/RANKS IORA2R/LV/DS/NONE/RANKS L16 L14 K13 K12 K11 D5 D12 G9 E13 IOR42A/LVDS/NONE/BANK3 IOR36A/LVDS/NONE/BANK3 VCC01 VCCO1 VSS VSS IOR36B/I VDS/NONE/BANK3 IOR40B/LVDS/NONE/BANK3 Bank2 IOR38A/LVDS/NONE/BANK3 IOR40A/LVDS/NONE/BANK3 IOR38B/LVDS/NONE/BANK3 VCCO2 H10 M13 D13 IOT31A/SCL/GCLKT 1/DQ7/BANK1 IOR2A/RPLL1 T FB/LVDS/DQ5/BANK2 VCCO2 IOT318/SDA/GCLKC_1/DQ7/BANK1 IOT39A/JTAGSEL_N/DQ7/BANK1 IOT39B/RECONFIG_N/DQ7/BANK1 IOR2B/RPLL1_C_FB/LVDS/DQ5/BANK2 IOR4A/RPLL1_T_IN/LVDS/DQ5/BANK2 IOR4B/RPLL1_C_IN/LVDS/DQ5/BANK2 VCC03 VCCO3 Bank3 JTAGSEL_N > VCCO3 N12 B10 E14 L11 RECONEIG N VCCO4 IOR28A/GCLKT 3/LVDS/NONE/BANK3 IOT55A/READY/DO6/BANK1 GW2AN-FV9XPG256 VCCC04 DONE IOT55B/DONE/DQ6/BANK1 IOR28B/GCLKC_3/LVDS/NONE/BANK3 VCCO5 VCCO5 VCCO5 VCCO6 GW2AN-FV9XPG256 GW2AN-EV9XPG256 M4 H7 R15 B2 M5 VCC07 VCCO7 M12 VCC08 VSS Bank0 Bank4 GW2AN-EV9XPG256 R6 N6 L7 R7 P7 M7 N7 IOB12A/I VDS/DQ2/BANK5 IOB8B/I VDS/DQ1/BANK5 IOB48B/LVDS/DQS4/BANK4 IOT12A/I VDS/DQ8/BANK0 IOT8B/I VDS/DQ9/BANK0 IOB12B/I VDS/DQ2/BANK5 IOB32A/I VDS/DQ3/BANK4 B4 IOB8A/I VDS/DQ1/BANK5 IOT12B/LVDS/DQ8/BANK0 IOT8A/LVDS/DQ9/BANK0 IOB14A/LVDS/DQ2/BANK5 IOB6B/LVDS/DQ1/BANK5 IOB32B/LVDS/DQ3/BANK4 IOB48A/LVDS/DQS4/BANK4 D6 E7 B7 C7 E6 D7 M9 L10 P10 JTAGSEL_N >> R1 1K IOT14A/I VDS/DO8/BANKO IOT6B/I VDS/DO9/BANKO IOB14B/I VDS/DO2/BANKS IOB6A/LVDS/DO1/BANKS IOR34A/I VDS/DO3/RANK4 IOR44B/I VDS/DO3/BANK4 IOT14B/LVDS/DQ8/BANK0 IOB16A/LVDS/DQ2/BANK5 IOB4B/LVDS/DQ1/BANK5 IOB34B/LVDS/DQ3/BANK4 TTAG mode selection signal section IOT4B/LVDS/DQ9/BANK0 IOT18A/LVDS/DQ8/BANK0 IOB16B/LVDS/DQ2/BANK5 IOB4A/LVDS/DQ1/BANK5 R10 N10 M11 IOB36A/LVDS/DQ3/BANK4 IOB42B/LVDS/DQ3/BANK4 B3 B5 C4 M10 P11 T11 IOT18B/LVDS/DQ8/BANK0 IOT4A/LVDS/DQ9/BANK0 IOB18A/LVDS/DQ2/BANK5 IOB2B/LVDS/DQ1/BANK5 IOB36B/LVDS/DQ3/BANK4 IOB42A/LVDS/DQ3/BANK4 P4 N9 IOT20A/I VDS/DQ8/BANK0 IOT2B/I VDS/DQ9/BANKO IOB18B/I VDS/DQ2/BANKS IOB2A/I VDS/DQ1/BANK5 IOB38A/I VDS/DQ3/BANK4 IOB40B/I VDS/DQ3/BANK4 IOT2A/LVDS/DQ9/BANK0 E9 IOT20B/LVDS/DQ8/BANK0 IOB20A/LVDS/DQ2/BANK5 IOB26B/LVDS/DQ2/BANK5 IOB38B/LVDS/DQ3/BANK4 IOB40A/LVDS/DQ3/BANK4 L8 P8 T8 M8 IOT22A/I VDS/DO8/BANKO IOT26B/LVDS/DQ8/BANKO IOB20B/LVDS/DO2/BANKS IOB26A/LVDS/DO2/BANK5 E8 IOT22B/LVDS/DQ8/BANK0 D8 R2 IOT26A/LVDS/DQ8/BANK0 IOB22A/LVDS/DQ2/BANK5 IOB24B/LVDS/DQ2/BANK5 IOB22B/LVDS/DQ2/BANK5 IOB24A/LVDS/DQ2/BANK IOB30A/GCLKT_4/LVDS/DQ3/BANK4 IOB30B/GCLKC_4/LVDS/DQ3/BANK4 A/CCO0/VCCX TDI << IOT17A/TDO/DQ8/BANK0 IOB50A/SCLK/LVDS/DQ4/BANK4 IOB23A/GCLKT 5/DQ2/BANK5 IOT17B/TDI/DQ8/BANK0 IOB50B/D1/SO/LVDS/DQ4/BANK4 TCK IOT23A/TCK/DQ8/BANK0 IOB23B/GCLKC_5/DQ2/BANK5 IOB52A/FASTRD_N/D3/LVDS/DQ4/BANK4 IOT23B/TMS/DQ8/BANK0 IOB52B/QSSPI WPN/LVDS/DQ4/BANK4 0.1uF GW2AN-FV9XPG256 IOB54A/SSPI_CS_N/D0/LVDS/DQ4/BANK4 IOB54B/SI/D2/LVDS/DQ4/BANK4 IOT24A/GCLKT_0/LVDS/DQ8/BANK0 IOT24B/GCLKC_0/LVDS/DQ8/BANK0 A8 TMS< IOB55A/D5/DQ4/BANK4 GW2AN-EV9XPG256 IOB55B/D4/DQ4/BANK4 GW2AN-EV9XPG256 U1H Bank7 IOL8A/LVDS/DQ0/BANK8 IOL8B/LVDS/DQ0/BANK8 IOL2B/LVDS/DQ0/BANK8 IOL2A/LVDS/DQ0/BANK8 101 104 /dconv/ccx IOL21A/LVDS/NONE/BANK7 IOL21B/LVDS/NONE/BANK7 IOL15A/LVDS/NONE/BANK8 IOL20B/NONE/BANK8 GND VCC IOI 15B/I VDS/NONE/BANK8 IOI 20A/NONE/BANK8 IOL19B/LVDS/NONE/BANK8 IOL19A/LVDS/NONE/BANK8 IOL36A/LVDS/NONE/BANK6 102 103 L3 K4 L5 K5 L4 N2 P1 IOI 51B/NONE/BANK6 IOI 22B/NONE/BANK7 IOL32A/LVDS/NONE/BANK7 IOI 16B/NONE/BANKS IOL36B/LVDS/NONE/BANK6 ESD IOL24A/NONE/BANK7 IOL30B/LVDS/NONE/BANK7 IOL17A/LVDS/NONE/BANK8 IOL40A/LVDS/NONE/BANK6 IOL51A/NONE/BANK6 N3 M2 *JTAG download section IOI 17B/I VDS/NONE/BANK8 IOL2/B/NONE/BANK7 IOL304/LVDS/NONE/BANK7 IOLARRI VIDS/NONE/BANKS IOL50B/LVDS/NONE/BANKS IOL46A/LVDS/NONE/BANK6 IOL33B/NONE/BANK7 IOI 28A/I VDS/NONE/BANK7 IOI 46B/I VDS/NONE/BANK6 IOI 48B/I VDS/NONE/BANK6 M3 IOL47A/NONE/BANK6 IOL48A/LVDS/NONE/BANK6 IOL47B/NONE/BANK6 IOL14A/GCLKT_8/NONE/BANK8 IOL14B/GCLKC_8/NONE/BANK8 IOL4A/LPLL1 T FB/LVDS/DQ0/BANK8 Bank6 4.7K VCC01 IOL25A/GCLKT_7/LVDS/NONE/BANK7 IOL25B/GCLKC_7/LVDS/NONE/BANK7 IOL4B/LPLL1_C_FB/LVDS/DQ0/BANK8 Configuration completed IOL44A/GCLKT 6/LVDS/NONE/BANK6 GW2AN-EV9XPG256 IOL5A/LPLL1_T_IN/DQ0/BANK8 IOL5B/LPLL1_C_IN/DQ0/BANK8 IOL44B/GCLKC 6/LVDS/NONE/BANK6 detection section GW2AN-EV9XPG256 GW2AN-EV9XPG256 VCC1P2 VCC00/VCCX VCCO1 VCCO2 VCC03 VCCO4 VCCO5 VCCO6 VCCO7 VCCO8 vcc>> FB1 *Configurable detection section C12 C2 C14 C17 C20 C22 C25 C13 C16 C18 C19 C21 C23 C24 C26 C27 D.10F D.10F D.10F D.10F D.10F 0.1uF 0.1uF 4 7UF 0 01UF 0 10F 0 10F 0.1uF 0.1uF RECONFIG_N
R6 4.7K *Configuration reset section 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. GOW IN Minimum System Diagram ize A3 Rev 2.0 GW2AN-FV9XPG256

3 5 GW2AN-EV9XUG256 Bank1 IOT54B/LVDS/DQ6/BANK1 IOT54A/LVDS/DQ6/BANK1 IOR11A/LVDS/NONE/BANK2 IOR11B/LVDS/NONE/BANK2 IOR8B/LVDS/DQ5/BANK2 IOR8A/LVDS/DQ5/BANK2 IOT34A/LVDS/DQ7/BANK1 IOR29A/NONE/BANK3 VCC1P2 IOT34B/I VDS/DQ7/BANK1 IOR29B/NONE/BANK3 IOR50B/LVDS/NONE/BANK3 vss IOT36A/LVDS/DQ7/BANK1 IOT52B/LVDS/DQ6/BANK1 IOR13A/LVDS/NONE/BANK2 IOR6B/LVDS/DQS5/BANK2 OR30A/LVDS/NONE/BANK3 IOR50A/LVDS/NONE/BANK3 IOR48B/LVDS/NONE/BANK3 VSS VSS VCC G12 F14 A10 F9 N14 A16 K10 IOT52A/LVDS/DQ6/BANK1 IOR13B/LVDS/NONE/BANK2 IOR6A/LVDS/DQS5/BANK2 IOR30B/LVDS/NONE/BANK3 IOT36B/LVDS/DQ7/BANK1 N16 IOT38A/LVDS/DQ7/BANK1 IOT50B/LVDS/DQ6/BANK1 IOR15A/LVDS/NONE/BANK2 IOR25B/LVDS/NONE/BANK2 IOR25A/LVDS/NONE/BANK2 IOR31A/NONE/BANK3 IOR31B/NONE/BANK3 IOR48A/LVDS/NONE/BANK3 VCC VSS VSS B13 A12 L6 P14 IOT38B/I VDS/DQ7/BANK1 IOT50A/I VDS/DQ6/BANK1 IOR15B/I VDS/NONF/BANK2 IOR46B/I VDS/NONF/BANK3 VCC IOT40A/LVDS/DQ7/BANK1 IOT48B/LVDS/DQS6/BANK1 IOR17A/LVDS/NONE/BANK2 IOR23B/LVDS/NONE/BANK2 IOR32A/LVDS/NONE/BANK3 IOR46A/LVDS/NONE/BANK3 VCC VSS F6 E12 J9 R2 M15 IOT40B/LVDS/DO7/BANK1 IOT48A/I VDS/DOS6/BANK1 IOR17B/I VDS/NONE/BANK2 IOR23A/LVDS/NONE/BANK2 IOR32B/I VDS/NONE/BANK3 IOR44B/I VDS/NONE/BANK3 VCC VSS M14 J11 L12 IOT42A/LVDS/DQ7/BANK1 IOT44B/LVDS/DQ7/BANK1 IOR19A/LVDS/NONE/BANK2 IOR21B/LVDS/NONE/BANK2 IOR34A/LVDS/NONE/BANK3 IOR44A/LVDS/NONE/BANK3 VCC VCCO0/VCCX IOT42B/LVDS/DQ7/BANK1 IOT44A/LVDS/DQ7/BANK1 IOR19B/LVDS/NONE/BANK2 IOR21A/I VDS/NONF/BANK2 IOR3/IR/LV/DS/NONE/RANK3 IOR/2R/LVDS/NONE/RANK3 VCCO0/VCCX VSS VSS L16 L14 K13 K12 K11 D5 D12 G9 E13 IOR36A/LVDS/NONE/BANK3 VCCO0/VCCX IOR42A/LVDS/NONE/BANK3 IOR36B/LVDS/NONE/BANK3 IOR38A/LVDS/NONE/BANK3 IOR40B/LVDS/NONE/BANK3 IOR40A/LVDS/NONE/BANK3 VCCO1 VCCO₁ VSS VSS Bank2 VCCO1 VCCO2 IOR38B/LVDS/NONE/BANK3 VCCO VSS D13 IOT31A/SCL/GCLKT 1/DQ7/BANK1 IOR2A/RPLL1 T FB/LVDS/DQ5/BANK2 VSS VCCO2 D4 H9 IOT31B/SDA/GCLKC_1/DQ7/BANK1 IOT39A/JTAGSEL_N/DQ7/BANK1 IOR2B/RPLL1_C_FB/LVDS/DQ5/BANK2 IOR4A/RPLL1_T_IN/LVDS/DQ5/BANK2 VCCO3 VCCO3 VSS VSS Bank3 JTAGSEL_N VCCO3 B10 E14 N12 L11 VSS VSS VSS VSS VSS VSS VSS RECONEIG N IOT39B/RECONFIG_N/DQ7/BANK1 IOR4B/RPLL1_C_IN/LVDS/DQ5/BANK2 VCCO4 VCCO4 READY IOR28A/GCLKT_3/LVDS/NONE/BANK3 IOT55A/READY/DO6/BANK1 GW2AN-FV9XUG256 VCCC04 DONE IOT55B/DONE/DO6/BANK1 IOR28B/GCLKC_3/LVDS/NONE/BANK3 VCCO5 VCCO5 GW2AN-EV9XIIG256 GW2AN-EV9XUG256 M4 H7 J7 E4 R15 VCC06 VCC07 VCCO7 Bank4 VSS VCC07 VCCO8 VCC08 VSS Bank0 Bank5 IOB32A/LVDS/DQ3/BANK4 IOB48B/LVDS/DQS4/BANK4 GW2AN-EV9XUG256 T10 M9 IOB32B/LVDS/DQ3/BANK4 IOB48A/LVDS/DQS4/BANK4 IOB44B/LVDS/DQ3/BANK4 IOT12A/LVDS/DQ8/BANK0 IOT8B/LVDS/DQ9/BANK0 IOB8B/LVDS/DQ1/BANK5 IOB12A/I VDS/DQ2/BANK5 B4 IOB34A/I VDS/DQ3/BANK4 A5 L10 R13 T3 IOT12B/LVDS/DQ8/BANK0 IOT8A/LVDS/DQ9/BANK0 A5 C5 A4 A2 B3 B5 C4 IOB34B/LVDS/DQ3/BANK4 IOB44A/LVDS/DQ3/BANK4 IOB12B/LVDS/DQ2/BANK5 IOB8A/LVDS/DQ1/BANK5 P5 R5 R3 T2 T4 P4 JTAGSEL_N >> R7 IOT14A/I VDS/DO8/BANKO IOT6B/I VDS/DO9/BANKO IOB14A/I VDS/DO2/BANK5 IOB6B/LVDS/DO1/BANK5 IOR36A/I VDS/DO3/RANK4 IOR42R/LVDS/DO3/RANK4 OT14B/LVDS/DQ8/BANK0 OT6A/LVDS/DQ9/BANK0 IOB36B/LVDS/DQ3/BANK4 IOB42A/LVDS/DQ3/BANK4 IOB14B/LVDS/DQ2/BANK5 TAG mode selection signal section IOT4B/LVDS/DQ9/BANK0 C7 E6 D7 IOT18A/LVDS/DQ8/BANK0 IOB38A/LVDS/DQ3/BANK4 IOB40B/LVDS/DQ3/BANK4 IOB16A/LVDS/DQ2/BANK5 IOB4B/LVDS/DQ1/BANK5 M11 T11 IOT18B/LVDS/DQ8/BANK0 IOT4A/LVDS/DQ9/BANK0 IOB38B/LVDS/DQ3/BANK4 IOB40A/LVDS/DQ3/BANK4 IOB16B/LVDS/DQ2/BANK5 IOB4A/LVDS/DQ1/BANK5 IOT20A/I VDS/DQ8/BANK0 IOT2B/I VDS/DQ9/BANKO IOB18A/I VDS/DQ2/BANK5 OT20B/LVDS/DQ8/BANK0 IOT2A/LVDS/DQ9/BANK0 IOB18B/LVDS/DQ2/BANK5 IOT22A/LVDS/DO8/BANKO IOT26B/LVDS/DO8/BANKO IOB20A/LVDS/DO2/BANK5 E8 D8 IOT22B/LVDS/DQ8/BANK0 IOT26A/LVDS/DQ8/BANK0 IOB20B/LVDS/DQ2/BANK5 T9 P9 P6 T6 IOB30A/GCLKT_4/LVDS/DQ3/BANK4 IOB30B/GCLKC_4/LVDS/DQ3/BANK4 IOB50A/SCLK/LVDS/DQ4/BANK4 IOB50B/D1/SO/LVDS/DQ4/BANK4 IOB22A/I VDS/DQ2/BANK5 IOB22B/LVDS/DQ2/BANK5 IOB24A/LVDS/DQ2/BANK5 ₹\CC00\ΛCCX Bank5 IOT17A/TDO/DQ8/BANK0 IOB52A/FASTRD_N/D3/LVDS/DQ4/BANK4 IOT17B/TDI/DQ8/BANK0 IOB52B/QSSPI WPN/LVDS/DQ4/BANK4 JTAG IOT23A/TCK/DQ8/BANK0 IOB54A/SSPI_CS_N/D0/LVDS/DQ4/BANK4 IOB23A/GCLKT_5/DQ2/BANK5 IOT23B/TMS/DQ8/BANK0 IOB54B/SI/D2/I VDS/DQ4/BANK4 IOB23B/GCLKC_5/DQ2/BANK5 R14 IOB55A/D5/DQ4/BANK4 IOT24A/GCLKT_0/LVDS/DQ8/BANK0 IOT24B/GCLKC_0/LVDS/DQ8/BANK0 GW2AN-EV9XUG256 IOB55B/D4/DQ4/BANK4 тмѕ<<-GW2AN-EV9XUG256 GW2AN-EV9XUG256 U3I U3G U3H Bank8 Bank 6 Bank7 U4 101 104 COONCC IOL8A/LVDS/DQ0/BANK8 IOL2B/LVDS/DQ0/BANK8 IOL2A/LVDS/DQ0/BANK8 IOL36A/LVDS/NONE/BANK6 IOL21A/LVDS/NONE/BANK7 B1 H6 L3 K4 VCC IOI 8B/I VDS/DQ0/BANK8 IOI 36B/I VDS/NONE/BANK6 IOI 21B/I VDS/NONE/BANK GND IOL15A/LVDS/NONE/BANK8 IOL40A/LVDS/NONE/BANK6 IOL22A/NONE/BANK7 L5 K5 L4 N2 P1 K3 IO2 103 IOI 15B/I VDS/NONE/BANKS IOL20A/NONE/BANKS IOI 40B/I VDS/NONE/BANKS IOI 22B/NONE/BANK7 IOL32A/LVDS/NONE/BANK7 IOL19B/LVDS/NONE/BANK8 IOL16A/NONE/BANK8 IOL46A/LVDS/NONE/BANK6 IOL24A/NONE/BANK7 IOL30B/LVDS/NONE/BANK7 *JTAG download section IOI 16B/NONE/BANKS IOL19A/LVDS/NONE/BANK8 IOL46B/LVDS/NONE/BANK6 IOL24B/NONE/BANK7 IOI 30A/I VDS/NONF/BANK7 IOL48A/LVDS/NONE/BANK6 IOL17B/LVDS/NONE/BANK8 IOI 47B/NONE/BANKS IOL33B/NONE/BANK7 IOL28A/LVDS/NONE/BANK7 IOL14A/GCLKT 8/NONE/BANK8 IOL44A/GCLKT_6/LVDS/NONE/BANK6 IOL44B/GCLKC_6/LVDS/NONE/BANK6 IOL25A/GCLKT_7/LVDS/NONE/BANK7 IOL25B/GCLKC_7/LVDS/NONE/BANK7 DONE (IOL14B/GCLKC 8/NONE/BANK8
IOL4A/LPLL1_T_FB/LVDS/DQ0/BANK8
IOL4B/LPLL1_C_FB/LVDS/DQ0/BANK8 –1K R10 – 4.7K VCCO1 GW2AN-EV9XUG256 GW2AN-EV9XUG256 Configuration completed IOL5A/LPLL1_T_IN/DQ0/BANK8 IOL5B/LPLL1_C_IN/DQ0/BANK8 E3 detection section GW2AN-EV9XUG256 VCC00/VCCX VCCO1 VCCO2 VCC03 VCCO6 VCCO7 VCC08 VCCO₄ VCCO₅ R11 4.7K vcc>> FB2 *Configurable detection section C29 C33 C32 C35 C39 C42 C43 C45 C49 C50 C52 C53 .1uF 0.1uF RECONFIG_N
R12 4.7K *Configuration reset section 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. GOW IN Minimum System Diagram 3.It is recommended that add an ESD protection chip to the JTAG download circuit. ize A3 Rev 2.0 GW2AN-EV9XUG256



3 4 GW2AN-EV9XUG400 IOB32A/I VDS/DQ3/BANK/ IOB49B/DQ4/BANK4 IOR9B/DQ5/BANK2 IOR9A/DQ5/BANK2 IOR8B/LVDS/DQ5/BANK2 IOR8A/LVDS/DQ5/BANK2 IOR9A/LVDS/DQ5/BANK2 VCC1P2 IOB32B/LVDS/DQ3/BANK4 IOB49A/DQ4/BANK4 IOL34A/LVDS/NONE/BANK6 IOB33A/DQ3/BANK4 IOB48B/LVDS/DQS4/BANK4 IOB48A/LVDS/DQS4/BANK4 | NI | OL34AL/USIN/MEIDANG | OL51BINU/MEIDANG | OL5 IOL51B/NONE/BANK6
IOL50B/LVDS/NONE/BANK6
IOL50B/LVDS/NONE/BANK6
IOL50A/LVDS/NONE/RANK6
IOL50A/LVDS/NONE/RANK6 H12 VCC
H12 VCC
L12 VCC
J10 VCC
J11 VCC
M10 VCC
M11 VCC
K12 VCC
H13 VCC IOB33B/DQ3/BANK4 FEG 10R12BINONEGRANIC FEG 10R13BILVDSNONEGRANIC 114 (OR13BILVDSNONEGRANIC 115 (OR13BILVDSNONEGRANIC 117 (OR13BILVDSNONEGRANIC 117 (OR13BINONEGRANIC 118 (OR13BINONEGRANIC 118 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 118 (OR2GANIONEGRANIC 118 (OR2GANIONEGRANIC 119 (OR13BINONEGRANIC 110 (OR13BINONEGRANIC 111 (OR2GANIONEGRANIC 111 (OR2GANIONEGRANIC 111 (OR2GANIONEGRANIC IOR12B/NONE/BANK2 IOR13A/LVDS/NONE/BAI IOB34A/LVDS/DQ3/BANK IOB45B/DQ3/BANK4 IOB45A/DQ3/BANK4 IOB468A/DQ3/BANK4
IOB448L/DS/DQ3/BANK4
IOB428L/DS/DQ3/BANK4
IOB428L/DS/DQ3/BANK4
IOB428L/DS/DQ3/BANK4
IOB4/BIDQ3/BANK4
IOB4/BIDQ3/BANK4
IOB4/BIDQ3/BANK4
IOB4/BIDQ3/BANK4
IOB4/BIDQ3/BANK4
IOB4/BIDQ3/BANK4
IOB4/BIDQ3/BANK4 IOB35A/DQ3/BANK4 T11 IOB35BIDQ3/BANK4
W14 IOB35BIDQ3/BANK4
W14 IOB35BIDQ3/BANK4
Y15 IOB35BILVDS/IDQ3/BANK4
W15 IOB35BILVDS/IDQ3/BANK4
P12 IOB35BILVDS/IDQ3/BANK4
IOB35BILVDS/IDQ3/BANK4
IOB35BIDQ3/BANK4 VCC00/VCCX H8 VCC00/VCCX VCC00/VCCX VCC00/VCCX VCC00/VCCX VCC01 VCC01 VCC01 VCC01 VCC01 W12 IOB30A/GCLKT_4/LVDS/DQ3/BANK4 IOR55B/D4/DQ4/BANK4 IOR20B/NONE/BANK2 IOB30B/GCLKC_4/LVDS/DQ3/BANK4 IOB50A/SCLK/LVDS/DQ4/BANK4 IOB55A/D5/DQ4/BANK4 IOB53B/D6/DQ4/BANK4 VCC02 | J13 | VCC03 | VCCO1 -U1 IOL44A/GCLKT_6/LVDS/NONE/BANK6 VCC01 VCC02 VCC03 VCC03 VCC03 VCC04 IOR2B/RPLL1_C_FB/LVDS/DQ5/BANK2 IOR2B/RPLL1_C_FB/LVDS/DQ5/BANK2 IOR4B/RPLL1_C_IN/LVDS/DQ5/BANK2 VCCO4 VCCO5 VCCO5 VCCO5 VCCO6 VSS V7
VSS E18
VSS K11
VSS V5
VSS D4
VSS E11
VSS U8
VSS E13
VSS D3
VSS C5
VSS C5 GW2AN-EV9XUG400 IOB54B/SI/D2/I VDS/DQ4/BANK4 IOL11A/LVDS/NONE/BANK8 IOL11B/LVDS/NONE/BANK8 IOL13A/LVDS/NONE/BANK8 VCCO6 -M8 M9 K8 VCCO7 [-K8 K9 DR28AINONE/BANK3
DR28BINONE/BANK3
DR38BINONE/BANK3
DR38BINONE/BANK3
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DR34BINONE/BANK3 IOB9B/DQS1/BANK5 IOB8A/DQS1/BANK5 IOB8B/LVDS/DQ1/BANK5 IOB8A/LVDS/DQ1/BANK5 IOB7B/DQ1/BANK5 IOB7A/DQ1/BANK5 IOB6B/LVDS/DQ1/BANK5 IOB6A/LVDS/DQ1/BANK5 U7B R8 P8 Y4 W4 Y3 W3 U6 VCCO8 J/

IOB5B/DQ1/BANK5

IOB3B/DQ1/BANK5

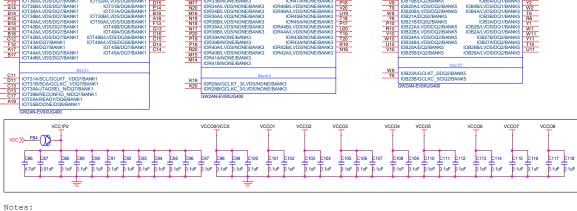
IOB3A/DQ1/BANK5

IOB2B/LVDS/DQ1/BANK5 IOB2A/LVDS/DQ1/BANK5

IOR20A/I VDS/DO2/RANKS

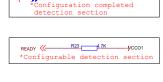
IOB21A/DQS2/BANK5

IOB21B/DQS2/BANK5

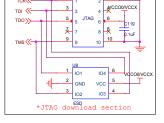


IOR47B/NONE/BANK3 IOR47A/NONE/BANK3

FT 0L13AL/DSINONERANKS
G3 0L15AL/DSINONERANKS
G3 0L15AL/DSINONERANKS
G3 0L15AL/DSINONERANKS
H4 0L15AL/DSINONERANKS
G2 0L15BINONERANKS
G1 0L17AL/DSINONERANKS
G1 0L17AL/DSINONERANKS
J5 0L15AL/DSINONERANKS
H2 0L15AL/DSINONERANKS
UL19AL/DSINONERANKS
H1 0L15AL/DSINONERANKS
UL19AL/DSINONERANKS VCC06 VCC07 VCC07 VCC08 VCC08 GW2AN-EV9XUG400 IOL144/GCLKT 8/NONE/BANKS IOL4A/LPLL1_T_FB/LVDS/DQ0/BANK8 IOL4B/LPLL1_C_FB/LVDS/DQ0/BANK8 IOL5A/LPLL1_T_IN/DQ0/BANK8 IOLZ2A/NONE/BANK7 IOL32B/ILVDS/NONE/BANK7
IOL22B/NONE/BANK7 IOL32B/ILVDS/NONE/BANK7
IOL32B/ILVDS/NONE/BANK7 IOL32B/ILVDS/NONE/BANK7
IOL32B/ILVDS/NONE/BANK7 IOL31B/NONE/BANK7
IOL33B/ILVDS/NONE/BANK7 IOL31B/INONE/BANK7 IOL5B/LPLL1 C IN/DQ0/BANK8 IOL24A/NONE/BANK7 IOL30B/LVDS/NONE/BANK7 IOL24B/NONE/BANK7 IOL30A/LVDS/NONE/BANK7 GW2AN-EV9XUG400 L3 IOL26A/NONE/BANK7
IOL26B/NONE/BANK7
IOL28A/LVDS/NONE/BANK7
IOL28B/LVDS/NONE/BANK7 IOL26A/NONE/BANK7 IOL29B/NONE/BANK7 IOL26B/NONE/BANK7 IOL29A/NONE/BANK7 JTAGSEL_N >> R19 1K L1 IOL25A/GCLKT_7/LVDS/NONE/BANK7 IOL25B/GCLKC_7/LVDS/NONE/BANK7 GW2AN-EV9YLIG400 R20 LED4 R21 1K R22 4.7K VCC01



RECONFIG N R24 4.7K VCCO1 *Configuration reset section



В

RECONFIG N READY DONE

A12 B12 IOT30ALVDS/DQ7/BANK1 A13 IOT30B/LVDS/DQ7/BANK1 B13 IOT32ALVDS/DQ7/BANK1 IOT34BALVDS/DQ7/BANK1 IOT34BALVDS/DQ7/BANK1

C12 IOT36A/LVDS/DQ7/BANK1 A14 IOT36B/LVDS/DQ7/BANK1

IOT34B/LVDS/DQ7/BANK

OT38A/LVDS/DO7/BANK

IOT40A/I VDS/DQ7/BANK

OT40B/LVDS/DQ7/BANK

IOT42A/LVDS/DQ7/BANK

IOT38B/LVDS/DQ7/BANK

1.F CLK signal is an external input clock signal.

IOT54B/I VDS/DQ6/BANK1 IOT54B/LVDS/DQ6/BANK1 IOT54A/LVDS/DQ6/BANK1 IOT53B/DQ6/BANK1 IOT53A/DQ6/BANK1

IOT52B/LVDS/DQ6/BANK1 IOT52A/LVDS/DQ6/BANK1

IOT50B/LVDS/DQ6/BANK1

IOT50A/I VDS/DQ6/BANK1

IOT51B/DQ6/BANK1 IOT51A/DQ6/BANK1

IOT49B/DQ6/BANK1 IOT49A/DQ6/BANK1

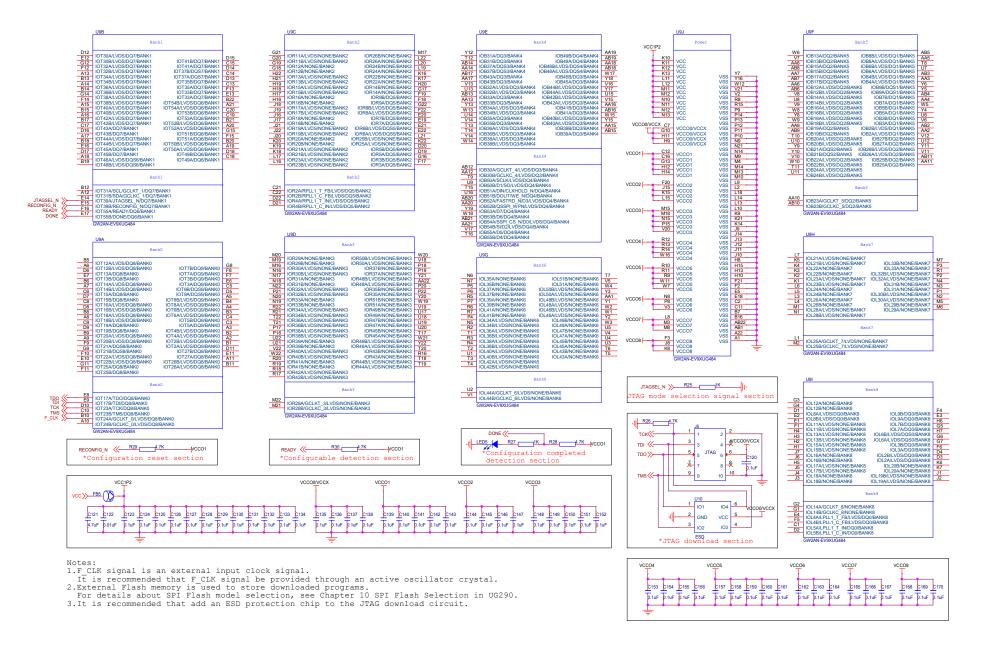
- It is recommended that F CLK signal be provided through an active oscillator crystal.
- 2. External Flash memory is used to store downloaded programs.
- For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290.

IOR36B/LVDS/NONE/BANK3

IOR38A/LVDS/NONE/BANK3 IOR38B/LVDS/NONE/BANK3

3.It is recommended that add an ESD protection chip to the JTAG download circuit.

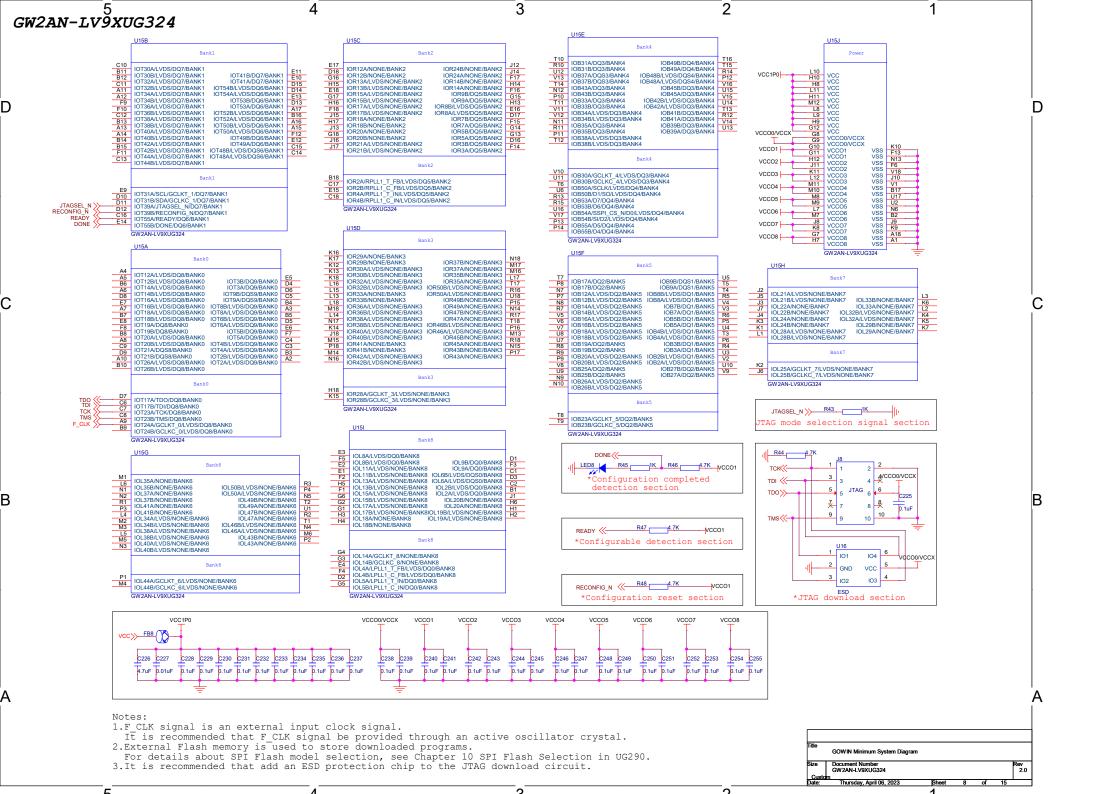
5 GW2AN-EV9XUG484 2 1



File
GOWIN Minimum System Diagram
Size
Document Number
C GW2AN-EVXIXG484
2.0
Date: Thumber And 05 2023 Sheet 5 of 15

GW2AN-LV9XPG256 H11C U11B U11E Bank2 IOR11A/LVDS/NONE/BANK2 IOR8B/LVDS/DQ5/BANK2 IOT34A/LVDS/DQ7/BANK1 IOT34B/LVDS/DQ7/BANK1 IOT54B/LVDS/DQ6/BANK1 IOT54A/LVDS/DQ6/BANK1 IOB32A/LVDS/DQ3/BANK4 IOB32B/LVDS/DQ3/BANK4 IOR11B/LVDS/NONE/BANK2 IOR8A/I VDS/DO5/BANK2 IOB48B/LVDS/DQS4/BANK4 IOR6B/LVDS/DQS5/BANK2 IOB48A/LVDS/DQS4/BANK4 VCC1P0 IOR13A/LVDS/NONE/BANK2 vcc VSS IOT36A/LVDS/DQ7/BANK1 IOT52B/LVDS/DQ6/BANK1 IOR13B/LVDS/NONE/BANK2 IOR6A/LVDS/DQS5/BANK2 IOB34A/LVDS/DQ3/BANK4 IOB44B/LVDS/DQ3/BANK4 VCC VCC VSS VSS F14 F16 L10 P10 A16 K10 K7 C14 F11 C12 A14 J12 H13 R13 IOR15A/LVDS/NONE/BANK2 IOR25B/LVDS/NONE/BANK2 IOT36B/LVDS/DQ7/BANK1 IOT52A/LVDS/DQ6/BANK1 IOB34B/LVDS/DQ3/BANK4 IOB44A/LVDS/DQ3/BANK4 IOT38A/LVDS/DQ7/BANK1 IOT50B/LVDS/DQ6/BANK1 IOR15B/LVDS/NONE/BANK2 IOR25A/LVDS/NONE/BANK2 IOR23B/LVDS/NONE/BANK2 IOB36A/LVDS/DQ3/BANK4 IOB42B/LVDS/DQ3/BANK4 VCC VSS F12 G13 G15 G14 H15 G16 H12 L6 P14 IOT38B/I VDS/DQ7/BANK1 IOT50A/I VDS/DQ6/BANK1 IOR17A/I VDS/NONF/BANK2 IOB36B/I VDS/DO3/BANK4 IOB42A/I VDS/DQ3/BANK4 VCC VCC VSS VSS IOT40A/LVDS/DQ7/BANK1 IOT48B/LVDS/DQS6/BANK1 IOR17B/LVDS/NONE/BANK2 IOR23A/LVDS/NONE/BANK2 IOB38A/LVDS/DQ3/BANK4 IOB40B/LVDS/DQ3/BANK4 F6 VCC IOT40B/LVDS/DO7/BANK1 IOT48A/I VDS/DOS6/BANK1 IOR19A/I VDS/NONE/BANK2 IOR21B/I VDS/NONE/BANK2 IOR38R/I VDS/DO3/RANK4 IOB40A/I VDS/DO3/BANK4 VSS E12 J9 R2 A1 G8 IOT42A/LVDS/DQ7/BANK1 IOT44B/LVDS/DQ7/BANK1 IOR19B/LVDS/NONE/BANK2 VSS VCCO0/VCCX VCCO0/VCCX VCCO0/VCCX VSS VSS IOT42B/LVDS/DQ7/BANK1 IOT44A/LVDS/DQ7/BANK1 D5 D12 G9 E13 VCC01 VCCO1 VSS VSS IOB30A/GCLKT_4/LVDS/DQ3/BANK4 IOB30B/GCLKC_4/LVDS/DQ3/BANK4 IOB50A/SCLK/LVDS/DQ4/BANK4 IOR2A/RPLL1_T_FB/LVDS/DQ5/BANK2 IOR2B/RPLL1_C_FB/LVDS/DQ5/BANK2 IOR4A/RPLL1_T_IN/LVDS/DQ5/BANK2 IOR4B/RPLL1_C_IN/LVDS/DQ5/BANK2 VSS VSS VSS VCCO2 E15 D16 E14 H10 M13 D13 IOT31A/SCL/GCLKT 1/DQ7/BANK1 VCCO2 IOT318/SDA/GCLKC_1/DQ7/BANK1 IOT39A/JTAGSEL_N/DQ7/BANK1 IOT39B/RECONFIG_N/DQ7/BANK1 IOB50B/D1/SO/LVDS/DQ4/BANK4 IOB52A/FASTRD N/D3/LVDS/DQ4/BANK4 VCCO3 VCCO3 JTAGSEL_N > VSS VSS VSS VSS VCCO3 T13 N12 B10 L11 RECONEIG N IOB52B/QSSPI_WPN/LVDS/DQ4/BANK4 IOB54A/SSPI_CS_N/D0/LVDS/DQ4/BANK4 VCCO4 VCCO4 GW2AN-LV9XPG256 IOT55A/READY/DO6/BANK1 VCCC04 DONE IOT55B/DONE/DO6/BANK1 IOB54B/SI/D2/LVDS/DQ4/BANK4 VCCO5 VCCO5 U11D VSS VSS VSS VSS VCCO5 VCCO6 IOB55A/D5/DQ4/BANK4 GW2AN-LV9XPG256 R14 IOB55B/D4/DQ4/BANK4 M4 H7 R15 B2 Bank3 VCC07 VCCO7 GW2AN-LV9XPG256 U11A M12 IOR29A/NONE/BANK3 VCC08 VSS Bank0 J14 J15 K16 IOR29B/NONE/BANK3 IOR50B/LVDS/NONE/BANK3 P15 N14 GW2AN-LV9XPG256 IOR30A/LVDS/NONE/BANK3 IOR30B/LVDS/NONE/BANK3 IOR50A/LVDS/NONE/BANK3 IOR48B/LVDS/NONE/BANK3 Bank5 IOT12A/I VDS/DQ8/BANK0 IOT8B/I VDS/DQ9/BANK0 B4 N16 P16 H11 IOT12B/LVDS/DQ8/BANK0 IOT8A/LVDS/DQ9/BANK0 IOR31A/NONE/BANK3 IOR48A/LVDS/NONE/BANK3 JTAGSEL_N >> R31 1K IOB12A/I VDS/DO2/BANK5 IOBSB/I VDS/DO1/BANK5 IOT14A/I VDS/DO8/BANKO IOT6B/I VDS/DO9/BANKO IOR31B/NONE/BANK3 IOR46B/I VDS/NONE/BANK3 N15 M15 IOR32A/LVDS/NONE/BANK3 IOR32B/LVDS/NONE/BANK3 IOR46A/LVDS/NONE/BANK3 IOR44B/LVDS/NONE/BANK3 IOT14B/LVDS/DQ8/BANK0 IOB12B/LVDS/DQ2/BANK5 IOB8A/LVDS/DQ1/BANK5 TAG mode selection signal section IOT4B/LVDS/DQ9/BANK0 IOT18A/LVDS/DQ8/BANK0 IOB14A/LVDS/DQ2/BANK5 IOB6B/LVDS/DQ1/BANK5 B3 B5 C4 M14 IOT18B/LVDS/DQ8/BANK0 IOT4A/LVDS/DQ9/BANK0 IOR34A/LVDS/NONE/BANK3 IOR44A/LVDS/NONE/BANK3 IOB14B/LVDS/DQ2/BANK5 IOB6A/LVDS/DQ1/BANK5 IOT20A/I VDS/DQ8/BANK0 IOT2B/I VDS/DQ9/BANKO IOR34B/I VDS/NONF/BANK3 IOR42B/I VDS/NONF/BANK3 IOB16A/I VDS/DQ2/BANK5 IOB4B/I VDS/DQ1/BANK5 IOR42A/LVDS/NONE/BANK3 M16 IOT2A/LVDS/DQ9/BANK0 E9 IOT20B/LVDS/DQ8/BANK0 IOR36A/LVDS/NONE/BANK3 IOB16B/LVDS/DQ2/BANK5 IOB4A/LVDS/DQ1/BANK5 T4 P4 IOT22A/I VDS/DO8/BANKO IOT26B/LVDS/DQ8/BANKO IOR36B/LVDS/NONE/BANK3 IOR40B/LVDS/NONE/BANK3 IOB18A/LVDS/DO2/BANK5 IOB2B/LVDS/DO1/BANK5 E8 IOT22B/LVDS/DQ8/BANK0 D8 L15 N7 R32 -IOT26A/LVDS/DQ8/BANK0 IOR38A/LVDS/NONE/BANK3 IOR40A/LVDS/NONE/BANK3 IOB18B/LVDS/DQ2/BANK5 IOB2A/LVDS/DQ1/BANK5 N9 M8 IOB26B/LVDS/DQ2/BANK5 IOB26A/LVDS/DQ2/BANK5 IOR38B/LVDS/NONE/BANK3 IOB20A/LVDS/DQ2/BANK5 IOB20B/I VDS/DQ2/BANK5 IOB24B/LVDS/DQ2/BANK5 IOB24A/LVDS/DQ2/BANK5 IOB22A/LVDS/DO2/BANK5 A/CCO0/VCCX IOB22B/LVDS/DQ2/BANK5 IOT17A/TDO/DQ8/BANK0 IOR28A/GCLKT 3/LVDS/NONE/BANK3 IOT17B/TDI/DQ8/BANK0 C171 TCK IOT23A/TCK/DQ8/BANK0 IOR28B/GCLKC_3/LVDS/NONE/BANK3 IOT23B/TMS/DQ8/BANK0 GW2AN-I V9XPG256 0.1uF R8 IOB23A/GCLKT_5/DQ2/BANK5 IOT24A/GCLKT_0/LVDS/DQ8/BANK0 IOT24B/GCLKC_0/LVDS/DQ8/BANK0 A8 TMS< 10 GW2AN-LV9XPG256 GW2AN-LV9XPG256 Bank8 U11H U11G IOL8A/LVDS/DQ0/BANK8 IOL2B/LVDS/DQ0/BANK8 Bank7 Banké IOL8B/LVDS/DQ0/BANK8 IOL2A/LVDS/DQ0/BANK8 101 104 F4 G6 F3 /dconv/ccx IOL15A/LVDS/NONE/BANK8 IOL20B/NONE/BANK8 IOL21A/LVDS/NONE/BANK7 IOL21B/LVDS/NONE/BANK7 IOL15B/LVDS/NONE/BANK8 IOL20A/NONE/BANK8 IOL36A/LVDS/NONE/BANK6 GND VCC IOI 16A/NONE/BANK8 IOI 19B/I VDS/NONE/BANK8 IOI 36B/I VDS/NONE/BANK6 IOI 51B/NONE/BANK6 IOL16B/NONE/BANK8 IOL19A/LVDS/NONE/BANK IOL40A/LVDS/NONE/BANK6 IOL51A/NONE/BANK6 102 103 IOI 50B/LVDS/NONE/BANK6 IOI 22B/NONE/BANK7 IOL32A/LVDS/NONE/BANK7 IOI 17A/I VDS/NONE/BANK8 IOI 40B/I VDS/NONE/BANKS ESD IOL24A/NONE/BANK7 IOL30B/LVDS/NONE/BANK7 IOL17B/LVDS/NONE/BANK8 IOL46A/LVDS/NONE/BANK6 IOL50A/LVDS/NONE/BANK6 N1 M3 *JTAG download section IOL2/B/NONE/BANK7 IOL304/LVDS/NONE/BANK7 IOLARRA VIDS/NONE/RANKS IOLARRA VIDS/NONE/RANKE IOL33B/NONE/BANK7 IOI 28A/I VDS/NONE/BANK7 IOL47B/NONE/BANK6 IOL14A/GCLKT_8/NONE/BANK8 IOL14B/GCLKC_8/NONE/BANK8 F2 D3 D1 E2 DONE <<-IOL14B/GCLRC_8/NONE/BANK8 IOL4A/LPLL1_T_FB/LVDS/DQ0/BANK8 IOL4B/LPLL1_T_IN/DQ0/BANK8 IOL5A/LPLL1_T_IN/DQ0/BANK8 IOL5B/LPLL1_C_IN/DQ0/BANK8 4.7K VCCO1 IOL25A/GCLKT_7/LVDS/NONE/BANK7 IOL25B/GCLKC_7/LVDS/NONE/BANK7 IOL44A/GCLKT_6/LVDS/NONE/BANK6 IOL44B/GCLKC_6/LVDS/NONE/BANK6 Configuration completed GW2AN-LV9XPG256 GW2AN-LV9XPG256 detection section GW2AN-LV9XPG256 VCC1P0 VCC00/VCCX VCCO1 VCCO2 VCC03 VCCO4 VCCO5 VCCO6 VCCO7 VCCO8 VCC>> FB6 *Configurable detection section C172 C173 C174 C175 C176 C177 C178 C179 C180 C181 C182 C183 C184 C185 C186 C187 C188 C189 C190 C191 C192 C193 C194 C195 C196 D.10F D.10F D.10F D.10F D.10F 4.7uF 0.01uF 0.1uF 0.1uF RECONFIG N KR36 4.7K *Configuration reset section 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. GOW IN Minimum System Diagram ize A3 Rev 2.0 GW2AN-I V9XPG256

3 5 GW2AN-LV9XUG256 U13D IOT54B/LVDS/DQ6/BANK1 IOT54A/LVDS/DQ6/BANK1 IOR11A/LVDS/NONE/BANK2 IOR11B/LVDS/NONE/BANK2 IOR8B/LVDS/DQ5/BANK2 IOR8A/LVDS/DQ5/BANK2 IOT34A/LVDS/DQ7/BANK1 IOR29A/NONE/BANK3 VCC1P0 IOT34B/I VDS/DQ7/BANK1 IOR29B/NONE/BANK3 IOR50B/LVDS/NONE/BANK3 vss VCC IOT36A/LVDS/DQ7/BANK1 IOT52B/LVDS/DQ6/BANK1 IOR13A/LVDS/NONE/BANK2 IOR6B/LVDS/DQS5/BANK2 OR30A/LVDS/NONE/BANK3 IOR50A/LVDS/NONE/BANK3 IOR48B/LVDS/NONE/BANK3 VSS VSS VCC G12 F14 A10 F9 N14 A16 K10 IOT52A/LVDS/DQ6/BANK1 IOR6A/LVDS/DQS5/BANK2 IOR30B/LVDS/NONE/BANK3 IOT36B/LVDS/DQ7/BANK1 IOR13B/LVDS/NONE/BANK2 N16 IOT38A/LVDS/DQ7/BANK1 IOT50B/LVDS/DQ6/BANK1 IOR15A/LVDS/NONE/BANK2 IOR25B/LVDS/NONE/BANK2 IOR25A/LVDS/NONE/BANK2 IOR31A/NONE/BANK3 IOR31B/NONE/BANK3 IOR48A/LVDS/NONE/BANK3 VCC VSS VSS B13 A12 IOT38B/I VDS/DQ7/BANK1 IOT50A/I VDS/DQ6/BANK1 IOR15B/I VDS/NONF/BANK2 IOR46B/I VDS/NONF/BANK3 VCC IOT40A/LVDS/DQ7/BANK1 IOT48B/LVDS/DQS6/BANK1 IOR17A/LVDS/NONE/BANK2 IOR23B/LVDS/NONE/BANK2 IOR32A/LVDS/NONE/BANK3 IOR46A/LVDS/NONE/BANK3 VCC VSS F6 E12 J9 R2 M15 IOT40B/LVDS/DO7/BANK1 IOT48A/I VDS/DOS6/BANK1 IOR17B/I VDS/NONE/BANK2 IOR23A/LVDS/NONE/BANK2 IOR32B/I VDS/NONE/BANK3 IOR44B/I VDS/NONE/BANK3 VCC VSS M14 J11 L12 IOT42A/LVDS/DQ7/BANK1 IOT44B/LVDS/DQ7/BANK1 IOR19A/LVDS/NONE/BANK2 IOR21B/LVDS/NONE/BANK2 IOR34A/LVDS/NONE/BANK3 IOR44A/LVDS/NONE/BANK3 VCC VCCO0/VCCX IOT42B/LVDS/DQ7/BANK1 IOT44A/LVDS/DQ7/BANK1 IOR19B/LVDS/NONE/BANK2 IOR21A/I VDS/NONF/BANK2 IOR3/IR/LV/DS/NONE/RANK3 IOR/2R/LVDS/NONE/RANK3 VCCO0/VCCX VSS VSS L16 L14 K13 K12 K11 D5 D12 IOR36A/LVDS/NONE/BANK3 VCCO0/VCCX IOR42A/LVDS/NONE/BANK3 IOR36B/LVDS/NONE/BANK3 IOR38A/LVDS/NONE/BANK3 VCCO1 IOR40B/LVDS/NONE/BANK3 VCCO₁ VSS VSS Bank2 IOR40A/LVDS/NONE/BANK3 VCCO1 VCCO2 IOR38B/LVDS/NONE/BANK3 VCCO VSS IOT31A/SCL/GCLKT 1/DQ7/BANK1 IOR2A/RPLL1 T FB/LVDS/DQ5/BANK2 VSS VCCO2 D4 H9 IOT31B/SDA/GCLKC_1/DQ7/BANK1 IOT39A/JTAGSEL_N/DQ7/BANK1 IOR2B/RPLL1_C_FB/LVDS/DQ5/BANK2 IOR4A/RPLL1_T_IN/LVDS/DQ5/BANK2 VCCO3 VCCO3 VSS VSS Bank3 JTAGSEL_N VCCO3 B10 E14 N12 L11 RECONEIG N IOT39B/RECONFIG_N/DQ7/BANK1 IOR4B/RPLL1_C_IN/LVDS/DQ5/BANK2 VCCO4 VCCO4 VSS VSS READY IOR28A/GCLKT_3/LVDS/NONE/BANK3 IOT55A/READY/DO6/BANK1 GW2AN-I V9XUG256 VCCC04 VSS VSS VSS VSS DONE IOT55B/DONE/DO6/BANK1 IOR28B/GCLKC_3/LVDS/NONE/BANK3 VCCO5 VCCO5 GW2AN-I V9XIIG256 U13E GW2AN-I V9XIIG256 M4 H7 J7 E4 R15 VCC06 VCC07 VCCO7 U13A Bank4 U13F VSS VCC07 VCCO8 VCC08 VSS Bank0 Bank5 IOB32A/LVDS/DQ3/BANK4 IOB48B/LVDS/DQS4/BANK4 GW2AN-LV9XUG256 T10 M9 IOB32B/LVDS/DQ3/BANK4 IOB48A/LVDS/DQS4/BANK4 IOB44B/LVDS/DQ3/BANK4 T14 IOT12A/LVDS/DQ8/BANK0 IOT8B/LVDS/DQ9/BANK0 IOB8B/LVDS/DQ1/BANK5 IOB12A/I VDS/DQ2/BANK5 B4 IOB34A/I VDS/DQ3/BANK4 A5 L10 R13 T3 IOT12B/LVDS/DQ8/BANK0 IOT8A/LVDS/DQ9/BANK0 A5 C5 A4 A2 B3 B5 C4 IOB34B/LVDS/DQ3/BANK4 IOB44A/LVDS/DQ3/BANK4 IOB12B/LVDS/DQ2/BANK5 IOB8A/LVDS/DQ1/BANK5 P5 R5 R3 T2 T4 P4 JTAGSEL_N >> R37 IOT14A/I VDS/DO8/BANKO IOT6B/I VDS/DO9/BANKO IOB14A/I VDS/DO2/BANK5 IOB6B/LVDS/DO1/BANK5 IOR36A/I VDS/DO3/RANK4 IOR42R/LVDS/DO3/RANK4 OT14B/LVDS/DQ8/BANK0 OT6A/LVDS/DQ9/BANK0 IOB36B/LVDS/DQ3/BANK4 IOB42A/LVDS/DQ3/BANK4 IOB14B/LVDS/DQ2/BANK5 TAG mode selection signal section IOT4B/LVDS/DQ9/BANK0 C7 E6 D7 IOT18A/LVDS/DQ8/BANK0 IOB38A/LVDS/DQ3/BANK4 IOB40B/LVDS/DQ3/BANK4 IOB16A/LVDS/DQ2/BANK5 IOB4B/LVDS/DQ1/BANK5 M11 T11 IOT18B/LVDS/DQ8/BANK0 IOT4A/LVDS/DQ9/BANK0 IOB38B/LVDS/DQ3/BANK4 IOB40A/LVDS/DQ3/BANK4 IOB16B/LVDS/DQ2/BANK5 IOB4A/LVDS/DQ1/BANK5 IOT20A/I VDS/DQ8/BANK0 IOT2B/I VDS/DQ9/BANKO IOB18A/I VDS/DQ2/BANK5 IOB2B/I VDS/DQ1/BANK5 IOB2A/LVDS/DQ1/BANK5 N9 OT20B/LVDS/DQ8/BANK0 IOT2A/LVDS/DQ9/BANK0 IOB18B/LVDS/DQ2/BANK5 IOT22A/LVDS/DO8/BANKO IOT26B/LVDS/DO8/BANKO IOB20A/LVDS/DO2/BANK5 IOB26B/LVDS/DO2/BANK5 E8 D8 M8 IOT22B/LVDS/DQ8/BANK0 IOT26A/LVDS/DQ8/BANK0 IOB20B/LVDS/DQ2/BANK5 IOB26A/LVDS/DQ2/BANK5 L9 N8 IOB30A/GCLKT_4/LVDS/DQ3/BANK4 IOB30B/GCLKC_4/LVDS/DQ3/BANK4 IOB50A/SCLK/LVDS/DQ4/BANK4 IOB50B/D1/SO/LVDS/DQ4/BANK4 T9 P9 IOB22A/I VDS/DQ2/BANK5 IOB24B/LVDS/DQ2/BANK5 IOB22B/LVDS/DQ2/BANK5 IOB24A/LVDS/DQ2/BANK5 P6 T6 ₹\CC00\ΛCCX Bank5 IOT17A/TDO/DQ8/BANK0 IOB52A/FASTRD_N/D3/LVDS/DQ4/BANK4 IOT17B/TDI/DQ8/BANK0 IOB52B/QSSPI WPN/LVDS/DQ4/BANK4 JTAG IOT23A/TCK/DQ8/BANK0 IOB54A/SSPI_CS_N/D0/LVDS/DQ4/BANK4 IOB23A/GCLKT_5/DQ2/BANK5 IOT23B/TMS/DQ8/BANK0 IOB54B/SI/D2/I VDS/DQ4/BANK4 IOB23B/GCLKC_5/DQ2/BANK5 R14 IOB55A/D5/DQ4/BANK4 IOT24A/GCLKT_0/LVDS/DQ8/BANK0 IOT24B/GCLKC_0/LVDS/DQ8/BANK0 GW2AN-LV9XUG25 IOB55B/D4/DQ4/BANK4 тмѕ<<-GW2AN-LV9XUG256 GW2AN-LV9XUG256 U13I U13G U13H Bank8 Bank 6 Bank7 U14 101 104 COONCC IOL8A/LVDS/DQ0/BANK8 IOL2B/LVDS/DQ0/BANK8 IOL2A/LVDS/DQ0/BANK8 IOL36A/LVDS/NONE/BANK6 IOL21A/LVDS/NONE/BANK7 B1 H6 L3 K4 IOI 51B/NONE/BANK6 IOI 8B/I VDS/DQ0/BANK8 IOI 36B/I VDS/NONE/BANK6 IOL51B/NONE/BANK6 R1
IOL51A/NONE/BANK6 N3
IOL50B/LVDS/NONE/BANK6 M2 IOI 21B/I VDS/NONE/BANK GND VCC IOL15A/LVDS/NONE/BANK8 IOL22A/NONE/BANK7 L5 K5 L4 N2 P1 K3 IO2 103 IOI 15B/I VDS/NONE/BANKS IOL20A/NONE/BANKS IOI 40B/I VDS/NONE/BANKS IOL 22B/NONE/BANK7 IOL32A/LVDS/NONE/BANK7 IOL16A/NONE/BANK8 IOL19B/LVDS/NONE/BANK8 IOL46A/LVDS/NONE/BANK6 IOL50A/LVDS/NONE/BANK6 IOL24A/NONE/BANK7 IOL30B/LVDS/NONE/BANK7 N1 M3 *JTAG download section IOI 16B/NONE/BANKS IOL19A/LVDS/NONE/BANK8 IOL46B/LVDS/NONE/BANK6 IOLARRA VIDS/NONE/RANKS IOL24B/NONE/BANK7 IOI 30A/I VDS/NONF/BANK7 IOL48A/LVDS/NONE/BANK IOL17B/LVDS/NONE/BANK8 IOI 47B/NONE/BANKS IOL33B/NONE/BANK7 IOL28A/LVDS/NONE/BANK7 IOL14A/GCLKT 8/NONE/BANK8 IOL44A/GCLKT_6/LVDS/NONE/BANK6 IOL44B/GCLKC_6/LVDS/NONE/BANK6 IOL25A/GCLKT_7/LVDS/NONE/BANK7 IOL25B/GCLKC_7/LVDS/NONE/BANK7 DONE ((-IOL14B/GCLKC 8/NONE/BANK8
IOL4A/LPLL1_T_FB/LVDS/DQ0/BANK8
IOL4B/LPLL1_C_FB/LVDS/DQ0/BANK8 –1K R40 – R39 4.7K VCCO1 GW2AN-LV9XUG256 GW2AN-LV9XUG256 Configuration completed IOL5A/LPLL1_T_IN/DQ0/BANK8 IOL5B/LPLL1_C_IN/DQ0/BANK8 E3 detection section GW2AN-LV9XUG256 VCC00/VCCX VCCO2 VCC03 VCCO6 VCCO7 VCC08 VCC01 VCCO₄ VCCO₅ R41 4.7K VCC>> FB7 *Configurable detection section C202 C203 C204 C205 C206 C207 C208 C199 C200 C209 C210 C211 C212 C213 C214 C215 C216 C217 C218 C219 C220 C222 C223 0.1uF 0.1uF .1uF).1uF).1uF 0.1uF .1uF 0.1uF RECONFIG_N
R42
A.7K *Configuration reset section 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. GOW IN Minimum System Diagram 3.It is recommended that add an ESD protection chip to the JTAG download circuit. ize A3 Rev 2.0 GW2ANJ V9XUG256



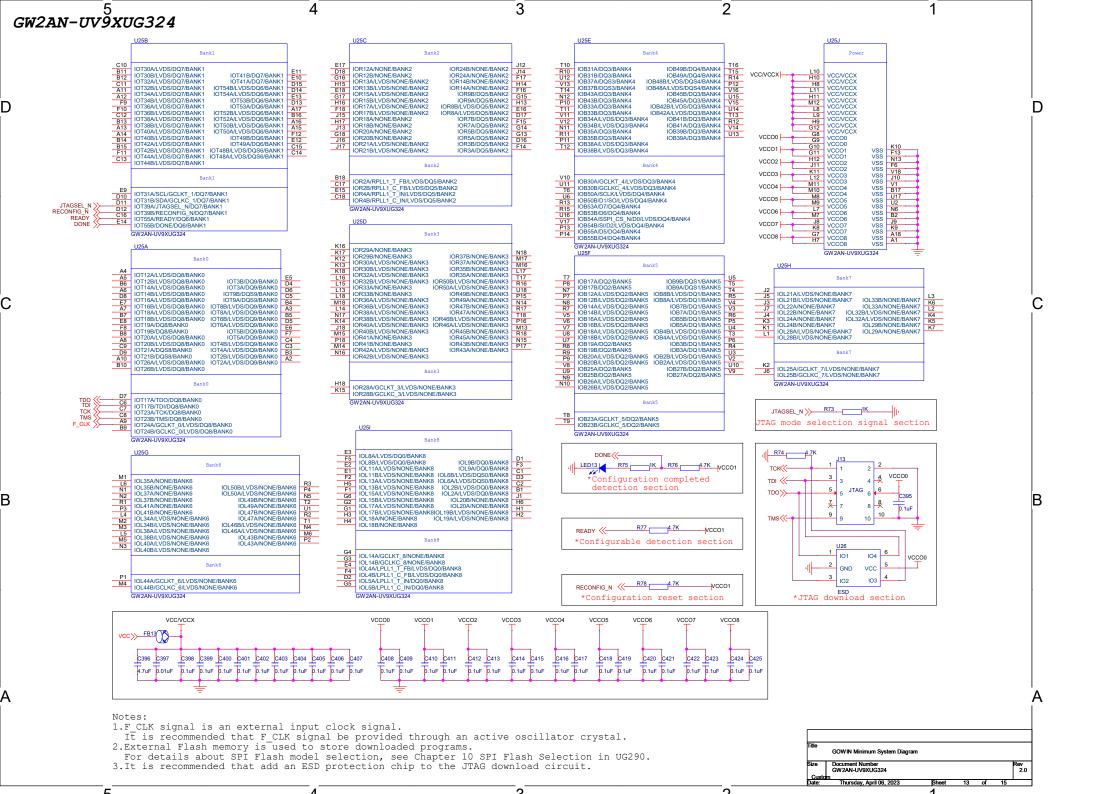
3 4 GW2AN-LV9XUG400 IOB32A/I VDS/DQ3/BANK4 IOI 34A/I VDS/NONE/BANK6 IOR9B/DQ5/BANK2 IOR9A/DQ5/BANK2 IOR8B/LVDS/DQ5/BANK2 IOR8A/LVDS/DQ5/BANK2 IOR9A/LVDS/DQ5/BANK2 VCC1P0 IOL51B/NONE/BANK6 IOL51A/NONE/BANK6 IB/LVDS/NONE/BANK6 IA/LVDS/NONE/BANK6 P6 IOL34B/LVDS/NONE/BANK6 IOL36A/LVDS/NONE/BANK6 IOL36B/LVDS/NONE/BANK6 IOL50B/LVDS/NONE/BANK6 J9 VCC
H12 VCC
L12 VCC
J10 VCC
J11 VCC
J11 VCC
J11 VCC
H13 VCC
K12 VCC
H13 VCC FEG 10R12BINONEGRANIC FEG 10R13BILVDSNONEGRANIC 114 (OR13BILVDSNONEGRANIC 115 (OR13BILVDSNONEGRANIC 117 (OR13BILVDSNONEGRANIC 117 (OR13BINONEGRANIC 118 (OR13BINONEGRANIC 118 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 119 (OR13BINONEGRANIC 118 (OR2GANIONEGRANIC 118 (OR2GANIONEGRANIC 119 (OR13BINONEGRANIC 110 (OR13BINONEGRANIC 111 (OR2GANIONEGRANIC 111 (OR2GANIONEGRANIC 111 (OR2GANIONEGRANIC IOR12B/NONE/BANK2 IOR13A/LVDS/NONE/BAI IOB34A/LVDS/DQ3/BANK4 IOL38A/LVDS/NONE/BANK6 IOL50A/LVDS/NONE/BANK6 \(\ss \) \(\frac{\text{F16}}{\text{S}} R1 IOL38B/LVDS/NONE/BANK6 R2 IOL40A/LVDS/NONE/BANK6 T1 IOL40B/LVDS/NONE/BANK6 | DL40ALVDSNOVEBANK| | DL40ALV T11 | IOBSS/IDQJISHANK4 | Y14 | IOBSS/IDQJISHANK4 | W14 | IOBSS/IDQJISHANK4 | Y15 | IOBSS/IDQJISHANK4 | Y15 | IOBSS/IDQJISHANK4 | IOBSS/IDQJISHANK VCC00/VCCX H8 VCC00/VCCX VCC00/VCCX VCC00/VCCX VCC00/VCCX VCC01 V U1 IOL44A/GCLKT_6/LVDS/NONE/BANK6 IOL44B/GCLKC_6/LVDS/NONE/BANK6 IOR55B/D4/DO4/BANK4 IOR20B/NONE/BANK2 VCC01 H11 J12 VCC02 J13 VCC02 K13 VCCO1 -GW2ANJ V9YLIG400 I OBSOA/SCLEKLVDS/DQ4/BANK4 IK
I OBSBB/D1/SOLVDS/DQ4/BANK4 IK
I OBSB1/DIN/CLKHOLD_N/DQ4/BANK4
I OBSB1/DD01/TWE_N/DQ4/BANK4
I OBSB2/DC01/TWE_N/DQ4/BANK4
I OBS2/FASTRD_N/D3/LVDS/DQ4/BANK4
I OBS2/BQSP/WFNL/US/DQ4/BANK4
I OBS4/NSSPL_GS_N/DD1/LVDS/DQ4/BANK4 VCC01 VCC02 VCC03 VCC03 VCC03 VCC04 IOR2B/RPLL1_C_FB/LVDS/DQ5/BANK2 IOR2B/RPLL1_C_FB/LVDS/DQ5/BANK2 IOR4B/RPLL1_C_IN/LVDS/DQ5/BANK2 H6
H7
IOL11A/LVDS/NONE/BANK8
IOL11B/LVDS/NONE/BANK8
IOL13A/LVDS/NONE/BANK8
IOL13A/LVDS/NONE/BANK8 VCCO4 VCCO5 VCCO5 VCCO5 VCCO6 VSS V7
VSS E18
VSS K11
VSS V5
VSS D4
VSS E11
VSS U8
VSS E13
VSS D3
VSS C5
VSS C5 GW2AN-LV9XUG400 IOB54B/SI/D2/I VDS/DQ4/BANK4 FT 10L13ALVDSINONEBANKS
G3 10L15ALVDSINONEBANKS
G3 10L15ALVDSINONEBANKS
H3 10L15BLVDSINONEBANKS
H4 10L16ANONEBANKS
G2 10L16BNONEBANKS
G3 10L17ALVDSINONEBANKS
G4 10L17ALVDSINONEBANKS
G5 10L17ALVDSINONEBANKS
G6 10L17ALVDSINONEBANKS
H5 10L15BNONEBANKS
H6 10L15BNONEBANKS
H7 10L15BNONEBANKS
H7 10L15BNONEBANKS
H7 10L15BNONEBANKS
H7 10L15BNONEBANKS VCCO6 M8 M9 IOL6B/LVDS/DQS0/BANK8 IOLBAI/LVDS/IDQSIDISANIKS IOLBAI/VDS/IDQSIDISANIKS IOLBAI/DQVIBANIKS IOLBAI/VDS/IDQVIBANIKS IOL2BI/LVDS/IDQVIBANIKS IOL2BI/LVDS/IDQVIBANIKS IOL2OB/INONE/BANIKS IOL2OB/INONE/BANIKS U17B | IOR51B/NONE/BANK3 | IOR51A/NONE/BANK3 | IOR50B/L/DS/NONE/BANK3 | IOR50A/L/DS/NONE/BANK3 | IOR49B/NONE/BANK3 | IOR49A/NONE/BANK3 | IOR49A/NONE/BANK3 IOB9B/DQS1/BANK5 IOB9A/DQS1/BANK5 IOB8B/LVDS/DQ1/BANK5 IOB8A/LVDS/DQ1/BANK5 IOB7B/DQ1/BANK5 IOB7A/DQ1/BANK5 GW2AN-LV9XUG400 A12 B12 IOT30ALVDS/DQ7/BANK1 A13 IOT30B/LVDS/DQ7/BANK1 B13 IOT32ALVDS/DQ7/BANK1 IOT34BALVDS/DQ7/BANK1 IOT34BALVDS/DQ7/BANK1 IORZ9ANONEBANK3
IORZ9ANONEBANK3
IORZ9ANONEBANK3
IORZ9ALVDSINONEBANK3
IORZ9ALVDSINONEBANK3 IOT54B/LVDS/DQ6/BANK1 IOT54A/LVDS/DQ6/BANK1 IOT53B/DQ6/BANK1 IOT53A/DQ6/BANK1 U17H IOT34B/LVDS/DQ7/BANK IOT52B/LVDS/DQ6/BANK1 IOT52A/LVDS/DQ6/BANK1 IOR48B/LVDS/NONE/BANK3 IOR48A/I VDS/NONE/BANK3 IOB6B/LVDS/DQ1/BANK5 IOB6A/LVDS/DQ1/BANK5 E2 IOL14A/GCLKT_8/NONE/BANK8
C2 IOL14B/GCLKC_8/NONE/BANK8
C1 IOL4A/LPLL1_T_FBI/LVDS/DQ//BANK8
D2 IOL4B/LPLL1_T_IN/DQ//BANK8
D1 IOL5A/LPLL1_T_IN/DQ//BANK8 IOI 14A/GCI KT 8/NONE/BANK8 C12 IOT36A/LVDS/DQ7/BANK1 A14 IOT36B/LVDS/DQ7/BANK1 IOT51B/DQ6/BANK1 IOT51A/DQ6/BANK1 IOR47B/NONE/BANK3 IOR47A/NONE/BANK3 OT38A/LVDS/DO7/BANK IORSA/DO1/BANKS IOT38B/LVDS/DQ7/BANK IOT50B/LVDS/DQ6/BANK1 IOR46B/LVDS/NONE/BANK3 IOB20A/LVDS/DQ2/BANK5 IOB4B/LVDS/DQ1/BANK5 IOT40A/I VDS/DQ7/BANK IOT50A/I VDS/DQ6/BANK1 IOR34B/LVDS/NONE/BANK3 IOR46A/I VDS/NONE/BANK3 IOB20B/I VDS/DQ2/BANK5 IOB4A/I VDS/DQ1/BANK5 IOL5A/LPLL1_T_IN/DQ0/BANK8 IOL5B/LPLL1_C_IN/DQ0/BANK8 IOLZ2A/NONE/BANK7 IOL32B/ILVDS/NONE/BANK7
IOL22B/NONE/BANK7 IOL32B/ILVDS/NONE/BANK7
IOL32B/ILVDS/NONE/BANK7 IOL32B/ILVDS/NONE/BANK7
IOL32B/ILVDS/NONE/BANK7 IOL31B/NONE/BANK7
IOL33B/ILVDS/NONE/BANK7 IOL31B/INONE/BANK7 OT40B/LVDS/DQ7/BANK IOT49B/DQ6/BANK1 IOT49A/DQ6/BANK1 IOR36A/LVDS/NONE/BANK3 IOR36B/LVDS/NONE/BANK3 IOB21A/DQS2/BANK5 IOB21B/DQS2/BANK5 IOB3B/DQ1/BANK5 IOB3A/DQ1/BANK5 IOT42A/LVDS/DQ7/BANK IOR43B/IVDS:IMONE/BANK3 177
IOR44B/IVDS:IMONE/BANK3 179
IOR44A/IVDS:IMONE/BANK3 719
IOR43B/INONE/BANK3 720
IOR43B/INONE/BANK3 N16
IOR42B/IVDS:IMONE/BANK3 N16 IOT42B/LVDS/DQ7/BANK1 IOT48B/LVDS/DQS6/BANK1 IOR38A/LVDS/NONE/BANK3 IOB22A/LVDS/DQ2/BANK5 IOB2B/LVDS/DQ1/BANK5 IOT43A/DQ7/BANK1 IOT43B/DQ7/BANK1 IOT48A/LVDS/DQS6/BANK1 IOR38B/LVDS/NONE/BANK3 IOR39A/NONE/BANK3 IOB22B/LVDS/DQ2/BANK5 IOB24A/LVDS/DQ2/BANK5 IOB2A/LVDS/DQ1/BANK5 IOL24A/NONE/BANK7 IOL30B/LVDS/NONE/BANK7 IOL24B/NONE/BANK7 IOL30A/LVDS/NONE/BANK7 IOB27B/DQ2/BANK5 L4 IOL26A/NONE/BANK7
M1 IOL26B/INONE/BANK7
M2 IOL28A/LVDS/NONE/BANK7
IOL28B/LVDS/NONE/BANK7 B17 IOT44A/LVDS/DQ7/BANK1 IOT44B/LVDS/DQ7/BANK1 IOT45A/DQ7/BANK1 IOR39B/NONE/BANK3 IOR40A/LVDS/NONE/BANK3 IOB24B/LVDS/DQ2/BANK5 IOB27A/DQ2/BANK5 IOL26A/NONE/BANK7 IOL29B/NONE/BANK7 IOL26B/NONE/BANK7 IOL29A/NONE/BANK7 IOR40B/LVDS/NONE/BANK3 IOR42A/LVDS/NONE/BANK3 IOB26A/LVDS/DQ2/BANK IOB25B/DQ2/BANK5 JTAGSEL_N >> R49 1K L1 IOL25A/GCLKT_7/LVDS/NONE/BANK7 IOL25B/GCLKC_7/LVDS/NONE/BANK7 K19 IOR28A/GCLKT_3/LVDS/NONE/BANK3 IOR28B/GCLKC_3/LVDS/NONE/BANK3 RECONFIG N READY DONE GW24NJI V9XI IG400 GW2ANJ VOYLIGADO GW2AN-I V9XUG400 GW2AN-I V9XUG400 R50 vcc >> FB9 LED9 R51 1K R52 4.7K VCC01 4/CC00/VCCX Configuration completed ты « detection section JTAG TDO >> 8 8 В R53 4.7K VCCO1 *Configurable detection section 101 104 6 1.F CLK signal is an external input clock signal. VGCO0/VCC It is recommended that F CLK signal be provided through an active oscillator crystal. GND VCC 2. External Flash memory is used to store downloaded programs. 102 103 RECONFIG N KR54 4.7K VCCO1 For details about SPI Flash model selection, see Chapter 10 SPI Flash Selection in UG290. *JTAG download section 3.It is recommended that add an ESD protection chip to the JTAG download circuit. *Configuration reset section

3 2 4 GW2AN-LV9XUG484 U19J Power VCC1P0 IOB49B/DQ4/BANK4 AB19 IOB49A/DQ4/BANK4 AA18 IOB8B/LVDS/DQ1/BANK5 IOB8A/LVDS/DQ1/BANK5 IOB6B/LVDS/DQ1/BANK5 IOB6B/LVDS/DQ1/BANK5 1931 - 10831AD.03BANK4
1931 - 10831BOSBANK4
1931 - 10831BOSBANK4
1931 - 10831BOSSBANK4
1931 - 10831BOSSBANK4
1931 - 10831BOSSBANK4
1931 - 10832BOSSBANK4
1941 - 10832BOSSBANK4
1 IOT30A/LVDS/DQ7/BANK1 IOR26B/NONE/BANK2 IOB31A/DQ3/BANK4 IOB13A/DQ2/BANK5 IOT41B/DQ7/BANK1 AA8 AB8 AA7 AB7 AA6 AB6 IOR26A/NONE/BANK2 IOB13B/DQ2/BANK5 IOB15A/DQ2/BANK5 IOT32A/LVDS/DQ7/BANK IOT41A/DQ7/BANK1 IOR24B/NONE/BANK2 IOT32B/LVDS/DQ7/BANK1 IOT37B/DQS7/BANK1 IOT37A/DQS7/BANK1 IOR24A/NONE/BANK2 IOR22B/NONE/BANK2 IOB15B/DQ2/BANK5 IOB17A/DQ2/BANK5 IOB6A/LVDS/DQ1/BANK5 AR3 VSS Y16
VSS W12
VSS V21
VSS V2
VSS R8
VSS R15
VSS P9
VSS P14
VSS P13
VSS P12 A13 IOT34AILVDS/DQ//BANK1 B13 IOT34AILVDS/DQ//BANK1 A14 IOT34BILVDS/DQ//BANK1 B14 IOT36BILVDS/DQ//BANK1 G14 IOT36BILVDS/DQ//BANK1 F14 IOT36AILVDS/DQ//BANK1 IOB4B/LVDS/DQ1/BANK5 IOB4A/LVDS/DQ1/BANK5 V6 IOB9B/DQS1/BANK5 V6 V5 IOT35B/DQ7/BANK1 i (IOR22A/NONE/BANK2 I (IOR14B/NONE/BANK2 I (IOR14B/NONE/BANK2 I (IOR9B/DOS/BANK2 I (IOR9B/DOS/IOR)BANK2 I (IOR9B/DOS/IOR)BAN IOR22A/NONE/BANK2 A14 | O1348LVDSIOQ//BANK1 | O1348LVDSIOQ//BANK1 | O1368LVDSIOQ//BANK1 | O1368LVDSIOQ//BA IOTSSENDO/FRANKI IOTSSENDO/FRANKI IOTSSENDO/FRANKI IOTSSENDO/FRANKI IOTSSENDOBRANKI B21 A20 VCC00VCCX C7

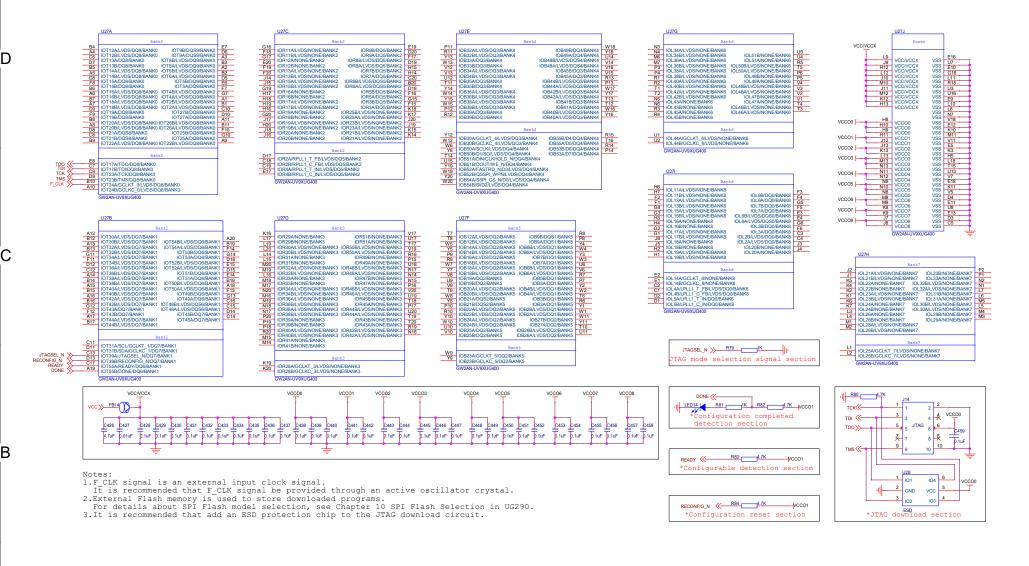
G10
H11
H9
VCC00VCCX
VCC00VCCX
VCC00VCCX
VCC00VCCX VSS P12 VSS P11 VSS P10 VSS N9 VSS N21 VSS N14 VSS M9 VSS M14 B18 IOT44A/L/DS/DQ7/BANK1
E16 IOT44B/L/DS/DQ7/BANK1
IOT45A/DQ7/BANK1
IOT45B/DQ7/BANK1
IOT45B/DQ7/BANK1 IOT50B/LVDS/DQ6/BANK1 IOT50A/LVDS/DQ6/BANK1 0UA/LVDS/DQ6/BANK1 IOT49B/DQ6/BANK1 IOT49A/DQ6/BANK1 IOT49A/DQ6/BANK1 IOR25A/LVDS/NONE/BANK2 IOR5B/DQ5/BANK2 VCC01 C16 VCC01 VC IOT45B/DQ7/BANK1 IOT48A/LVDS/DQS6/BANK1 L17 IOR218/LVDS/NONE/BANK2
L16 IOR238/LVDS/NONE/BANK2
IOR238/LVDS/NONE/BANK2 IORSB/DQS/BANK2 IORSB/DQS/BANK2 IORSB/DQS/BANK2 IORSA/DQS/BANK2 | VSS | Wild | Wild | VSS | Wild | W B19 IOT488/LVDs/DQS6/BANK1 F17 AA11 AB12 AA12 IOB30A/GCLKT_4/LVDS/DQ3/BANK4 VCCO1 IOB24B/LVDS/DQ2/BANK5 F20 J15 K15 L15 C21 IOR2A/RPLL1_T_FB/LVDS/DQ5/BANK2
D22 IOR2B/RPLL1_T_FB/LVDS/DQ5/BANK2
D21 IOR4A/RPLL1_T_IN/LVDS/DQ5/BANK2
IOR4B/RPLL1_C_IN/LVDS/DQ5/BANK2 VCCO2 VCCO2 VCCO2 VCCO2 VCCO2 AA10 IOB23A/GCLKT_5/DQ2/BANK5 IOB23B/GCLKC_5/DQ2/BANK5 VCC03 M15 M18 N15 P15 V20 GW2AN-I V9XUG484 GW2AN-I V9XIIG484 CIMIZANI I VIDVITICARA VCC04 R12 VCC04 VCC04 VCC04 VCC04 VCC04 U19A Dank7 GW2AN-I V9XUG484 Bank0 Bank3 IOI 214/I VIDS/NONE/RANK7 HIII IOL218/LVDS/NONE/E IOL21B/LVDS/NONE/E IOL22A/NONE/BANK7 IOI 33B/NONE/BANK7 B5 A6 IOT12A/LVDS/DQ8/BANK0 IOT12B/LVDS/DQ8/BANK0 VCC05 R10 VCC05 R20 VCC05 W11 VCC05 W7 VCC05 VCC05 IOR20A/NONE/RANK3 IORSOR/LVDS/NONE/RANK3 Bank 6 IOR29B/NONE/BANK3 IOR30A/LVDS/NONE/BANK3 IOR30B/LVDS/NONE/BANK3 IOR50A/LVDS/NONE/BANK3 IOR50A/LVDS/NONE/BANK3 IOR37B/NONE/BANK3 IOR37A/NONE/BANK3 IOT12B/LVDS/DQ8/BANK0 IOT13A/DQ8/BANK0 IOL22B/NONE/BANK7 IOL23A/LVDS/NONE/BANK7 IOL32B/LVDS/NONE/BANK7 E7 IOT13A/DQ8/BANK0 IOT13B/DQ8/BANK0 N16 N17 N6 N7 IOL35A/NONE/BANK6 IOL51B/NONE/BANKS IOL31B/NONE/BANK7 IOL31A/NONE/BANK7 | TO | OLSANNONE/BANK6 | OLSAN IOT14B/LVDS/DQ8/BANK0 IOR48A/LVDS/NONE/BANK3 IOL50B/LVDS/NONE/BANK6 IOL30B/LVDS/NONE/BANK7 IOT15A/DQ8/BANKO IOR35B/NONE/BANK3 IOR35A/NONE/BANK3 IOR51B/NONE/BANK3 IOL50A/LVDS/NONE/BANK6 IOL48B/LVDS/NONE/BANK6 IOL48A/LVDS/NONE/BANK6 VCC06 N8 P8 V3 IOI 30A/I VDS/NONE/BANK7 VCCO6 VCCO6 IOL29B/NONE/BANK7 IOL29A/NONE/BANK7 IOR51A/NONE/BANK3 IOL46B/LVDS/NONE/BANK6 VCC06 IOL28B/LVDS/NONE/BANK7 IOR49B/NONE/BANK3 IOR49A/NONE/BANK3 IOL46A/LVDS/NONE/BANK6 L8 VCCO7 VCCO7 VCCO7 VCCO7 IOL49B/NONE/BANK6 | IOTSBIDOGIBANKO | IOTSBIDOGI TO STANDAY OF THE PROPERTY OF IOL49A/NONE/BANK6 IOL47B/NONE/BANK6 VCCO7 L1 IOL25A/GCLKT_7/LVDS/NONE/BANK7 IOL25B/GCLKC_7/LVDS/NONE/BANK7 IOL47A/NONE/BANK6 F3 VCC08 -F3 J8 VCCO8 VCCO8 VCCO8 A9 IOTZOBIŁVDSIDQBRANKO
F9 IOTZOBIŁVDSIDQBRANKO
G9 IOTZ1A/DQS&/BANKO
IOTZ1B/DQS&/BANKO
E10 IOTZ2ALŁVDSIDQB/BANKO
G11 IOTZ2ALŁVDSIDQB/BANKO
IOTZSA/DQB/BANKO
IOTZSA/DQB/BANKO
IOTZSB/DQB/BANKO IOL45B/NONE/BANK6 IOL45B/NONE/BANK6 IOL45B/NONE/BANK6 IOL43B/NONE/BANK6 IOL43A/NONE/BANK6 GW2ANJI VQXI IG484 U19I BankS JTAGSEL N >> R55 1K IOI 12A/NONE/BANKS U2 V1 IOL44A/GCLKT_6/LVDS/NONE/BANK6 IOL44B/GCLKC 6/LVDS/NONE/BANK6 IOL12B/NONE/BANK8 IOL8A/LVDS/DQ0/BANK8 IOL8B/LVDS/DQ0/BANK8 'AG mode selection signal section IOT17A/TDO/DO8/BANKO IOT17B/TDI/DO8/BANK(GW24NJ VQYLIG48 IOT23A/TCK/DQ8/BANK(IOR28A/GCLKT_3/LVDS/NONE/BANK3 IOR28B/GCLKC 3/LVDS/NONE/BANK3 IOI 11A/I VDS/NONE/BANKS IOT23B/TMS/DQ8/BANK IOI 11B/I VDS/NONE/BANKS B10 IOT23B/TMS/DQ8/BANKU IOT24B/GCLKT_0/LVDS/DQ8/BANK0 IOT24B/GCLKC_0/LVDS/DQ8/BANK0 IOL13A/LVDS/NONE/BANK8 IOLERA VIDS/DOS0/BANKS GW2ANJI VOYI IG484 R56 4.7K IOL13B/LVDS/NONE/BANK8 IOL6A/LVDS/DQS0/BANK8 J10 2 2 IOL15A/LVDS/NONE/BANK8 IOL3B/DQ0/BANK8 DONE ((тск<< IOI 15B/I VDS/NONE/BANK8 IOL3A/DQ0/BANK8 | 37 | IOL168/LVDIS/NONE/BANK8 | 36 | IOL168/NONE/BANK8 | IOL168/NONE/BANK8 | 35 | IOL178/LVDIS/NONE/BANK8 | IOL178/LVDIS/NONE/BANK8 | IOL188/NONE/BANK8 | IOL188/NONE IOL2B/LVDS/DQ0/BANK8 IOL2A/LVDS/DQ0/BANK8 3 3 4 AVCCOOVCCX LED10 R57 1K R58 4.7K VCCO1 TDI < READY (CCO1 RECONFIG N R59 4.7K VCCO1 *Configuration completed 5 JTAG 6 6 IOL20B/NONE/BANK8 IOL20A/NONE/BANK8 TDO >> В *Configuration reset section *Configurable detection section IOL19B/LVDS/NONE/BANK8 IOL19A/LVDS/NONE/BANK8 7 7 8 & VCC1P0 VCC00/VCCX VCC01 VCCO2 VCC03 VCC >> FB10 U20 IO4 6 101 Vdcoo/vcc> C293 C294 C295 C296 C297 C298 C299 C300 C301 C302 C303 C304 C305 C306 C307 C308 C309 C310 C311 C312 C313 C314 C315 C316 C317 C318 C319 C320 C321 C322 GND 2 VCC 5 C291 C292 D.10F 0.1uF 0.1uF 0.1uF 0.1uF 4 7uF 0.01uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 3 IO2 103 4 GW2AN-I V9XIIG484 *JTAG download section VCCO4 VCCO5 VCCO6 VCC07 VCC08 1.F CLK signal is an external input clock signal. It is recommended that F CLK signal be provided through an active oscillator crystal. C323 C324 C325 C326 C327 C328 C329 C330 C331 C332 C333 C334 C335 C336 C337 C338 C339 C340 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. D.1uF D.1uF D.1uF D.1uF D.1uF D.1uF D.1uF D.1uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 3.It is recommended that add an ESD protection chip to the JTAG download circuit. GOWIN Minimum System Diagram

GW2AN-UV9XPG256 H21C Bank2 IOR11A/LVDS/NONE/BANK2 IOR8B/LVDS/DQ5/BANK2 IOT34A/LVDS/DQ7/BANK1 IOT34B/LVDS/DQ7/BANK1 IOT54B/LVDS/DQ6/BANK1 IOT54A/LVDS/DQ6/BANK1 IOR8A/LVDS/DQ5/BANK2 IOR6B/LVDS/DQS5/BANK2 IOB32A/LVDS/DQ3/BANK4 IOB32B/LVDS/DQ3/BANK4 IOB48B/LVDS/DQS4/BANK4 IOB48A/LVDS/DQS4/BANK4 IOR11B/LVDS/NONE/BANK2 VCC/VCCX -IOR13A/LVDS/NONE/BANK2 vcc/vccx VSS IOT36A/LVDS/DQ7/BANK1 IOT52B/LVDS/DQ6/BANK1 IOR13B/LVDS/NONE/BANK2 IOR6A/LVDS/DQS5/BANK2 IOB34A/LVDS/DQ3/BANK4 IOB44B/LVDS/DQ3/BANK4 VCC/VCCX VCC/VCCX VSS VSS F14 F16 L10 P10 C14 F11 C12 A14 J12 H13 IOR15A/LVDS/NONE/BANK2 IOR25B/LVDS/NONE/BANK2 IOT36B/LVDS/DQ7/BANK1 IOT52A/LVDS/DQ6/BANK1 IOB34B/LVDS/DQ3/BANK4 IOB44A/LVDS/DQ3/BANK4 IOT38A/LVDS/DQ7/BANK1 IOT50B/LVDS/DQ6/BANK1 IOR15B/LVDS/NONE/BANK2 IOR17A/LVDS/NONE/BANK2 IOR25A/LVDS/NONE/BANK2 IOR23B/LVDS/NONE/BANK2 IOB36A/LVDS/DQ3/BANK4 IOB42B/LVDS/DQ3/BANK4 VCC/VCCX VSS F12 G13 G15 G14 H15 G16 H12 G11 L6 P14 IOT38B/I VDS/DQ7/BANK1 IOT50A/I VDS/DQ6/BANK1 IOB36B/I VDS/DQ3/BANK4 IOB42A/I VDS/DQ3/BANK4 VCC/VCCX VSS IOT40A/LVDS/DQ7/BANK1 IOT48B/LVDS/DQS6/BANK1 IOR17B/LVDS/NONE/BANK2 IOR23A/LVDS/NONE/BANK2 IOB38A/LVDS/DQ3/BANK4 IOB40B/LVDS/DQ3/BANK4 VCC/VCCX VSS M11 F6 IOT40B/LVDS/DO7/BANK1 IOT48A/I VDS/DOS6/BANK1 IOR19A/I VDS/NONE/BANK2 IOR21B/I VDS/NONE/BANK2 IOR38B/I VDS/DO3/BANK4 IOB40A/I VDS/DO3/BANK4 VCC/VCCX VSS VSS IOT42A/LVDS/DQ7/BANK1 IOT44B/LVDS/DQ7/BANK1 IOR19B/LVDS/NONE/BANK2 VCC/VCCX J9 R2 VCCO0 IOT42B/LVDS/DQ7/BANK1 IOT44A/LVDS/DQ7/BANK1 VSS VSS D5 VCCO1 VCCO1 IOB30A/GCLKT 4/LVDS/DQ3/BANK4 IOR2A/RPLL1_T_FB/LVDS/DQ5/BANK2 IOR2B/RPLL1_C_FB/LVDS/DQ5/BANK2 IOR4A/RPLL1_T_IN/LVDS/DQ5/BANK2 IOR4B/RPLL1_C_IN/LVDS/DQ5/BANK2 IOB30B/GCLKC_4/LVDS/DO3/BANK4 VCCO2 P6 T6 E15 D16 E14 H10 M13 D13 IOT31A/SCL/GCLKT 1/DQ7/BANK1 IOB50A/SCLK/LVDS/DQ4/BANK4 VCCO2 IOT318/SDA/GCLKC_1/DQ7/BANK1 IOT39A/JTAGSEL_N/DQ7/BANK1 IOT39B/RECONFIG_N/DQ7/BANK1 IOB50B/D1/SO/LVDS/DQ4/BANK4 IOB52A/FASTRD N/D3/LVDS/DQ4/BANK4 VCCO3 VCCO3 JTAGSEL_N > T13 R12 P13 T15 N12 VCCO3 B10 L11 RECONEIG N IOB52B/QSSPI_WPN/LVDS/DQ4/BANK4 IOB54A/SSPI_CS_N/D0/LVDS/DQ4/BANK4 VCCO4 VCCO4 GW2AN-UV9XPG256 IOT55A/READY/DO6/BANK1 VCCC04 DONE IOT55B/DONE/DQ6/BANK1 IOB54B/SI/D2/LVDS/DQ4/BANK4 VCCO5 VCCO5 U21D VCCO5 VCCO6 IORSSA/DS/DOA/RANKA GW2AN-HV9XPG256 R14 M4 H7 R15 B2 M5 IOB55B/D4/DQ4/BANK4 Bank3 VCC07 VCCO7 GW2AN-UV9XPG256 M12 IOR29A/NONE/BANK3 VCC08 VSS Bank0 J14 J15 K16 IOR29B/NONE/BANK3 IOR50B/LVDS/NONE/BANK3 GW2AN-UV9XPG256 IOR30A/LVDS/NONE/BANK3 IOR30B/LVDS/NONE/BANK3 IOR50A/LVDS/NONE/BANK3 IOR48B/LVDS/NONE/BANK3 Bank5 IOT12A/I VDS/DQ8/BANK0 IOT8B/I VDS/DQ9/BANK0 B4 N16 P16 H11 IOT12B/LVDS/DQ8/BANK0 IOT8A/LVDS/DQ9/BANK0 IOR31A/NONE/BANK3 IOR48A/LVDS/NONE/BANK3 JTAGSEL_N >> R61 1K IOB12A/I VDS/DO2/BANK5 IOB8B/I VDS/DQ1/BANK5 IOT14A/I VDS/DO8/BANKO IOT6B/I VDS/DO9/BANKO IOR31B/NONE/BANK3 IOR46B/I VDS/NONE/BANK3 N15 M15 IOR32A/LVDS/NONE/BANK3 IOR32B/LVDS/NONE/BANK3 IOR46A/LVDS/NONE/BANK3 IOR44B/LVDS/NONE/BANK3 IOT14B/LVDS/DQ8/BANK0 IOB12B/LVDS/DQ2/BANK5 TTAG mode selection signal section IOT4B/LVDS/DQ9/BANK0 IOT18A/LVDS/DQ8/BANK0 IOB14A/LVDS/DQ2/BANK5 IOB6B/LVDS/DQ1/BANK5 B3 B5 C4 M14 IOT18B/LVDS/DQ8/BANK0 IOT4A/LVDS/DQ9/BANK0 IOR34A/LVDS/NONE/BANK3 IOR44A/LVDS/NONE/BANK3 IOB14B/LVDS/DQ2/BANK5 IOB6A/LVDS/DQ1/BANK5 IOT20A/I VDS/DQ8/BANK0 IOT2B/I VDS/DQ9/BANKO IOR34B/I VDS/NONF/BANK3 IOR42B/I VDS/NONF/BANK3 IOB16A/I VDS/DQ2/BANK5 IOB4B/I VDS/DQ1/BANK5 IOT2A/LVDS/DQ9/BANK0 E9 IOR42A/LVDS/NONE/BANK3 M16 IOT20B/LVDS/DQ8/BANK0 IOR36A/LVDS/NONE/BANK3 IOB16B/LVDS/DQ2/BANK5 IOB4A/LVDS/DQ1/BANK5 M7 N7 M6 L8 T4 P4 IOT22A/I VDS/DO8/BANKO IOT26B/LVDS/DQ8/BANKO IOR36B/LVDS/NONE/BANK3 IOR40B/LVDS/NONE/BANK3 IOB18A/I VDS/DO2/BANK5 IOB2B/LVDS/DO1/BANK5 E8 IOT22B/LVDS/DQ8/BANK0 D8 L15 R62 -IOT26A/LVDS/DQ8/BANK0 IOR38A/LVDS/NONE/BANK3 IOR40A/LVDS/NONE/BANK3 IOB18B/LVDS/DQ2/BANK5 IOB2A/LVDS/DQ1/BANK5 N9 M8 IOB26B/LVDS/DQ2/BANK5 IOB26A/LVDS/DQ2/BANK5 IOR38B/LVDS/NONE/BANK3 IOB20A/LVDS/DQ2/BANK5 IOB20B/LVDS/DQ2/BANK5 IOB22A/LVDS/DQ2/BANK5 IOB22B/LVDS/DQ2/BANK5 IOB24B/LVDS/DQ2/BANK5 IOB24A/LVDS/DQ2/BANK5 VCC00 N8 IOT17A/TDO/DQ8/BANK0 IOR28A/GCLKT 3/LVDS/NONE/BANK3 IOT17B/TDI/DQ8/BANK0 C341 TCK IOT23A/TCK/DQ8/BANK0 IOR28B/GCLKC_3/LVDS/NONE/BANK3 IOT23B/TMS/DQ8/BANK0 GW2AN-UV9XPG256 0.1uF IOB23A/GCLKT_5/DQ2/BANK5 IOB23B/GCLKC_5/DQ2/BANK5 IOT24A/GCLKT 0/LVDS/DQ8/BANK0 A8 TMS< IOT24B/GCLKC 0/LVDS/DQ8/BANK0 10 U21I GW2AN-UV9XPG256 GW2AN-UV9XPG256 Bank8 IOL8A/LVDS/DQ0/BANK8 IOL2B/LVDS/DQ0/BANK8 IOL8B/LVDS/DQ0/BANK8 IOL2A/LVDS/DQ0/BANK8 101 104 F4 G6 F3 vccon Bank6 IOL15A/LVDS/NONE/BANK8 IOL20B/NONE/BANK8 IOL15B/LVDS/NONE/BANK8 IOL20A/NONE/BANK8 GND VCC IOL21A/LVDS/NONE/BANK7 IOI 36A/I VDS/NONE/BANK6 IOI 16A/NONE/BANK8 IOI 19B/I VDS/NONE/BANK8 IOL16B/NONE/BANK8 IOL36B/LVDS/NONE/BANK6 IOL40A/LVDS/NONE/BANK6 IOL21B/LVDS/NONE/BANK IOL19A/LVDS/NONE/BANK K4 L5 K5 L4 N2 P1 103 G5 G4 IOL32B/LVDS/NONE/BANK7 IOI 22A/NONE/RANK7 IOI 17A/I VDS/NONE/BANKS IOL51A/NONE/BANK6 ESD IOL22B/NONE/BANK7 IOL32A/LVDS/NONE/BANK7 IOL17B/LVDS/NONE/BANK8 IOL40B/LVDS/NONE/BANK6 IOL50B/LVDS/NONE/BANK6 *JTAG download section H1 IOL24rv.
H1 IOL24rv.
J5 IOL34B/NONE/BANK7
IOL33B/NONE/BANK7 IOL30B/LVDS/NONE/BANK7 IOL464/LVDS/NONE/BANKS IOL50A/LVDS/NONE/BANKS IOL48B/LVDS/NONE/BANK6 M3 IOL28B/LVDS/NONE/BANK7 IOL47A/NONE/BANK6 IOL48A/LVDS/NONE/BANK6 IOL28A/LVDS/NONE/BANK7 IOL47B/NONE/BANK6 IOL14A/GCLKT_8/NONE/BANK8 IOL14B/GCLKC_8/NONE/BANK8 F2 D3 D1 E2 IOL14B/GCLRC_8/NONE/BANK8 IOL4A/LPLL1_T_FB/LVDS/DQ0/BANK8 IOL4B/LPLL1_T_IN/DQ0/BANK8 IOL5A/LPLL1_T_IN/DQ0/BANK8 IOL5B/LPLL1_C_IN/DQ0/BANK8 4.7K VCCO1 IOL25A/GCLKT_7/LVDS/NONE/BANK7 IOL44A/GCLKT_6/LVDS/NONE/BANK6 Configuration completed IOL25B/GCLKC_7/LVDS/NONE/BANK7 IOL44B/GCLKC_6/LVDS/NONE/BANK6 detection section GW2AN-UV9XPG256 GW2AN-UV9XPG256 GW2AN-UV9XPG256 VCC/VCCX VCC00 VCCO1 VCCO2 VCC03 VCCO4 VCCO5 VCCO6 VCCO7 VCCO8 VCC>> FB11 *Configurable detection section C342 C343 C344 C345 C346 C347 C348 C349 C350 C351 C352 C353 C354 C355 C356 C357 C358 C359 C360 C361 C362 C363 C364 C365 C366 C367 4 7UF 0 01UF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uE RECONFIG_N
RECONFIG_N *Configuration reset section 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. GOW IN Minimum System Diagram ize A3 Rev 2.0 GW2AN-LIV9XPG256

GW2AN-UV9XUG256 IOT34A/LVDS/DQ7/BANK1IOT54B/LVDS/DQ6/BANK1 IOT34B/LVDS/DQ7/BANK1IOT54A/LVDS/DQ6/BANK1 IOB32A/LVDS/DQ3/BANK4 IOB48B/LVDS/DQS4/BANK4 IOB32B/LVDS/DQ3/BANK4 IOB48A/LVDS/DQS4/BANK4 IOR29A/NONE/BANK3 VCC/VCCX -IOR29B/NONE/BANK3 IOR50B/LVDS/NONE/BANK3 VCC/VCCX vss IOT36A/LVDS/DQ7/BANK1IOT52B/LVDS/DQ6/BANK1 IOR30A/LVDS/NONE/BANK3 IOR50A/LVDS/NONE/BANK3 IOR30B/LVDS/NONE/BANK3 IOR48B/LVDS/NONE/BANK3 IOB34A/LVDS/DQ3/BANK4 IOB44B/LVDS/DQ3/BANK4 VCC/VCCX VCC/VCCX VSS VSS N14 R13 A16 IOT36B/LVDS/DQ7/BANK1IOT52A/LVDS/DQ6/BANK1 IOB34B/LVDS/DQ3/BANK4 IOB44A/LVDS/DQ3/BANK4 IOT38A/LVDS/DQ7/BANK1IOT50B/LVDS/DQ6/BANK1 IOR31A/NONE/BANK3 IOR48A/LVDS/NONE/BANK3 IOR46B/LVDS/NONE/BANK3 IOB36A/LVDS/DQ3/BANK4 IOB42B/LVDS/DQ3/BANK4 VCC/VCCX VSS VSS IOT38B/LVDS/DQ7/BANK1IOT50A/LVDS/DQ6/BANK1 IOR31B/NONF/BANK3 IOB36B/I VDS/DO3/BANK4 IOB42A/I VDS/DO3/BANK4 VCC/VCCX IOT40A/LVDS/DQ7/BANKIOT48B/LVDS/DQS6/BANK1 IOR32A/LVDS/NONE/BANK3 IOR46A/LVDS/NONE/BANK3 IOB38A/LVDS/DQ3/BANK4 IOB40B/LVDS/DQ3/BANK4 VCC/VCCX VSS IOT40B/LVDS/DO7/BANKIOT48A/LVDS/DOS6/BANK1 IOR32B/LVDS/NONE/BANK3 IOR44B/LVDS/NONE/BANK3 IOB38B/LVDS/DQ3/BANK4 IOB40A/LVDS/DQ3/BANK4 VCC/VCCX VSS E12 J9 R2 IOT42A/LVDS/DQ7/BANK1IOT44B/LVDS/DQ7/BANK1 IOR34A/LVDS/NONE/BANK3 IOR44A/LVDS/NONE/BANK3 VCC/VCCX VSS IOT42B/LVDS/DQ7/BANK1IOT44A/LVDS/DQ7/BANK1 IOR3/B/LV/DS/NONE/BANK3 IOR/28/LV/DS/NONE/BANK3 VCCO0 VSS VSS D5 IOR34B/LVDS/NONE/BANK3 IOR42A/LVDS/NONE/BANK3 M16 IOR36B/LVDS/NONE/BANK3 IOR40B/LVDS/NONE/BANK3 IOR38A/LVDS/NONE/BANK3 IOR40A/LVDS/NONE/BANK3 VSS VSS VSS VSS VCCO1 Bank1 IOB30A/GCLKT 4/LVDS/DQ3/BANK4 VCCO1 IOR38B/I VDS/NONE/BANK3 IOB30B/GCLKC_4/LVDS/DO3/BANK4 VCCO IOT31A/SCL/GCLKT 1/DQ7/BANK1 IOB50A/SCLK/LVDS/DQ4/BANK4 VCCO2 D4 H9 IOT31B/SDA/GCLKC_1/DQ7/BANK1 IOT39A/JTAGSEL_N/DQ7/BANK1 IOB50B/D1/SO/LVDS/DQ4/BANK4 IOB52A/FASTRD N/D3/LVDS/DQ4/BANK4 VCCO3 VSS VSS JTAGSEL_N T13 VCCO3 B10 N12 L11 IOB52B/QSSPI_WPN/LVDS/DQ4/BANK4 IOB54A/SSPI_CS_N/D0/LVDS/DQ4/BANK4 VSS VSS VSS VSS VSS VSS VSS RECONEIG N IOT39B/RECONFIG_N/DQ7/BANK1 VCCO4 READY IOR28A/GCLKT_3/LVDS/NONE/BANK3 IOT55A/READY/DO6/BANK1 VCCC04 DONE IOT55B/DONE/DQ6/BANK1 IOR28B/GCLKC_3/LVDS/NONE/BANK3 VCCO5 IORSSA/DS/DOA/RANKA VCCO5 GW2AN-HV9XHG256 GW2AN-HV9XHG256 R14 M4 H7 R15 IOB55B/D4/DQ4/BANK4 VCC06 VCC07 VCCO7 GW2AN-UV9XUG256 U23A U23F VSS VCC07 VCCO8 VCC08 VSS Bank0 Bank5 GW2AN-UV9XUG256 Banké IOT12A/I VDS/DQ8/BANKO IOT8B/I VDS/DQ9/BANKO IOB12A/I VDS/DQ2/BANK5 IOB8B/I VDS/DQ1/BANK5 B4 IOT12B/LVDS/DQ8/BANK0 IOT8A/LVDS/DQ9/BANK0 IOB12B/LVDS/DQ2/BANK5 IOB8A/LVDS/DQ1/BANK5 IOB14A/LVDS/DQ2/BANK5 IOB6B/LVDS/DQ1/BANK5 JTAGSEL_N >> R67 IOT14A/LVDS/DO8/BANKO_IOT6B/LVDS/DO9/BANKO IOL36A/LVDS/NONE/BANK6 IOT14B/LVDS/DQ8/BANK0 IOT6A/LVDS/DQ9/BANK0 IOT18A/LVDS/DQ8/BANK0 IOT18A/LVDS/DQ9/BANK0 IOT18A/LVDS/DQ9/BANK0 IOT18A/LVDS/DQ9/BANK0 IOT18A/LVDS/DQ9/BANK0 IOT18A/LVDS/DQ9/BANK0 IOT18A/LVDS/DQ9/BANK0 IOT18A/LVDS/DQ9/BANK0 I IOB14B/LVDS/DQ2/BANK5 IOB6A/LVDS/DQ1/BANK5 IOL36B/LVDS/NONE/BANK6 TAG mode selection signal section IOB16A/LVDS/DQ2/BANK5 IOB4B/LVDS/DQ1/BANK5 IOL40A/LVDS/NONE/BANK6 IOL51A/NONE/BANK6 B3 B5 C4 T2 T4 P4 IOT18B/LVDS/DQ8/BANK0 IOT4A/LVDS/DQ9/BANK0 IOB16B/LVDS/DQ2/BANK5 IOB4A/LVDS/DQ1/BANK5 IOL40B/LVDS/NONE/BANK6OL50B/LVDS/NONE/BANK6 IOT20A/I VDS/DQ8/BANK0_IOT2B/I VDS/DQ9/BANK0 IOB18A/I VDS/DQ2/BANK5 IOB2B/I VDS/DQ1/BANK5 IOI 46A/I VDS/NONE/BANK®OI 50A/I VDS/NONE/BANK6 IOT20B/LVDS/DQ8/BANKO IOT2A/LVDS/DQ9/BANKO IOB18A/LVDS/DQ2/BANK5 IOB2A/LVDS/DQ1/BANK5 N9 IOL46B/LVDS/NONE/BANK6OL48B/LVDS/NONE/BANK6 M3 IOT22A/LVDS/DO8/BANK0IOT26B/LVDS/DO8/BANK0 IOB20A/LVDS/DO2/BANK5OB26B/LVDS/DO2/BANK5 IOI 47A/NONE/BANK6 IOI 48A/I VDS/NONE/BANK6 D8 M8 IOT22B/LVDS/DQ8/BANK0IOT26A/LVDS/DQ8/BANK0 IOB20B/LVDS/DQ2/BANK5OB26A/LVDS/DQ2/BANK5 IOL47B/NONE/BANK6 IOB22A/LVDS/DQ2/BANK5OB24B/LVDS/DQ2/BANK5 IOB22B/LVDS/DQ2/BANK5OB24A/LVDS/DQ2/BANK5 VCC00 IOL44A/GCLKT_6/LVDS/NONE/BANK6 IOL44B/GCLKC 6/LVDS/NONE/BANK6 IOT17A/TDO/DQ8/BANK0 IOT17B/TDI/DQ8/BANK0 JTAG IOT23A/TCK/DQ8/BANK0 IOB23A/GCLKT_5/DQ2/BANK5 GW2AN-UV9XUG256 IOT23B/TMS/DQ8/BANK0 IOB23B/GCLKC_5/DQ2/BANK5 IOT24A/GCLKT_0/LVDS/DQ8/BANK0 IOT24B/GCLKC_0/LVDS/DQ8/BANK0 GW2AN-UV9XUG256 TMS< GW2AN-UV9XUG256 U23C U23H IOL8A/LVDS/DQ0/BANK8 IOL2B/LVDS/DQ0/BANK8 IOL8B/LVDS/DQ0/BANK8 IOL2A/LVDS/DQ0/BANK8 Bank2 1124 IOL15A/LVDS/NONE/BANK8 IOL20B/NONE/BANK8 IOL15B/LVDS/NONE/BANK8 IOL20A/NONE/BANK8 101 104 VCC00 IOR11A/LVDS/NONE/BANK2 IOR8B/LVDS/DQ5/BANK2 IOL21A/LVDS/NONE/BANK7 IOL16A/NONE/BANK8 IOL19B/LVDS/NONE/BANK8 IOL16B/NONE/BANK8 IOL19A/LVDS/NONE/BANK8 VCC IOR11B/I VDS/NONF/BANK2 IOR8A/I VDS/DQ5/BANK2 IOI 21B/I VDS/NONF/BANK7 GND G5 IOL17A/LVDS/NONE/BANK8 IOL17B/LVDS/NONE/BANK8 102 IO3 IOR13B/LVDS/NONE/BANK2 | IOR6A/LVDS/DOS5/BANK2 IOL 22B/NONE/BANK7 IOL32A/LVDS/NONE/BANK7 IOR15A/LVDS/NONE/BANK2 IOR25B/LVDS/NONE/BANK2 IOL24A/NONE/BANK7 IOL30B/LVDS/NONE/BANK7 F16 *JTAG download section IOR15B/LVDS/NONE/BANK2 IOR25A/LVDS/NONE/BANK2 IOL24B/NONE/BANK7 IOL30A/LVDS/NONE/BANK7 IOR17A/LVDS/NONE/BANK2 IOR23B/LVDS/NONE/BANK2 IOR17B/LVDS/NONE/BANK2 IOR23A/LVDS/NONE/BANK2 IOR19A/LVDS/NONE/BANK2 IOR21B/LVDS/NONE/BANK2 IOL33B/NONE/BANK7 IOL28A/LVDS/NONE/BANK7 E1 IOL14A/GCLKT_8/NONE/BANK8 IOR19B/LVDS/NONE/BANK2 IOR21A/LVDS/NONE/BANK2 IOL14B/GCLKC_8/NONE/BANK8 IOL4A/LPLL1_T_FB/LVDS/DQ0/BANK8 D3 D1 E2 E3 IOL4B/LPLL1_C_FB/LVDS/DQ0/BANK8 IOL5A/LPLL1_T_IN/DQ0/BANK8 IOL25A/GCLKT_7/LVDS/NONE/BANK7 IOL25B/GCLKC_7/LVDS/NONE/BANK7 DONE (IOL5B/LPLL1_C_IN/DQ0/BANK8 ¬1K R70 ⊢ IOR2A/RPLL1_T_FB/LVDS/DQ5/BANK2 GW2AN-UV9XUG256 GW2AN-UV9XUG256 Configuration completed IOR4A/RPLL1_T_IN/LVDS/DQ5/BANK2 IOR4B/RPLL1_C_IN/LVDS/DQ5/BANK2 detection section GW2AN-UV9XUG256 VCCO2 VCC03 VCCO6 VCCO7 VCC08 VCC00 VCC01 VCCO₄ VCCO₅ R71 4.7K VCC>> FB12 *Configurable detection section C372 C373 C374 C375 C376 C377 C378 C369 C379 C380 C381 C382 C383 C385 C388 C389 C390 C392 C393).1uF 0.1uF .1uF 0.1uF RECONFIG_N < R72 4.7K *Configuration reset section 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. GOW IN Minimum System Diagram 3.It is recommended that add an ESD protection chip to the JTAG download circuit. ize A3 Rev 2.0 GW2AN-HV9XHG256

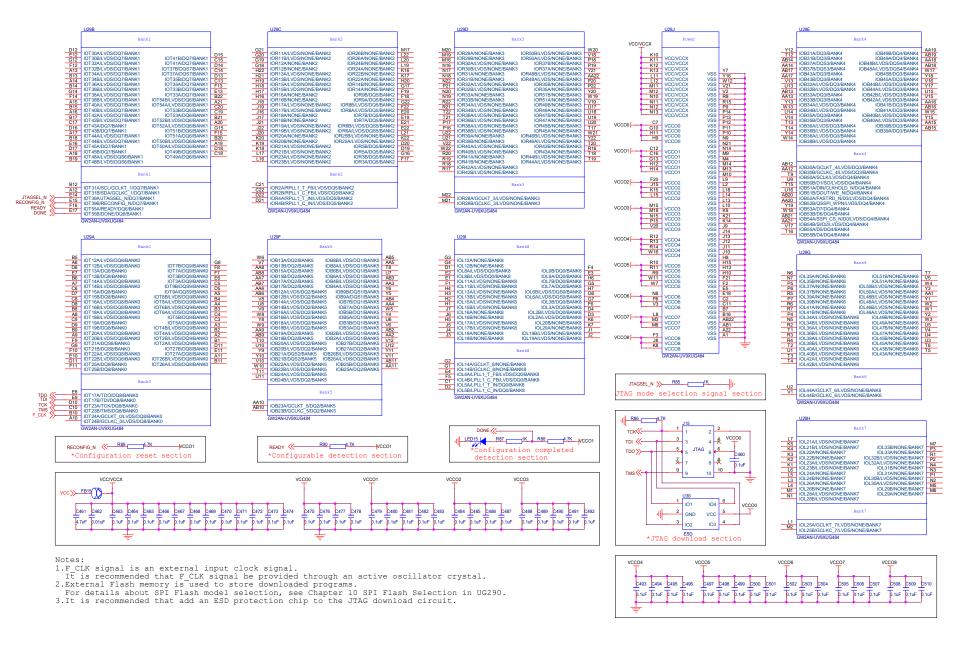


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GW2AN-UV9XUG484 4 3 2 1



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GOWIN Minimum System Diagram
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