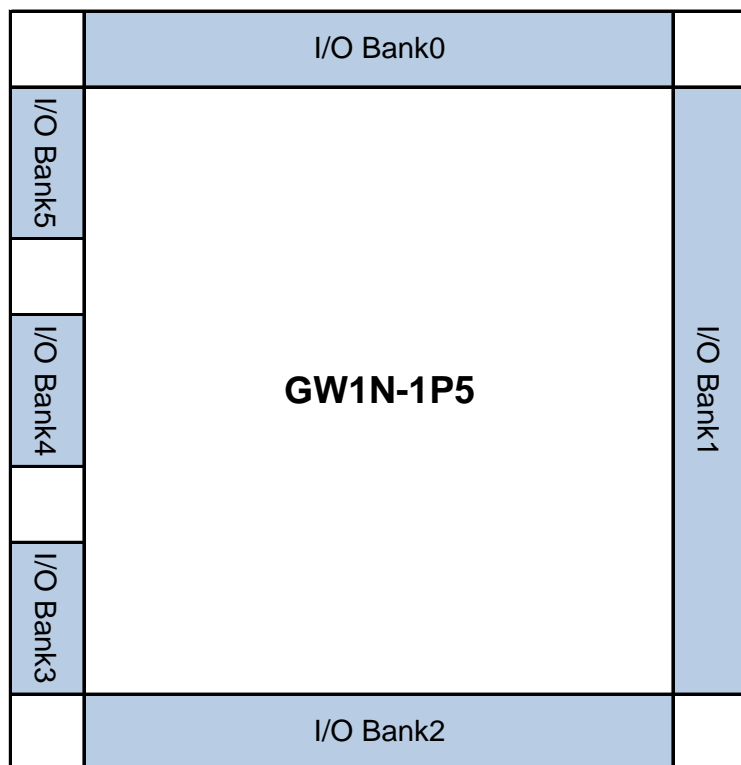


| 日期       | 版本  | 说明               |
|----------|-----|------------------|
| 2021/4/1 | 1.0 | 初始版本，支持LQ100X封装。 |

| 管脚名称                                 | 方向       | 说明   |
|--------------------------------------|----------|--|
| 用户I/O管脚                              |          |  |
| IO [End][Row/Column Number][A/B]     | I/O      | [End]提供管脚在器件中的位置信息，包括L(left) R(right) B(bottom) T(top)   |
|                                      |          | [Row/Column Number]提供管脚在器件中的具体行列位置信息，若[End]为T(top)或B(bottom)，则提供列信息，即管脚对应的CFU列数。若[End]为L(left)或R(right)，则提供行信息，即管脚对应的CFU行数 |
|                                      |          | [A/B]提供差分信号对信息   |
| 多功能管脚                                |          |  |
| IO [End][Row/Column Number][A/B]/MMM |          | 多功能管脚定义，/MMM表示在用户I/O功能的基础上有另外的一种或多种功能。当这些功能不使用的時候，这些管脚可以用作用户I/O  |
| D0                                   | I/O      | CPU模式下的数据端口D0  |
| D1                                   | I/O      | CPU模式下的数据端口D1  |
| D2                                   | I/O      | CPU模式下的数据端口D2  |
| D3                                   | I/O      | CPU模式下的数据端口D3  |
| D4                                   | I/O      | CPU模式下的数据端口D4  |
| D5                                   | I/O      | CPU模式下的数据端口D5  |
| D6                                   | I/O      | CPU模式下的数据端口D6  |
| D7                                   | I/O      | CPU模式下的数据端口D7  |
| WE_N                                 | I        | CPU模式下选择D[7: 0]的数据输入输出方向   |
| MODE0                                | I, 内部弱上拉 | GowinCONFIG配置模式选择信号端口；若该管脚未被封装出来，内部接地  |
| MODE1                                | I, 内部弱上拉 | GowinCONFIG配置模式选择信号端口；若该管脚未被封装出来，内部接地  |
| MODE2                                | I, 内部弱上拉 | GowinCONFIG配置模式选择信号端口；若该管脚未被封装出来，内部接地  |
| TMS                                  | I, 内部弱上拉 | JTAG模式串行模式输入   |
| TCK                                  | I        | JTAG模式串行时钟输入，需要在PCB上连接4.7K下拉电阻   |
| TDO                                  | O        | JTAG模式串行数据输出   |
| TDI                                  | I, 内部弱上拉 | JTAG模式串行数据输入   |
| JTAGSEL_N                            | I, 内部弱上拉 | JTAG模式选择信号，低电平有效   |
| FASTRD_N                             | I/O      | MSPI模式下Flash访问速度选择端口FASTRD_N，低电平表示使用高速Flash访问模式，高电平表示使用普通Flash访问模式   |
| MI                                   | I/O      | MSPI模式下MI  |
| MO                                   | I/O      | MSPI模式下MO  |
| MCS_N                                | I/O      | MSPI模式下的使能信号MCS_N，低电平有效  |
| MCLK                                 | I/O      | MSPI模式下时钟输出MCLK，默认频率为2.1Mhz，精度为+/-5%。  |
| DOUT                                 | O        | SERIAL模式下的数据输出   |
| DIN                                  | I, 内部弱上拉 | SERIAL模式下的数据输入   |

| 管脚名称                              | 方向       | 说明   |
|-----------------------------------|----------|--|
| SCLK                              | I        | SSPI, SERIAL, CPU模式下的时钟输入                            |
| SO                                | I/O      | SSPI模式下SO  |
| SI                                | I/O      | SSPI模式下SI  |
| SSPI_CS_N                         | I/O      | SSPI模式下的使能信号SSPI_CS_N, 低电平有效, 内部弱上拉                  |
| RECONFIG_N                        | I, 内部弱上拉 | 低电平脉冲开始新的GowinCONFIG配置                               |
| CLKHOLD_N                         | I, 内部弱上拉 | 高电平表示SSPI模式和CPU模式操作有效<br>低电平表示SSPI模式和CPU模式操作无效       |
| DONE                              | I/O      | 高电平表示成功完成编程配置<br>低电平表示未完成编程配置或编程配置失败                 |
| READY                             | I/O      | 高电平表示当前可以对器件进行编程配置<br>低电平表示无法对器件进行编程配置               |
| GCLKC_[x]                         | I        | GCLKT_[x]的差分输入管脚, C(Comp), [x]是全局时钟序号 <sup>[1]</sup> |
| GCLKT_[x]                         | I        | 全局时钟输入管脚, T(True), [x]: 全局时钟序号                       |
| LPLL_C_fb/RPLL_C_fb               | I        | 左边/右边PLL反馈输入管脚, C(Comp)                              |
| LPLL_T_fb/RPLL_T_fb               | I        | 左边/右边PLL反馈输入管脚, T(True)                              |
| LPLL_C_in/RPLL_C_in               | I        | 左边/右边PLL时钟输入管脚, C(Comp)                              |
| LPLL_T_in/RPLL_T_in               | I        | 左边/右边PLL时钟输入管脚, T(True)                              |
| SDA                               | I/O      | I2C串行数据线   |
| SCL                               | I        | I2C串行时钟线   |
| <b>其他管脚</b>                       |          |  |
| NC                                | NA       | 预留未使用  |
| VSS                               | NA       | Ground管脚   |
| VCCD                              | NA       | MIPI_DPHY_RX的核电压供电管脚                                 |
| VCCOD                             | NA       | DIO BANK6的I/O电压供电管脚                                  |
| VCC                               | NA       | 核电压供电管脚  |
| VCCO#                             | NA       | I/O BANK#的I/O电压供电管脚                                  |
| VCCX                              | NA       | 辅助电压供电管脚   |
| <b>注!</b>                         |          |  |
| [1]当输入是单端时,GCLKC_[x]所在管脚不是全局时钟管脚。 |          |  |



**注!**

- 1.每个Bank还提供一个独立的参考电压（VREF）；
- 2.用户可以选择使用IOB内置的VREF源（等于 $0.5 \cdot V_{CC0}$ ）；
- 3.用户也可选择外部的VREF输入（使用Bank中任意一个I/O管脚作为外部VREF输入）。

| 注！<br>[1]UV版本封装。<br>[2]LV版本封装。 |     |      |               |                |      |      |                       |                       |
|--------------------------------|-----|------|---------------|----------------|------|------|-----------------------|-----------------------|
| 管脚名                            | 功能  | BANK | 配置功能          | 差分Pair         | LVDS | X16  | LQ100X <sup>[1]</sup> | LQ100X <sup>[2]</sup> |
| I0B11A                         | I/O | 2    |               | True_of_I0B11B | True | x16  | 40                    | 40                    |
| I0B11B                         | I/O | 2    |               | Comp_of_I0B11A | True | none | 41                    | 41                    |
| I0B12A/FASTRD_N                | I/O | 2    | FASTRD_N      | True_of_I0B12B | none | none | 42                    | 42                    |
| I0B12B                         | I/O | 2    |               | Comp_of_I0B12A | none | none | 43                    | 43                    |
| I0B13A                         | I/O | 2    |               | True_of_I0B13B | True | x16  |                       |                       |
| I0B13B                         | I/O | 2    |               | Comp_of_I0B13A | True | none |                       |                       |
| I0B14A                         | I/O | 2    |               | True_of_I0B14B | none | none |                       |                       |
| I0B14B                         | I/O | 2    |               | Comp_of_I0B14A | none | none |                       |                       |
| I0B15A                         | I/O | 2    |               | True_of_I0B15B | True | x16  |                       |                       |
| I0B15B                         | I/O | 2    |               | Comp_of_I0B15A | True | none |                       |                       |
| I0B16A                         | I/O | 2    |               | True_of_I0B16B | none | none | 45                    | 45                    |
| I0B16B/DOUT/WE_N               | I/O | 2    | DOUT/WE_N     | Comp_of_I0B16A | none | none | 47                    | 47                    |
| I0B17A                         | I/O | 2    |               | True_of_I0B17B | True | x16  |                       |                       |
| I0B17B                         | I/O | 2    |               | Comp_of_I0B17A | True | none |                       |                       |
| I0B18A/SSPI_CS_N               | I/O | 2    | SSPI_CS_N     | True_of_I0B18B | none | none | 48                    | 48                    |
| I0B18B/SI                      | I/O | 2    | SI            | Comp_of_I0B18A | none | none | 49                    | 49                    |
| I0B2A                          | I/O | 2    |               | True_of_I0B2B  | True | x16  |                       |                       |
| I0B2B                          | I/O | 2    |               | Comp_of_I0B2A  | True | none |                       |                       |
| I0B3A/DIN/CLKHOLD_N            | I/O | 2    | DIN/CLKHOLD_N | True_of_I0B3B  | none | none | 27                    | 27                    |
| I0B3B                          | I/O | 2    |               | Comp_of_I0B3A  | none | none | 28                    | 28                    |
| I0B4A                          | I/O | 2    |               | True_of_I0B4B  | True | x16  | 29                    | 29                    |
| I0B4B                          | I/O | 2    |               | Comp_of_I0B4A  | True | none | 30                    | 30                    |
| I0B5A/SCLK                     | I/O | 2    | SCLK          | True_of_I0B5B  | none | none | 31                    | 31                    |
| I0B5B/SO                       | I/O | 2    | SO            | Comp_of_I0B5A  | none | none | 32                    | 32                    |
| I0B6A                          | I/O | 2    |               | True_of_I0B6B  | True | x16  |                       |                       |
| I0B6B                          | I/O | 2    |               | Comp_of_I0B6A  | True | none |                       |                       |
| I0B7A/GCLKT_4                  | I/O | 2    | GCLKT_4       | True_of_I0B7B  | none | none | 34                    | 34                    |
| I0B7B/GCLKC_4                  | I/O | 2    | GCLKC_4       | Comp_of_I0B7A  | none | none | 35                    | 35                    |
| I0B8A                          | I/O | 2    |               | True_of_I0B8B  | True | x16  | 36                    | 36                    |

**注!**

[1]UV版本封装。

[2]LV版本封装。

| 管脚名             | 功能  | BANK | 配置功能      | 差分Pair         | LVDS | X16  | LQ100X <sup>[1]</sup> | LQ100X <sup>[2]</sup> |
|-----------------|-----|------|-----------|----------------|------|------|-----------------------|-----------------------|
| I0B8B           | I/O | 2    |           | Comp_of_I0B8A  | True | none | 37                    | 37                    |
| I0B9A/GCLKT_3   | I/O | 2    | GCLKT_3   | True_of_I0B9B  | none | none | 38                    | 38                    |
| I0B9B/GCLKC_3   | I/O | 2    | GCLKC_3   | Comp_of_I0B9A  | none | none | 39                    | 39                    |
| I0L11A          | I/O | 4    |           | True_of_I0L11B | True | x16  | 9                     | 9                     |
| I0L11B          | I/O | 4    |           | Comp_of_I0L11A | True | none | 10                    | 10                    |
| I0L12A/GCLKT_6  | I/O | 4    | GCLKT_6   | True_of_I0L12B | none | none | 12                    | 12                    |
| I0L12B/GCLKC_6  | I/O | 4    | GCLKC_6   | Comp_of_I0L12A | none | none | 13                    | 13                    |
| I0L13A          | I/O | 4    |           | True_of_I0L13B | True | x16  | 14                    | 14                    |
| I0L13B          | I/O | 4    |           | Comp_of_I0L13A | True | none | 15                    | 15                    |
| I0L14A          | I/O | 4    |           | True_of_I0L14B | none | none | 16                    | 16                    |
| I0L14B          | I/O | 4    |           | Comp_of_I0L14A | none | none | 17                    | 17                    |
| I0L15A          | I/O | 3    |           | True_of_I0L15B | True | x16  | 18                    | 18                    |
| I0L15B          | I/O | 3    |           | Comp_of_I0L15A | True | none | 19                    | 19                    |
| I0L16A/GCLKT_5  | I/O | 3    | GCLKT_5   | True_of_I0L16B | none | none | 20                    | 20                    |
| I0L16B/GCLKC_5  | I/O | 3    | GCLKC_5   | Comp_of_I0L16A | none | none | 21                    | 21                    |
| I0L17A          | I/O | 3    |           | True_of_I0L17B | True | x16  | 24                    | 24                    |
| I0L17B          | I/O | 3    |           | Comp_of_I0L17A | True | none | 25                    | 25                    |
| I0L18A          | I/O | 3    |           | True_of_I0L18B | none | none |                       |                       |
| I0L18B          | I/O | 3    |           | Comp_of_I0L18A | none | none |                       |                       |
| I0L19A          | I/O | 3    |           | True_of_I0L19B | none | none |                       |                       |
| I0L19B          | I/O | 3    |           | Comp_of_I0L19A | none | none |                       |                       |
| I0L4A/LPLL_T_fb | I/O | 5    | LPLL_T_fb | True_of_I0L4B  | True | x16  |                       |                       |
| I0L4B/LPLL_C_fb | I/O | 5    | LPLL_C_fb | Comp_of_I0L4A  | True | none |                       |                       |
| I0L5A/LPLL_T_in | I/O | 5    | LPLL_T_in | True_of_I0L5B  | none | none | 1                     | 1                     |
| I0L5B/LPLL_C_in | I/O | 5    | LPLL_C_in | Comp_of_I0L5A  | none | none | 2                     | 2                     |
| I0L6A/GCLKT_7   | I/O | 5    | GCLKT_7   | True_of_I0L6B  | True | x16  | 3                     | 3                     |
| I0L6B/GCLKC_7   | I/O | 5    | GCLKC_7   | Comp_of_I0L6A  | True | none | 4                     | 4                     |
| I0L7A           | I/O | 5    |           | True_of_I0L7B  | none | none |                       |                       |
| I0L7B           | I/O | 5    |           | Comp_of_I0L7A  | none | none |                       |                       |

**注!**

[1]UV版本封装。

[2]LV版本封装。

| 管脚名            | 功能  | BANK | 配置功能    | 差分Pair         | LVDS | X16  | LQ100X <sup>[1]</sup> | LQ100X <sup>[2]</sup> |
|----------------|-----|------|---------|----------------|------|------|-----------------------|-----------------------|
| IOL8A          | I/O | 5    |         | True_of_IOL8B  | True | x16  | 7                     | 7                     |
| IOL8B          | I/O | 5    |         | Comp_of_IOL8A  | True | none | 8                     | 8                     |
| IOL9A          | I/O | 4    |         | True_of_IOL9B  | none | none |                       |                       |
| IOL9B          | I/O | 4    |         | Comp_of_IOL9A  | none | none |                       |                       |
| IOR11A/GCLKT_2 | I/O | 1    | GCLKT_2 | True_of_IOR11B | True | none | 63                    | 63                    |
| IOR11B/GCLKC_2 | I/O | 1    | GCLKC_2 | Comp_of_IOR11A | True | none | 62                    | 62                    |
| IOR12A         | I/O | 1    |         | True_of_IOR12B | none | none |                       |                       |
| IOR12B         | I/O | 1    |         | Comp_of_IOR12A | none | none |                       |                       |
| IOR13A         | I/O | 1    |         | True_of_IOR13B | True | none | 61                    | 61                    |
| IOR13B         | I/O | 1    |         | Comp_of_IOR13A | True | none |                       |                       |
| IOR14A         | I/O | 1    |         | True_of_IOR14B | none | none | 60                    | 60                    |
| IOR14B         | I/O | 1    |         | Comp_of_IOR14A | none | none | 59                    | 59                    |
| IOR15A         | I/O | 1    |         | True_of_IOR15B | True | none |                       |                       |
| IOR15B         | I/O | 1    |         | Comp_of_IOR15A | True | none |                       |                       |
| IOR16A         | I/O | 1    |         | True_of_IOR16B | none | none | 58                    | 58                    |
| IOR16B         | I/O | 1    |         | Comp_of_IOR16A | none | none | 57                    | 57                    |
| IOR17A         | I/O | 1    |         | True_of_IOR17B | True | none |                       |                       |
| IOR17B         | I/O | 1    |         | Comp_of_IOR17A | True | none |                       |                       |
| IOR18A         | I/O | 1    |         | True_of_IOR18B | none | none | 54                    | 54                    |
| IOR18B         | I/O | 1    |         | Comp_of_IOR18A | none | none | 53                    | 53                    |
| IOR19A         | I/O | 1    |         | True_of_IOR19B | none | none | 52                    | 52                    |
| IOR19B         | I/O | 1    |         | Comp_of_IOR19A | none | none | 51                    | 51                    |
| IOR1A          | I/O | 1    |         | True_of_IOR1B  | True | none |                       |                       |
| IOR1B          | I/O | 1    |         | Comp_of_IOR1A  | True | none |                       |                       |
| IOR2A          | I/O | 1    |         | True_of_IOR2B  | none | none | 75                    | 75                    |
| IOR2B          | I/O | 1    |         | Comp_of_IOR2A  | none | none | 74                    | 74                    |
| IOR3A/D2       | I/O | 1    | D2      | True_of_IOR3B  | True | none | 71                    | 71                    |
| IOR3B/D3       | I/O | 1    | D3      | Comp_of_IOR3A  | True | none | 70                    | 70                    |
| IOR4A/D0       | I/O | 1    | D0      | True_of_IOR4B  | none | none | 69                    | 69                    |

注!

[1]UV版本封装。

[2]LV版本封装。

| 管脚名                | 功能  | BANK | 配置功能        | 差分Pair         | LVDS | X16  | LQ100X <sup>[1]</sup> | LQ100X <sup>[2]</sup> |
|--------------------|-----|------|-------------|----------------|------|------|-----------------------|-----------------------|
| IOR4B/D1           | I/O | 1    | D1          | Comp_of_IOR4A  | none | none | 68                    | 68                    |
| IOR5A/MI/D7        | I/O | 1    | MI/D7       | True_of_IOR5B  | True | none | 67                    | 67                    |
| IOR5B/MO/D6        | I/O | 1    | MO/D6       | Comp_of_IOR5A  | True | none | 66                    | 66                    |
| IOR6A/MCS_N/D5     | I/O | 1    | MCS_N/D5    | True_of_IOR6B  | none | none | 65                    | 65                    |
| IOR6B/MCLK/D4      | I/O | 1    | MCLK/D4     | Comp_of_IOR6A  | none | none | 64                    | 64                    |
| IOT11A/GCLKT_0     | I/O | 0    | GCLKT_0     | True_of_IOT11B | True | x16  | 88                    | 88                    |
| IOT11B/GCLKC_0     | I/O | 0    | GCLKC_0     | Comp_of_IOT11A | True | none | 87                    | 87                    |
| IOT12A             | I/O | 0    |             | True_of_IOT12B | none | none | 89                    | 89                    |
| IOT12B             | I/O | 0    |             | Comp_of_IOT12A | none | none |                       |                       |
| IOT13A             | I/O | 0    |             | True_of_IOT13B | True | x16  | 84                    | 84                    |
| IOT13B             | I/O | 0    |             | Comp_of_IOT13A | True | none | 83                    | 83                    |
| IOT14A/GCLKT_1/SCL | I/O | 0    | GCLKT_1/SCL | True_of_IOT14B | none | none | 86                    | 86                    |
| IOT14B/GCLKC_1/SDA | I/O | 0    | GCLKC_1/SDA | Comp_of_IOT14A | none | none | 85                    | 85                    |
| IOT15A             | I/O | 0    |             | True_of_IOT15B | True | x16  |                       |                       |
| IOT15B             | I/O | 0    |             | Comp_of_IOT15A | True | none |                       |                       |
| IOT16A/JTAGSEL_N   | I/O | 0    | JTAGSEL_N   | True_of_IOT16B | none | none | 82                    | 82                    |
| IOT16B/RECONFIG_N  | I/O | 0    | RECONFIG_N  | Comp_of_IOT16A | none | none | 81                    | 81                    |
| IOT17A             | I/O | 0    |             | True_of_IOT17B | True | x16  | 78                    | 78                    |
| IOT17B             | I/O | 0    |             | Comp_of_IOT17A | True | none |                       |                       |
| IOT18A/READY       | I/O | 0    | READY       | True_of_IOT18B | none | none | 77                    | 77                    |
| IOT18B/DONE        | I/O | 0    | DONE        | Comp_of_IOT18A | none | none | 76                    | 76                    |
| IOT19A             | I/O | 0    |             | True_of_IOT19B | none | none |                       |                       |
| IOT19B             | I/O | 0    |             | Comp_of_IOT19A | none | none |                       |                       |
| IOT2A/MODE0        | I/O | 0    | MODE0       | True_of_IOT2B  | none | none |                       |                       |
| IOT2B/MODE1        | I/O | 0    | MODE1       | Comp_of_IOT2A  | none | none |                       |                       |
| IOT3A/MODE2        | I/O | 0    | MODE2       | True_of_IOT3B  | none | none |                       |                       |
| IOT4A              | I/O | 0    |             | True_of_IOT4B  | True | x16  | 99                    | 99                    |
| IOT4B              | I/O | 0    |             | Comp_of_IOT4A  | True | none | 98                    | 98                    |
| IOT5A              | I/O | 0    |             | True_of_IOT5B  | none | none |                       |                       |



| 注！          |        |      |      |               |      |      |                       |                       |
|-------------|--------|------|------|---------------|------|------|-----------------------|-----------------------|
| [1]UV版本封装。  |        |      |      |               |      |      |                       |                       |
| [2]LV版本封装。  |        |      |      |               |      |      |                       |                       |
| 管脚名         | 功能     | BANK | 配置功能 | 差分Pair        | LVDS | X16  | LQ100X <sup>[1]</sup> | LQ100X <sup>[2]</sup> |
| IOT5B       | I/O    | 0    |      | Comp_of_IOT5A | none | none |                       |                       |
| IOT6A       | I/O    | 0    |      | True_of_IOT6B | True | x16  | 97                    | 97                    |
| IOT6B       | I/O    | 0    |      | Comp_of_IOT6A | True | none | 96                    | 96                    |
| IOT7A/TDO   | I/O    | 0    | TDO  | True_of_IOT7B | none | none | 95                    | 95                    |
| IOT7B/TDI   | I/O    | 0    | TDI  | Comp_of_IOT7A | none | none | 94                    | 94                    |
| IOT8A       | I/O    | 0    |      | True_of_IOT8B | True | x16  |                       |                       |
| IOT8B       | I/O    | 0    |      | Comp_of_IOT8A | True | none |                       |                       |
| IOT9A/TCK   | I/O    | 0    | TCK  | True_of_IOT9B | none | none | 91                    | 91                    |
| IOT9B/TMS   | I/O    | 0    | TMS  | Comp_of_IOT9A | none | none | 90                    | 90                    |
| VCC         | Power  | N/A  |      |               |      |      |                       | 100                   |
| VCC         | Power  | N/A  |      |               |      |      |                       | 50                    |
| VCC/VCCX    | Power  | N/A  |      |               |      |      | 100                   |                       |
| VCC/VCCX    | Power  | N/A  |      |               |      |      | 50                    |                       |
| VCCO0       | Power  | N/A  |      |               |      |      | 80                    | 80                    |
| VCCO0       | Power  | N/A  |      |               |      |      | 93                    | 93                    |
| VCCO1       | Power  | N/A  |      |               |      |      | 55                    |                       |
| VCCO1       | Power  | N/A  |      |               |      |      | 73                    |                       |
| VCCO1/VCCX  | Power  | N/A  |      |               |      |      |                       | 55                    |
| VCCO1/VCCX  | Power  | N/A  |      |               |      |      |                       | 73                    |
| VCCO2       | Power  | N/A  |      |               |      |      | 26                    | 26                    |
| VCCO2       | Power  | N/A  |      |               |      |      | 46                    | 46                    |
| VCCO3       | Power  | N/A  |      |               |      |      | 23                    | 23                    |
| VCCO4/VCCO5 | Power  | N/A  |      |               |      |      | 5                     | 5                     |
| VSS         | Ground | N/A  |      |               |      |      | 6                     | 6                     |
| VSS         | Ground | N/A  |      |               |      |      | 22                    | 22                    |
| VSS         | Ground | N/A  |      |               |      |      | 33                    | 33                    |
| VSS         | Ground | N/A  |      |               |      |      | 44                    | 44                    |
| VSS         | Ground | N/A  |      |               |      |      | 56                    | 56                    |
| VSS         | Ground | N/A  |      |               |      |      | 72                    | 72                    |

## 注!

[1]UV版本封装。

[2]LV版本封装。

| 管脚名 | 功能     | BANK | 配置功能 | 差分Pair | LVDS | X16 | LQ100X <sup>[1]</sup> | LQ100X <sup>[2]</sup> |
|-----|--------|------|------|--------|------|-----|-----------------------|-----------------------|
| VSS | Ground | N/A  |      |        |      |     | 79                    | 79                    |
| VSS | Ground | N/A  |      |        |      |     | 92                    | 92                    |
| NC  | N/A    | N/A  |      |        |      |     | 11                    | 11                    |

| 注！<br>[1]UV版本封装。<br>[2]LV版本封装。 |     |      |           |                |      |      |                       |                       |
|--------------------------------|-----|------|-----------|----------------|------|------|-----------------------|-----------------------|
| 管脚名                            | 功能  | BANK | 配置功能      | 差分Pair         | LVDS | X16  | LQ100X <sup>[1]</sup> | LQ100X <sup>[2]</sup> |
| <b>BANK5 True LVDS Pair</b>    |     |      |           |                |      |      |                       |                       |
| IOL4A/LPLL_T_fb                | I/O | 5    | LPLL_T_fb | True_of_IOL4B  | True | x16  |                       |                       |
| IOL4B/LPLL_C_fb                | I/O | 5    | LPLL_C_fb | Comp_of_IOL4A  | True | none |                       |                       |
| IOL6A/GCLKT_7                  | I/O | 5    | GCLKT_7   | True_of_IOL6B  | True | x16  | 3                     | 3                     |
| IOL6B/GCLKC_7                  | I/O | 5    | GCLKC_7   | Comp_of_IOL6A  | True | none | 4                     | 4                     |
| IOL8A                          | I/O | 5    |           | True_of_IOL8B  | True | x16  | 7                     | 7                     |
| IOL8B                          | I/O | 5    |           | Comp_of_IOL8A  | True | none | 8                     | 8                     |
| <b>BANK4 True LVDS Pair</b>    |     |      |           |                |      |      |                       |                       |
| IOL11A                         | I/O | 4    |           | True_of_IOL11B | True | x16  | 9                     | 9                     |
| IOL11B                         | I/O | 4    |           | Comp_of_IOL11A | True | none | 10                    | 10                    |
| IOL13A                         | I/O | 4    |           | True_of_IOL13B | True | x16  | 14                    | 14                    |
| IOL13B                         | I/O | 4    |           | Comp_of_IOL13A | True | none | 15                    | 15                    |
| <b>BANK3 True LVDS Pair</b>    |     |      |           |                |      |      |                       |                       |
| IOL15A                         | I/O | 3    |           | True_of_IOL15B | True | x16  | 18                    | 18                    |
| IOL15B                         | I/O | 3    |           | Comp_of_IOL15A | True | none | 19                    | 19                    |
| IOL17A                         | I/O | 3    |           | True_of_IOL17B | True | x16  | 24                    | 24                    |
| IOL17B                         | I/O | 3    |           | Comp_of_IOL17A | True | none | 25                    | 25                    |

| 管脚名                         | 功能  | BANK | 配置功能    | 差分Pair         | LVDS | X16  | LQ100X <sup>[1]</sup> | LQ100X <sup>[2]</sup> |
|-----------------------------|-----|------|---------|----------------|------|------|-----------------------|-----------------------|
| <b>BANK2 True LVDS Pair</b> |     |      |         |                |      |      |                       |                       |
| IOB11A                      | I/O | 2    |         | True_of_IOB11B | True | x16  | 40                    | 40                    |
| IOB11B                      | I/O | 2    |         | Comp_of_IOB11A | True | none | 41                    | 41                    |
| IOB13A                      | I/O | 2    |         | True_of_IOB13B | True | x16  |                       |                       |
| IOB13B                      | I/O | 2    |         | Comp_of_IOB13A | True | none |                       |                       |
| IOB15A                      | I/O | 2    |         | True_of_IOB15B | True | x16  |                       |                       |
| IOB15B                      | I/O | 2    |         | Comp_of_IOB15A | True | none |                       |                       |
| IOB17A                      | I/O | 2    |         | True_of_IOB17B | True | x16  |                       |                       |
| IOB17B                      | I/O | 2    |         | Comp_of_IOB17A | True | none |                       |                       |
| IOB2A                       | I/O | 2    |         | True_of_IOB2B  | True | x16  |                       |                       |
| IOB2B                       | I/O | 2    |         | Comp_of_IOB2A  | True | none |                       |                       |
| IOB4A                       | I/O | 2    |         | True_of_IOB4B  | True | x16  | 29                    | 29                    |
| IOB4B                       | I/O | 2    |         | Comp_of_IOB4A  | True | none | 30                    | 30                    |
| IOB6A                       | I/O | 2    |         | True_of_IOB6B  | True | x16  |                       |                       |
| IOB6B                       | I/O | 2    |         | Comp_of_IOB6A  | True | none |                       |                       |
| IOB8A                       | I/O | 2    |         | True_of_IOB8B  | True | x16  | 36                    | 36                    |
| IOB8B                       | I/O | 2    |         | Comp_of_IOB8A  | True | none | 37                    | 37                    |
| <b>BANK1 True LVDS Pair</b> |     |      |         |                |      |      |                       |                       |
| IOR11A/GCLKT_2              | I/O | 1    | GCLKT_2 | True_of_IOR11B | True | none | 63                    | 63                    |
| IOR11B/GCLKC_2              | I/O | 1    | GCLKC_2 | Comp_of_IOR11A | True | none | 62                    | 62                    |
| IOR13A                      | I/O | 1    |         | True_of_IOR13B | True | none |                       |                       |
| IOR13B                      | I/O | 1    |         | Comp_of_IOR13A | True | none |                       |                       |
| IOR15A                      | I/O | 1    |         | True_of_IOR15B | True | none |                       |                       |
| IOR15B                      | I/O | 1    |         | Comp_of_IOR15A | True | none |                       |                       |
| IOR17A                      | I/O | 1    |         | True_of_IOR17B | True | none |                       |                       |
| IOR17B                      | I/O | 1    |         | Comp_of_IOR17A | True | none |                       |                       |
| IOR1A                       | I/O | 1    |         | True_of_IOR1B  | True | none |                       |                       |
| IOR1B                       | I/O | 1    |         | Comp_of_IOR1A  | True | none |                       |                       |
| IOR3A/D2                    | I/O | 1    | D2      | True_of_IOR3B  | True | none | 71                    | 71                    |
| IOR3B/D3                    | I/O | 1    | D3      | Comp_of_IOR3A  | True | none | 70                    | 70                    |
| IOR5A/MI/D7                 | I/O | 1    | MI/D7   | True_of_IOR5B  | True | none | 67                    | 67                    |
| IOR5B/MO/D6                 | I/O | 1    | MO/D6   | Comp_of_IOR5A  | True | none | 66                    | 66                    |

| 管脚名                         | 功能  | BANK | 配置功能    | 差分Pair         | LVDS | X16  | LQ100X <sup>[1]</sup> | LQ100X <sup>[2]</sup> |
|-----------------------------|-----|------|---------|----------------|------|------|-----------------------|-----------------------|
| <b>BANK0 True LVDS Pair</b> |     |      |         |                |      |      |                       |                       |
| IOT11A/GCLKT_0              | I/O | 0    | GCLKT_0 | True_of_IOT11B | True | x16  | 88                    | 88                    |
| IOT11B/GCLKC_0              | I/O | 0    | GCLKC_0 | Comp_of_IOT11A | True | none | 87                    | 87                    |
| IOT13A                      | I/O | 0    |         | True_of_IOT13B | True | x16  | 84                    | 84                    |
| IOT13B                      | I/O | 0    |         | Comp_of_IOT13A | True | none | 83                    | 83                    |
| IOT15A                      | I/O | 0    |         | True_of_IOT15B | True | x16  |                       |                       |
| IOT15B                      | I/O | 0    |         | Comp_of_IOT15A | True | none |                       |                       |
| IOT17A                      | I/O | 0    |         | True_of_IOT17B | True | x16  |                       |                       |
| IOT17B                      | I/O | 0    |         | Comp_of_IOT17A | True | none |                       |                       |
| IOT4A                       | I/O | 0    |         | True_of_IOT4B  | True | x16  | 99                    | 99                    |
| IOT4B                       | I/O | 0    |         | Comp_of_IOT4A  | True | none | 98                    | 98                    |
| IOT6A                       | I/O | 0    |         | True_of_IOT6B  | True | x16  | 97                    | 97                    |
| IOT6B                       | I/O | 0    |         | Comp_of_IOT6A  | True | none | 96                    | 96                    |
| IOT8A                       | I/O | 0    |         | True_of_IOT8B  | True | x16  |                       |                       |
| IOT8B                       | I/O | 0    |         | Comp_of_IOT8A  | True | none |                       |                       |

**注!**

建议把VCCX和电压最高的VCCO接在一起使用。

**GW1N-1P5器件LQ100X封装LV版本电源供电要求**

| 名称                | 描述                             | 最小值   | 最大值    |
|-------------------|--------------------------------|-------|--------|
| VCC               | 核电压                            | 1.14V | 1.26V  |
| VCCO0、VCCO2、VCCO3 | I/O Bank电压                     | 1.14V | 3.465V |
| VCCO4/VCCO5       | I/O Bank电压, VCCO4,VCCO5内部短接到一起 | 1.14V | 3.465V |
| VCCX/VCCO1        | 辅助电压VCCX和VCCO1内部短接在一起          | 1.71V | 3.465V |

**GW1N-1P5器件LQ100X封装UV版本电源供电要求**

| 名称                      | 描述                             | 最小值    | 最大值    |
|-------------------------|--------------------------------|--------|--------|
| VCCX/VCC                | 核电压VCC和辅助电压VCCX短接在一起           | 2.375V | 3.465V |
| VCCO4/VCCO5             | I/O Bank电压, VCCO4,VCCO5内部短接到一起 | 1.14V  | 3.465V |
| VCCO0、VCCO1、VCCO2、VCCO3 | I/O Bank电压                     | 1.14V  | 3.465V |