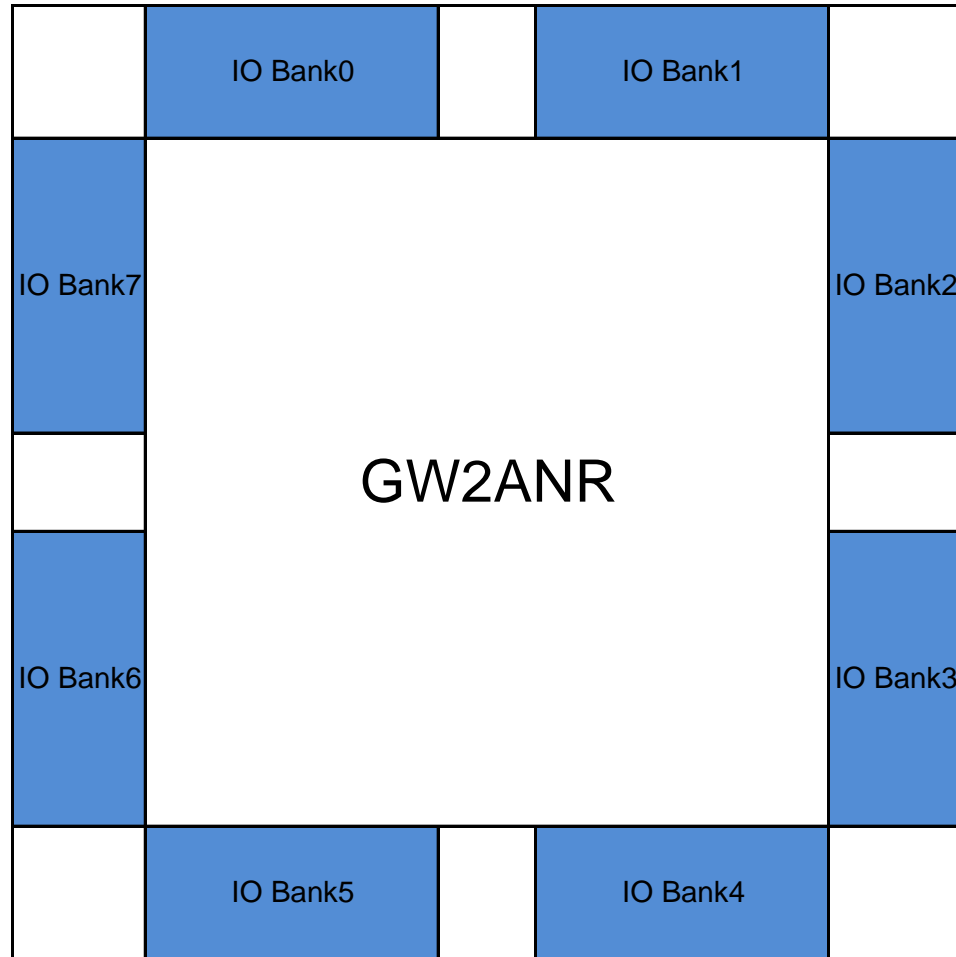


Date	Version	Description
05/08/2020	1.0E	Initial version published. QN88 package supported.
10/20/2022	1.1E	Pin definitions sheet updated. The note in Power sheet updated.
05/04/2023	1.1.1E	The note of QN88 in Power sheet added. The description of CLKHOLD_N pin in Pin Definitions sheet updated.
06/30/2023	1.1.2E	The descriptions of pin definitions and info. for MODE0, MODE1, MODE2 pins optimized.
11/15/2024	1.1.3E	The description of EPAD pin in Pin Definitions sheet added. The description of EXTR pin in Pin Definitions sheet optimized. The I/O descriptions of Ready and Done pins in Pin Definitions sheet optimized.

Pin Name	I/O	Description
<b>User I/O</b>		
IO[End][Row/Column Number][A/B]	I/O	[End] indicates the pin location, including L(left), R(right), B(bottom), and T(top).
		[Row/Column Number] indicates the pin row/column number. If [End] is T(top) or B(bottom), the pin indicates the column number of the corresponding CFU. If [End] is L(left) or R(right), the pin indicates the row number of the corresponding CFU.
		[A/B] indicates differential signal pair information.
<b>Multi-Function Pins</b>		
IO[End][Row/Column Number][A/B]/MMM		/MMM represents one or more of the other functions in addition to being general purpose user I/O. When these functions are not in use, these pins can be used as user I/O.
D0	I/O	Data port D0 in CPU mode
D1	I/O	Data port D1 in CPU mode
D2	I/O	Data port D2 in CPU mode
D3	I/O	Data port D3 in CPU mode
D4	I/O	Data port D4 in CPU mode
D5	I/O	Data port D5 in CPU mode
D6	I/O	Data port D6 in CPU mode
D7	I/O	Data port D7 in CPU mode
WE_N	I	Select data input/output of D[7:0] in CPU mode.0: Write;1: Read.
DOUT	O	Data output in SERIAL mode
DIN	I, internal weak pull-up	Data input in SERIAL mode
TMS	I, internal weak pull-up	Serial mode input in JTAG mode
TCK	I	Serial clock input in JTAG mode
TDO	O	Serial data output in JTAG mode
TDI	I, internal weak pull-up	Serial data input in JTAG mode
JTAGSEL_N	I, internal weak pull-up	Reconfigure JTAG download function signal
RECONFIG_N	I, internal weak pull-up	Global reset GowinCONFIG logic signal, active low
FASTRD_N	I	Access SPI FLASH to select signal. Low, Fast Read mode; High, Read mode.
DONE <sup>[1]</sup>	O, internal weak pull-up	High, the programming configuration has been completed successfully; Low, the programming configuration has not been completed or failed.
	I, internal weak pull-up	When the DONE signal is low, delay the chip to activate. Activate the chip until the DONE signal is high.
READY <sup>[1]</sup>	I/O, internal weak pull-up	High, the device can be programmed and configured currently; Low, the device cannot be programmed and configured currently.
MI	I	MI in MSPI mode
MO	O	MO in MSPI mode
MCS_N	O	Enable signal MCS_N in MSPI mode, active-low

Pin Name	I/O	Description
MCLK	O	Clock output MCLK in MSPI mode, with default frequency of 2.5Mhz
SCLK	I	Clock input in SSPI, SERIAL, and CPU modes
SO	O	SO in SSPI mode
SI	I/O	SI in SSPI mode
SSPI_CS_N	I/O	Enable signal SSPI_CS_N in SSPI mode, active-low, and internal weak pull-up
CLKHOLD_N	I, internal weak pull-up	Active-high in SSPI mode; Active-low in CPU mode.
GCLKC_[x]	I	Differential input pin of GCLKT_[x], C(Comp), [x] is global clock number <sup>[2]</sup>
GCLKT_[x]	I	Global clock input pin, T(True), [x] is global clock number
LPLL_C_fb/RPLL_C_fb	I	Left/Right PLL feedback input pin, C(Comp)
LPLL_T_fb/RPLL_T_fb	I	Left/Right PLL feedback input pin, T(True)
LPLL_C_in/RPLL_C_in	I	Left/Right PLL clock input pin, C(Comp)
LPLL_T_in/RPLL_T_in	I	Left/Right PLL clock input pin, T(True)
MODE2	I, internal weak pull-up	GowinCONFIG modes selection pin; if this pin is marked as "VCCIO", it's internally powered; if this pin is marked as "GND", it's internally grounded.
MODE1	I, internal weak pull-up	GowinCONFIG modes selection pin; if this pin is marked as "VCCIO", it's internally powered; if this pin is marked as "GND", it's internally grounded.
MODE0	I, internal weak pull-up	GowinCONFIG modes selection pin; if this pin is marked as "VCCIO", it's internally powered; if this pin is marked as "GND", it's internally grounded.
<b>Other Pins</b>		
EXTR	NA	Dedicated pin to provide reference voltage for internal circuits, must be connected to an external 10K 1% resistor to ground.
NC	NA	Reserved
VSS	NA	Ground
VCC	NA	Power supply pin of core voltage
VCCIO#	NA	Power supply pin of I/O voltage for I/O BANK#
VCCX	NA	Power supply pin of auxiliary voltage
VCCPLL0/1	NA	Left PLL0/1 voltage supply pin, LQFP is separately packaged.
VCCPLLR0/1	NA	Right PLL0/1 voltage supply pin, LQFP is separately packaged.
VCCPLL	NA	Package PBGA: Left PLL0/1 voltage supply pin
VCCPLLR	NA	Package PBGA: Right PLL0/1 voltage supply pin
EPAD	NA	Exposed pad. Connect to ground.
<b>Note!</b>		
<sup>[1]</sup> The default state of READY/DONE is open-drain output, internal weak pull-up. DONE outputs 0 during configuration.		
<sup>[2]</sup> When the input is single-ended, GCLKC_[x] pin is not a global clock pin.		



**Note!**

[1] Each Bank has independent reference voltage (VREF).

[2] You can select to use IOB internal VREF (equals to  $0.5 * VCCIO$ ).

[3] You can also select to use external VREF input (use any IO pins as external VREF input).

**Note!**

VCCX should be greater than or equal to VCCIO.

**Recommended Operating Conditions of QN88 Package in GW2ANR-18**

<b>Name</b>	<b>Description</b>	<b>Min.</b>	<b>Max.</b>
VCC	Core voltage	0.95V	1.05V
VCCPLL1	Left PLL supply voltage	0.95V	1.05V
VCCPLLR1	Right PLL supply voltage	0.95V	1.05V
VCCIO0, VCCIO1, VCCIO3, VCCIO4, VCCIO5	I/O Bank power supply voltage When Flash is used, VCCIO3 provides voltage to Flash	1.14V 2.7V	3.6V 3.6V
VCCX/VCCIO2/VCCIO6	VCCX/VCCIO2/VCCIO6 are internally connected.	2.7V	3.6V
VCCIO7	I/O Bank power supply voltage, connected to SDR SDRAM port	3.135V	3.6V

**Note!**

It is highly recommended that the EPAD connect to GND, but not a requirement.

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
EXTR	Ground		N/A				47
IOB12A	I/O	DQ5	5		True_of_IOB12B	True	
IOB12B	I/O	DQ5	5		Comp_of_IOB12A	True	
IOB13A	I/O	DQ5	5		True_of_IOB13B	none	
IOB13B	I/O	DQ5	5		Comp_of_IOB13A	none	
IOB14A	I/O	DQ5	5		True_of_IOB14B	True	29
IOB14B	I/O	DQ5	5		Comp_of_IOB14A	True	30
IOB15A	I/O	DQ5	5		True_of_IOB15B	none	
IOB15B	I/O	DQ5	5		Comp_of_IOB15A	none	
IOB16A	I/O	DQ5	5		True_of_IOB16B	True	
IOB16B	I/O	DQ5	5		Comp_of_IOB16A	True	
IOB17A	I/O	DQ5	5		True_of_IOB17B	none	
IOB17B	I/O	DQ5	5		Comp_of_IOB17A	none	
IOB18A	I/O	DQ5	5		True_of_IOB18B	True	31
IOB18B	I/O	DQ5	5		Comp_of_IOB18A	True	32
IOB19A	I/O	DQ5	5		True_of_IOB19B	none	
IOB19B	I/O	DQ5	5		Comp_of_IOB19A	none	
IOB20A	I/O	DQ5	5		True_of_IOB20B	True	
IOB20B	I/O	DQ5	5		Comp_of_IOB20A	True	
IOB21A	I/O	DQS5	5		True_of_IOB21B	none	
IOB21B	I/O	DQS5	5		Comp_of_IOB21A	none	
IOB22A	I/O	DQ5	5		True_of_IOB22B	True	
IOB22B	I/O	DQ5	5		Comp_of_IOB22A	True	
IOB23A	I/O	DQ5	5		True_of_IOB23B	none	
IOB23B	I/O	DQ5	5		Comp_of_IOB23A	none	
IOB24A	I/O	DQ5	5		True_of_IOB24B	True	33
IOB24B	I/O	DQ5	5		Comp_of_IOB24A	True	34
IOB25A	I/O	DQ5	5		True_of_IOB25B	none	
IOB25B	I/O	DQ5	5		Comp_of_IOB25A	none	
IOB26A	I/O	DQ5	5		True_of_IOB26B	True	
IOB26B	I/O	DQ5	5		Comp_of_IOB26A	True	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOB27A	I/O	DQ5	5	GCLKT_5	True_of_IOB27B	none	
IOB27B	I/O	DQ5	5	GCLKC_5	Comp_of_IOB27A	none	
IOB2A	I/O	DQ4	5		True_of_IOB2B	True	
IOB2B	I/O	DQ4	5		Comp_of_IOB2A	True	
IOB30A	I/O	DQ6	4	GCLKT_4	True_of_IOB30B	True	35
IOB30B	I/O	DQ6	4	GCLKC_4	Comp_of_IOB30A	True	36
IOB31A	I/O	DQ6	4		True_of_IOB31B	none	
IOB31B	I/O	DQ6	4		Comp_of_IOB31A	none	
IOB32A	I/O	DQ6	4		True_of_IOB32B	True	
IOB32B	I/O	DQ6	4		Comp_of_IOB32A	True	
IOB33A	I/O	DQ6	4		True_of_IOB33B	none	
IOB33B	I/O	DQ6	4		Comp_of_IOB33A	none	
IOB34A	I/O	DQ6	4		True_of_IOB34B	True	37
IOB34B	I/O	DQ6	4		Comp_of_IOB34A	True	38
IOB35A	I/O	DQ6	4		True_of_IOB35B	none	
IOB35B	I/O	DQ6	4		Comp_of_IOB35A	none	
IOB36A	I/O	DQ6	4		True_of_IOB36B	True	
IOB36B	I/O	DQ6	4		Comp_of_IOB36A	True	
IOB37A	I/O	DQS6	4		True_of_IOB37B	none	
IOB37B	I/O	DQS6	4		Comp_of_IOB37A	none	
IOB38A	I/O	DQ6	4		True_of_IOB38B	True	
IOB38B	I/O	DQ6	4		Comp_of_IOB38A	True	
IOB39A	I/O	DQ6	4		True_of_IOB39B	none	
IOB39B	I/O	DQ6	4		Comp_of_IOB39A	none	
IOB3A	I/O	DQ4	5		True_of_IOB3B	none	
IOB3B	I/O	DQ4	5		Comp_of_IOB3A	none	
IOB40A	I/O	DQ6	4		True_of_IOB40B	True	39
IOB40B	I/O	DQ6	4		Comp_of_IOB40A	True	40
IOB41A	I/O	DQ6	4		True_of_IOB41B	none	
IOB41B	I/O	DQ6	4		Comp_of_IOB41A	none	
IOB42A	I/O	DQ6	4		True_of_IOB42B	True	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOB42B	I/O	DQ6	4		Comp_of_IOB42A	True	42
IOB43A	I/O	DQ6	4		True_of_IOB43B	none	41
IOB43B	I/O	DQ6	4		Comp_of_IOB43A	none	
IOB44A	I/O	DQ6	4		True_of_IOB44B	True	
IOB44B	I/O	DQ6	4		Comp_of_IOB44A	True	
IOB45A	I/O	DQ6	4		True_of_IOB45B	none	
IOB45B	I/O	DQ6	4		Comp_of_IOB45A	none	
IOB48A	I/O	DQS7	4		True_of_IOB48B	True	
IOB48B	I/O	DQS7	4		Comp_of_IOB48A	True	
IOB49A	I/O	DQ7	4		True_of_IOB49B	none	
IOB49B	I/O	DQ7	4		Comp_of_IOB49A	none	
IOB4A	I/O	DQ4	5		True_of_IOB4B	True	
IOB4B	I/O	DQ4	5		Comp_of_IOB4A	True	
IOB50A	I/O	DQ7	4		True_of_IOB50B	True	
IOB50B	I/O	DQ7	4		Comp_of_IOB50A	True	
IOB51A	I/O	DQ7	4		True_of_IOB51B	none	
IOB51B	I/O	DQ7	4		Comp_of_IOB51A	none	
IOB52A	I/O	DQ7	4		True_of_IOB52B	True	
IOB52B	I/O	DQ7	4		Comp_of_IOB52A	True	
IOB53A	I/O	DQ7	4		True_of_IOB53B	none	
IOB53B	I/O	DQ7	4		Comp_of_IOB53A	none	
IOB54A	I/O	DQ7	4		True_of_IOB54B	True	
IOB54B	I/O	DQ7	4		Comp_of_IOB54A	True	
IOB55A	I/O	DQ7	4		True_of_IOB55B	none	
IOB55B	I/O	DQ7	4		Comp_of_IOB55A	none	
IOB5A	I/O	DQ4	5		True_of_IOB5B	none	
IOB5B	I/O	DQ4	5		Comp_of_IOB5A	none	
IOB6A	I/O	DQ4	5		True_of_IOB6B	True	25
IOB6B	I/O	DQ4	5		Comp_of_IOB6A	True	26
IOB7A	I/O	DQ4	5		True_of_IOB7B	none	
IOB7B	I/O	DQ4	5		Comp_of_IOB7A	none	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
I0B8A	I/O	DQ4	5		True_of_I0B8B	True	27
I0B8B	I/O	DQ4	5		Comp_of_I0B8A	True	28
I0B9A	I/O	DQS4	5		True_of_I0B9B	none	
I0B9B	I/O	DQS4	5		Comp_of_I0B9A	none	
I0L11A	I/O	DQ1	7		True_of_I0L11B	True	
I0L11B	I/O	DQ1	7		Comp_of_I0L11A	True	
I0L12A	I/O	DQ1	7		True_of_I0L12B	none	
I0L12B	I/O	DQ1	7		Comp_of_I0L12A	none	
I0L13A	I/O	DQ1	7		True_of_I0L13B	True	
I0L13B	I/O	DQ1	7		Comp_of_I0L13A	True	
I0L14A	I/O	DQ1	7		True_of_I0L14B	none	
I0L14B	I/O	DQ1	7		Comp_of_I0L14A	none	
I0L15A	I/O	DQ1	7		True_of_I0L15B	True	
I0L15B	I/O	DQ1	7		Comp_of_I0L15A	True	
I0L16A	I/O	DQ1	7		True_of_I0L16B	none	
I0L16B	I/O	DQ1	7		Comp_of_I0L16A	none	
I0L17A	I/O	DQ1	7		True_of_I0L17B	True	
I0L17B	I/O	DQ1	7		Comp_of_I0L17A	True	
I0L18A	I/O	DQ1	7		True_of_I0L18B	none	
I0L18B	I/O	DQ1	7		Comp_of_I0L18A	none	
I0L20A	I/O	DQ1	7		True_of_I0L20B	True	
I0L20B	I/O	DQ1	7		Comp_of_I0L20A	True	
I0L21A	I/O	DQ1	7		True_of_I0L21B	none	
I0L21B	I/O	DQ1	7		Comp_of_I0L21A	none	
I0L22A	I/O	DQS1	7		True_of_I0L22B	True	
I0L22B	I/O	DQS1	7		Comp_of_I0L22A	True	
I0L23A	I/O	DQ1	7		True_of_I0L23B	none	
I0L23B	I/O	DQ1	7		Comp_of_I0L23A	none	
I0L24A	I/O	DQ1	7		True_of_I0L24B	True	
I0L24B	I/O	DQ1	7		Comp_of_I0L24A	True	
I0L25A	I/O	DQ1	7		True_of_I0L25B	none	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOL25B	I/O	DQ1	7		Comp_of_IOL25A	none	
IOL26A	I/O	DQ1	7		True_of_IOL26B	True	
IOL26B	I/O	DQ1	7		Comp_of_IOL26A	True	
IOL27A	I/O	DQ1	7	GCLKT_7	True_of_IOL27B	none	
IOL27B	I/O	DQ1	7	GCLKC_7	Comp_of_IOL27A	none	
IOL29A	I/O	DQ2	6	GCLKT_6	True_of_IOL29B	True	10
IOL29B	I/O	DQ2	6	GCLKC_6	Comp_of_IOL29A	True	11
IOL2A	I/O	DQ0	7		True_of_IOL2B	True	
IOL2B	I/O	DQ0	7		Comp_of_IOL2A	True	
IOL30A	I/O	DQ2	6		True_of_IOL30B	none	
IOL30B	I/O	DQ2	6		Comp_of_IOL30A	none	
IOL31A	I/O	DQ2	6		True_of_IOL31B	True	
IOL31B	I/O	DQ2	6		Comp_of_IOL31A	True	
IOL32A	I/O	DQ2	6		True_of_IOL32B	none	
IOL32B	I/O	DQ2	6		Comp_of_IOL32A	none	
IOL33A	I/O	DQ2	6		True_of_IOL33B	True	
IOL33B	I/O	DQ2	6		Comp_of_IOL33A	True	
IOL34A	I/O	DQ2	6		True_of_IOL34B	none	
IOL34B	I/O	DQ2	6		Comp_of_IOL34A	none	
IOL35A	I/O	DQ2	6		True_of_IOL35B	True	
IOL35B	I/O	DQ2	6		Comp_of_IOL35A	True	
IOL36A	I/O	DQS2	6		True_of_IOL36B	none	
IOL36B	I/O	DQS2	6		Comp_of_IOL36A	none	
IOL38A	I/O	DQ2	6		True_of_IOL38B	True	
IOL38B	I/O	DQ2	6		Comp_of_IOL38A	True	
IOL39A	I/O	DQ2	6		True_of_IOL39B	none	
IOL39B	I/O	DQ2	6		Comp_of_IOL39A	none	
IOL3A	I/O	DQ0	7		True_of_IOL3B	none	
IOL3B	I/O	DQ0	7		Comp_of_IOL3A	none	
IOL40A	I/O	DQ2	6		True_of_IOL40B	True	
IOL40B	I/O	DQ2	6		Comp_of_IOL40A	True	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOL41A	I/O	DQ2	6		True_of_IOL41B	none	
IOL41B	I/O	DQ2	6		Comp_of_IOL41A	none	
IOL42A	I/O	DQ2	6		True_of_IOL42B	True	
IOL42B	I/O	DQ2	6		Comp_of_IOL42A	True	
IOL43A	I/O	DQ2	6		True_of_IOL43B	none	
IOL43B	I/O	DQ2	6		Comp_of_IOL43A	none	
IOL44A	I/O	DQ2	6		True_of_IOL44B	True	
IOL44B	I/O	DQ2	6		Comp_of_IOL44A	True	
IOL45A	I/O	DQ2	6	LPLL2_T_in	True_of_IOL45B	none	13
IOL45B	I/O	DQ2	6	LPLL2_C_in	Comp_of_IOL45A	none	
IOL47A	I/O	DQ3	6	LPLL2_T_fb	True_of_IOL47B	True	15
IOL47B	I/O	DQ3	6	LPLL2_C_fb	Comp_of_IOL47A	True	16
IOL48A	I/O	DQ3	6		True_of_IOL48B	none	
IOL48B	I/O	DQ3	6		Comp_of_IOL48A	none	
IOL49A	I/O	DQ3	6		True_of_IOL49B	True	17
IOL49B	I/O	DQ3	6		Comp_of_IOL49A	True	18
IOL4A	I/O	DQ0	7		True_of_IOL4B	True	
IOL4B	I/O	DQ0	7		Comp_of_IOL4A	True	
IOL50A	I/O	DQS3	6		True_of_IOL50B	none	
IOL50B	I/O	DQS3	6		Comp_of_IOL50A	none	
IOL51A	I/O	DQ3	6		True_of_IOL51B	True	19
IOL51B	I/O	DQ3	6		Comp_of_IOL51A	True	20
IOL52A	I/O	DQ3	6		True_of_IOL52B	none	
IOL52B	I/O	DQ3	6		Comp_of_IOL52A	none	
IOL53A	I/O	DQ3	6		True_of_IOL53B	True	
IOL53B	I/O	DQ3	6		Comp_of_IOL53A	True	
IOL54A	I/O	DQ3	6		True_of_IOL54B	none	
IOL54B	I/O	DQ3	6		Comp_of_IOL54A	none	
IOL5A	I/O	DQ0	7		True_of_IOL5B	none	
IOL5B	I/O	DQ0	7		Comp_of_IOL5A	none	
IOL6A	I/O	DQS0	7		True_of_IOL6B	True	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOL6B	I/O	DQS0	7		Comp_of_IOL6A	True	
IOL7A	I/O	DQ0	7	LPLL1_T_in	True_of_IOL7B	none	4
IOL7B	I/O	DQ0	7	LPLL1_C_in	Comp_of_IOL7A	none	
IOL8A	I/O	DQ0	7	LPLL1_T_fb	True_of_IOL8B	True	
IOL8B	I/O	DQ0	7	LPLL1_C_fb	Comp_of_IOL8A	True	
IOL9A	I/O	DQ0	7		True_of_IOL9B	none	
IOL9B	I/O	DQ0	7		Comp_of_IOL9A	none	
IOR11A	I/O	DQ10	2		True_of_IOR11B	True	
IOR11B	I/O	DQ10	2		Comp_of_IOR11A	True	
IOR12A	I/O	DQ10	2		True_of_IOR12B	none	
IOR12B	I/O	DQ10	2		Comp_of_IOR12A	none	
IOR13A	I/O	DQ10	2		True_of_IOR13B	True	
IOR13B	I/O	DQ10	2		Comp_of_IOR13A	True	
IOR14A	I/O	DQ10	2		True_of_IOR14B	none	
IOR14B	I/O	DQ10	2		Comp_of_IOR14A	none	
IOR15A	I/O	DQ10	2		True_of_IOR15B	True	
IOR15B	I/O	DQ10	2		Comp_of_IOR15A	True	
IOR16A	I/O	DQ10	2		True_of_IOR16B	none	
IOR16B	I/O	DQ10	2		Comp_of_IOR16A	none	
IOR17A	I/O	DQ10	2		True_of_IOR17B	True	
IOR17B	I/O	DQ10	2		Comp_of_IOR17A	True	
IOR18A	I/O	DQ10	2		True_of_IOR18B	none	
IOR18B	I/O	DQ10	2		Comp_of_IOR18A	none	
IOR20A	I/O	DQ10	2		True_of_IOR20B	True	
IOR20B	I/O	DQ10	2		Comp_of_IOR20A	True	
IOR21A	I/O	DQ10	2		True_of_IOR21B	none	
IOR21B	I/O	DQ10	2		Comp_of_IOR21A	none	
IOR22A	I/O	DQS10	2		True_of_IOR22B	True	
IOR22B	I/O	DQS10	2		Comp_of_IOR22A	True	
IOR23A	I/O	DQ10	2		True_of_IOR23B	none	62
IOR23B	I/O	DQ10	2		Comp_of_IOR23A	none	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOR24A	I/O	DQ10	2		True_of_IOR24B	True	
IOR24B	I/O	DQ10	2		Comp_of_IOR24A	True	
IOR25A	I/O	DQ10	2	TDO	True_of_IOR25B	none	8
IOR25B	I/O	DQ10	2	TMS	Comp_of_IOR25A	none	5
IOR26A	I/O	DQ10	2	TCK	True_of_IOR26B	True	6
IOR26B	I/O	DQ10	2	TDI	Comp_of_IOR26A	True	7
IOR27A	I/O	DQ10	2	GCLKT_2	True_of_IOR27B	none	
IOR27B	I/O	DQ10	2	GCLKC_2	Comp_of_IOR27A	none	
IOR29A	I/O	DQ9	3	GCLKT_3	True_of_IOR29B	True	63
IOR29B	I/O	DQ9	3	GCLKC_3	Comp_of_IOR29A	True	61
IOR2A	I/O	DQ11	2		True_of_IOR2B	True	
IOR2B	I/O	DQ11	2		Comp_of_IOR2A	True	
IOR30A	I/O	DQ9	3	MODE0	True_of_IOR30B	none	88
IOR30B	I/O	DQ9	3	MODE1	Comp_of_IOR30A	none	87
IOR31A	I/O	DQ9	3	MODE2	True_of_IOR31B	True	GND <sup>[1]</sup>
IOR31B	I/O	DQ9	3	RECONFIG_N	Comp_of_IOR31A	True	9
IOR32A	I/O	DQ9	3	READY	True_of_IOR32B	none	60
IOR32B	I/O	DQ9	3	DONE	Comp_of_IOR32A	none	59
IOR33A	I/O	DQ9	3	MI/D7	True_of_IOR33B	True	
IOR33B	I/O	DQ9	3	MO/D6	Comp_of_IOR33A	True	
IOR34A	I/O	DQ9	3	MCS_N/D5	True_of_IOR34B	none	
IOR34B	I/O	DQ9	3	MCLK/D4	Comp_of_IOR34A	none	
IOR35A	I/O	DQ9	3	FASTRD_N/D3	True_of_IOR35B	True	57
IOR35B	I/O	DQ9	3	SI/D2	Comp_of_IOR35A	True	
IOR36A	I/O	DQS9	3	SO/D1	True_of_IOR36B	none	56
IOR36B	I/O	DQS9	3	SSPI_CS_N/D0	Comp_of_IOR36A	none	55
IOR38A	I/O	DQ9	3	DIN/CLKHOLD_N	True_of_IOR38B	True	54
IOR38B	I/O	DQ9	3	DOUT/WE_N	Comp_of_IOR38A	True	53
IOR39A	I/O	DQ9	3	SCLK	True_of_IOR39B	none	52
IOR39B	I/O	DQ9	3		Comp_of_IOR39A	none	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOR3A	I/O	DQ11	2		True_of_IOR3B	none	
IOR3B	I/O	DQ11	2		Comp_of_IOR3A	none	
IOR40A	I/O	DQ9	3		True_of_IOR40B	True	
IOR40B	I/O	DQ9	3		Comp_of_IOR40A	True	
IOR41A	I/O	DQ9	3		True_of_IOR41B	none	
IOR41B	I/O	DQ9	3		Comp_of_IOR41A	none	
IOR42A	I/O	DQ9	3		True_of_IOR42B	True	
IOR42B	I/O	DQ9	3		Comp_of_IOR42A	True	
IOR43A	I/O	DQ9	3		True_of_IOR43B	none	
IOR43B	I/O	DQ9	3		Comp_of_IOR43A	none	
IOR44A	I/O	DQ9	3		True_of_IOR44B	True	
IOR44B	I/O	DQ9	3		Comp_of_IOR44A	True	
IOR45A	I/O	DQ9	3	RPLL2_T_in	True_of_IOR45B	none	51
IOR45B	I/O	DQ9	3	RPLL2_C_in	Comp_of_IOR45A	none	
IOR47A	I/O	DQ8	3	RPLL2_T_fb	True_of_IOR47B	True	
IOR47B	I/O	DQ8	3	RPLL2_C_fb	Comp_of_IOR47A	True	
IOR48A	I/O	DQ8	3		True_of_IOR48B	none	
IOR48B	I/O	DQ8	3		Comp_of_IOR48A	none	
IOR49A	I/O	DQ8	3		True_of_IOR49B	True	49
IOR49B	I/O	DQ8	3		Comp_of_IOR49A	True	48
IOR4A	I/O	DQ11	2		True_of_IOR4B	True	
IOR4B	I/O	DQ11	2		Comp_of_IOR4A	True	
IOR50A	I/O	DQS8	3		True_of_IOR50B	none	
IOR50B	I/O	DQS8	3		Comp_of_IOR50A	none	
IOR51A	I/O	DQ8	3		True_of_IOR51B	True	
IOR51B	I/O	DQ8	3		Comp_of_IOR51A	True	
IOR52A	I/O	DQ8	3		True_of_IOR52B	none	
IOR52B	I/O	DQ8	3		Comp_of_IOR52A	none	
IOR53A	I/O	DQ8	3		True_of_IOR53B	True	
IOR53B	I/O	DQ8	3		Comp_of_IOR53A	True	
IOR54A	I/O	DQ8	3		True_of_IOR54B	none	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOR54B	I/O	DQ8	3		Comp_of_IOR54A	none	
IOR5A	I/O	DQ11	2		True_of_IOR5B	none	
IOR5B	I/O	DQ11	2		Comp_of_IOR5A	none	
IOR6A	I/O	DQS11	2		True_of_IOR6B	True	
IOR6B	I/O	DQS11	2		Comp_of_IOR6A	True	
IOR7A	I/O	DQ11	2	RPLL1_T_in	True_of_IOR7B	none	
IOR7B	I/O	DQ11	2	RPLL1_C_in	Comp_of_IOR7A	none	
IOR8A	I/O	DQ11	2	RPLL1_T_fb	True_of_IOR8B	True	
IOR8B	I/O	DQ11	2	RPLL1_C_fb	Comp_of_IOR8A	True	
IOR9A	I/O	DQ11	2		True_of_IOR9B	none	
IOR9B	I/O	DQ11	2		Comp_of_IOR9A	none	
IOT12A	I/O	DQ14	0		True_of_IOT12B	True	
IOT12B	I/O	DQ14	0		Comp_of_IOT12A	True	
IOT13A	I/O	DQ14	0		True_of_IOT13B	none	
IOT13B	I/O	DQ14	0		Comp_of_IOT13A	none	
IOT14A	I/O	DQ14	0		True_of_IOT14B	True	
IOT14B	I/O	DQ14	0		Comp_of_IOT14A	True	
IOT15A	I/O	DQ14	0		True_of_IOT15B	none	
IOT15B	I/O	DQ14	0		Comp_of_IOT15A	none	
IOT16A	I/O	DQ14	0		True_of_IOT16B	True	
IOT16B	I/O	DQ14	0		Comp_of_IOT16A	True	
IOT17A	I/O	DQ14	0		True_of_IOT17B	none	82
IOT17B	I/O	DQ14	0		Comp_of_IOT17A	none	81
IOT18A	I/O	DQ14	0		True_of_IOT18B	True	
IOT18B	I/O	DQ14	0		Comp_of_IOT18A	True	
IOT19A	I/O	DQ14	0		True_of_IOT19B	none	
IOT19B	I/O	DQ14	0		Comp_of_IOT19A	none	
IOT20A	I/O	DQ14	0		True_of_IOT20B	True	
IOT20B	I/O	DQ14	0		Comp_of_IOT20A	True	
IOT21A	I/O	DQS14	0		True_of_IOT21B	none	
IOT21B	I/O	DQS14	0		Comp_of_IOT21A	none	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOT22A	I/O	DQ14	0		True_of_IOT22B	True	
IOT22B	I/O	DQ14	0		Comp_of_IOT22A	True	
IOT23A	I/O	DQ14	0		True_of_IOT23B	none	
IOT23B	I/O	DQ14	0		Comp_of_IOT23A	none	
IOT24A	I/O	DQ14	0		True_of_IOT24B	True	
IOT24B	I/O	DQ14	0		Comp_of_IOT24A	True	
IOT25A	I/O	DQ14	0		True_of_IOT25B	none	
IOT25B	I/O	DQ14	0		Comp_of_IOT25A	none	
IOT26A	I/O	DQ14	0		True_of_IOT26B	True	
IOT26B	I/O	DQ14	0		Comp_of_IOT26A	True	
IOT27A	I/O	DQ14	0	GCLKT_0	True_of_IOT27B	none	80
IOT27B	I/O	DQ14	0	GCLKC_0	Comp_of_IOT27A	none	79
IOT2A	I/O	DQ15	0		True_of_IOT2B	True	
IOT2B	I/O	DQ15	0		Comp_of_IOT2A	True	
IOT30A	I/O	DQ13	1	GCLKT_1	True_of_IOT30B	True	77
IOT30B	I/O	DQ13	1	GCLKC_1	Comp_of_IOT30A	True	76
IOT31A	I/O	DQ13	1		True_of_IOT31B	none	
IOT31B	I/O	DQ13	1		Comp_of_IOT31A	none	
IOT32A	I/O	DQ13	1		True_of_IOT32B	True	
IOT32B	I/O	DQ13	1		Comp_of_IOT32A	True	
IOT33A	I/O	DQ13	1		True_of_IOT33B	none	
IOT33B	I/O	DQ13	1		Comp_of_IOT33A	none	
IOT34A	I/O	DQ13	1		True_of_IOT34B	True	75
IOT34B	I/O	DQ13	1		Comp_of_IOT34A	True	74
IOT35A	I/O	DQ13	1		True_of_IOT35B	none	
IOT35B	I/O	DQ13	1		Comp_of_IOT35A	none	
IOT36A	I/O	DQ13	1		True_of_IOT36B	True	
IOT36B	I/O	DQ13	1		Comp_of_IOT36A	True	
IOT37A	I/O	DQS13	1		True_of_IOT37B	none	
IOT37B	I/O	DQS13	1		Comp_of_IOT37A	none	
IOT38A	I/O	DQ13	1		True_of_IOT38B	True	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOT38B	I/O	DQ13	1		Comp_of_IOT38A	True	
IOT39A	I/O	DQ13	1		True_of_IOT39B	none	
IOT39B	I/O	DQ13	1		Comp_of_IOT39A	none	
IOT3A	I/O	DQ15	0		True_of_IOT3B	none	
IOT3B	I/O	DQ15	0		Comp_of_IOT3A	none	
IOT40A	I/O	DQ13	1		True_of_IOT40B	True	73
IOT40B	I/O	DQ13	1		Comp_of_IOT40A	True	72
IOT41A	I/O	DQ13	1		True_of_IOT41B	none	
IOT41B	I/O	DQ13	1		Comp_of_IOT41A	none	
IOT42A	I/O	DQ13	1		True_of_IOT42B	True	
IOT42B	I/O	DQ13	1		Comp_of_IOT42A	True	
IOT43A	I/O	DQ13	1		True_of_IOT43B	none	
IOT43B	I/O	DQ13	1		Comp_of_IOT43A	none	
IOT44A	I/O	DQ13	1		True_of_IOT44B	True	71
IOT44B	I/O	DQ13	1		Comp_of_IOT44A	True	70
IOT45A	I/O	DQ13	1		True_of_IOT45B	none	
IOT45B	I/O	DQ13	1		Comp_of_IOT45A	none	
IOT48A	I/O	DQS12	1		True_of_IOT48B	True	
IOT48B	I/O	DQS12	1		Comp_of_IOT48A	True	
IOT49A	I/O	DQ12	1		True_of_IOT49B	none	
IOT49B	I/O	DQ12	1		Comp_of_IOT49A	none	
IOT4A	I/O	DQ15	0		True_of_IOT4B	True	86
IOT4B	I/O	DQ15	0		Comp_of_IOT4A	True	85
IOT50A	I/O	DQ12	1		True_of_IOT50B	True	69
IOT50B	I/O	DQ12	1		Comp_of_IOT50A	True	
IOT51A	I/O	DQ12	1		True_of_IOT51B	none	
IOT51B	I/O	DQ12	1		Comp_of_IOT51A	none	
IOT52A	I/O	DQ12	1		True_of_IOT52B	True	
IOT52B	I/O	DQ12	1		Comp_of_IOT52A	True	
IOT53A	I/O	DQ12	1		True_of_IOT53B	none	
IOT53B	I/O	DQ12	1		Comp_of_IOT53A	none	

Note!							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOT54A	I/O	DQ12	1		True_of_IOT54B	True	
IOT54B	I/O	DQ12	1		Comp_of_IOT54A	True	
IOT55A	I/O	DQ12	1		True_of_IOT55B	none	
IOT55B	I/O	DQ12	1	JTAGSEL_N	Comp_of_IOT55A	none	
IOT5A	I/O	DQ15	0		True_of_IOT5B	none	
IOT5B	I/O	DQ15	0		Comp_of_IOT5A	none	
IOT6A	I/O	DQ15	0		True_of_IOT6B	True	84
IOT6B	I/O	DQ15	0		Comp_of_IOT6A	True	83
IOT7A	I/O	DQ15	0		True_of_IOT7B	none	
IOT7B	I/O	DQ15	0		Comp_of_IOT7A	none	
IOT8A	I/O	DQ15	0		True_of_IOT8B	True	
IOT8B	I/O	DQ15	0		Comp_of_IOT8A	True	
IOT9A	I/O	DQS15	0		True_of_IOT9B	none	
IOT9B	I/O	DQS15	0		Comp_of_IOT9A	none	
VCC	Power		N/A				1
VCC	Power		N/A				22
VCC	Power		N/A				45
VCC	Power		N/A				66
VCCIO0	Power		N/A				78
VCCIO1	Power		N/A				67
VCCIO2/VCCIO6/VCCX	Power		N/A				64
VCCIO2/VCCIO6/VCCX	Power		N/A				12
VCCIO3	Power		N/A				58
VCCIO4	Power		N/A				44
VCCIO5	Power		N/A				23
VCCIO7	Power		N/A				3
VCCPLLL1	Power		N/A				14
VCCPLLR1	Power		N/A				50
VSS	Ground		N/A				2
VSS	Ground		N/A				21
VSS	Ground		N/A				46

<b>Note!</b>							
[1] The pin is internally grounded.							
Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
VSS	Ground		N/A				65
VSS	Ground		N/A				68
VSS	Ground		N/A				43
VSS	Ground		N/A				24

Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
<b>BANK7 True LVDS Pair</b>							
IOL11A	I/O	DQ1	7		True_of_IOL11B	True	
IOL11B	I/O	DQ1	7		Comp_of_IOL11A	True	
IOL13A	I/O	DQ1	7		True_of_IOL13B	True	
IOL13B	I/O	DQ1	7		Comp_of_IOL13A	True	
IOL15A	I/O	DQ1	7		True_of_IOL15B	True	
IOL15B	I/O	DQ1	7		Comp_of_IOL15A	True	
IOL17A	I/O	DQ1	7		True_of_IOL17B	True	
IOL17B	I/O	DQ1	7		Comp_of_IOL17A	True	
IOL20A	I/O	DQ1	7		True_of_IOL20B	True	
IOL20B	I/O	DQ1	7		Comp_of_IOL20A	True	
IOL22A	I/O	DQS1	7		True_of_IOL22B	True	
IOL22B	I/O	DQS1	7		Comp_of_IOL22A	True	
IOL24A	I/O	DQ1	7		True_of_IOL24B	True	
IOL24B	I/O	DQ1	7		Comp_of_IOL24A	True	
IOL26A	I/O	DQ1	7		True_of_IOL26B	True	
IOL26B	I/O	DQ1	7		Comp_of_IOL26A	True	
IOL2A	I/O	DQ0	7		True_of_IOL2B	True	
IOL2B	I/O	DQ0	7		Comp_of_IOL2A	True	
IOL4A	I/O	DQ0	7		True_of_IOL4B	True	
IOL4B	I/O	DQ0	7		Comp_of_IOL4A	True	
IOL6A	I/O	DQS0	7		True_of_IOL6B	True	
IOL6B	I/O	DQS0	7		Comp_of_IOL6A	True	
IOL8A	I/O	DQ0	7	LP1L1_T_fb	True_of_IOL8B	True	
IOL8B	I/O	DQ0	7	LP1L1_C_fb	Comp_of_IOL8A	True	
<b>BANK6 True LVDS Pair</b>							
IOL29A	I/O	DQ2	6	GCLKT_6	True_of_IOL29B	True	10
IOL29B	I/O	DQ2	6	GCLKC_6	Comp_of_IOL29A	True	11
IOL31A	I/O	DQ2	6		True_of_IOL31B	True	
IOL31B	I/O	DQ2	6		Comp_of_IOL31A	True	
IOL33A	I/O	DQ2	6		True_of_IOL33B	True	
IOL33B	I/O	DQ2	6		Comp_of_IOL33A	True	

Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOL35A	I/O	DQ2	6		True_of_IOL35B	True	
IOL35B	I/O	DQ2	6		Comp_of_IOL35A	True	
IOL38A	I/O	DQ2	6		True_of_IOL38B	True	
IOL38B	I/O	DQ2	6		Comp_of_IOL38A	True	
IOL40A	I/O	DQ2	6		True_of_IOL40B	True	
IOL40B	I/O	DQ2	6		Comp_of_IOL40A	True	
IOL42A	I/O	DQ2	6		True_of_IOL42B	True	
IOL42B	I/O	DQ2	6		Comp_of_IOL42A	True	
IOL44A	I/O	DQ2	6		True_of_IOL44B	True	
IOL44B	I/O	DQ2	6		Comp_of_IOL44A	True	
IOL47A	I/O	DQ3	6	LPPLL2_T_fb	True_of_IOL47B	True	15
IOL47B	I/O	DQ3	6	LPPLL2_C_fb	Comp_of_IOL47A	True	16
IOL49A	I/O	DQ3	6		True_of_IOL49B	True	17
IOL49B	I/O	DQ3	6		Comp_of_IOL49A	True	18
IOL51A	I/O	DQ3	6		True_of_IOL51B	True	19
IOL51B	I/O	DQ3	6		Comp_of_IOL51A	True	20
IOL53A	I/O	DQ3	6		True_of_IOL53B	True	
IOL53B	I/O	DQ3	6		Comp_of_IOL53A	True	
<b>BANK5 True LVDS Pair</b>							
IOB12A	I/O	DQ5	5		True_of_IOB12B	True	
IOB12B	I/O	DQ5	5		Comp_of_IOB12A	True	
IOB14A	I/O	DQ5	5		True_of_IOB14B	True	29
IOB14B	I/O	DQ5	5		Comp_of_IOB14A	True	30
IOB16A	I/O	DQ5	5		True_of_IOB16B	True	
IOB16B	I/O	DQ5	5		Comp_of_IOB16A	True	
IOB18A	I/O	DQ5	5		True_of_IOB18B	True	31
IOB18B	I/O	DQ5	5		Comp_of_IOB18A	True	32
IOB20A	I/O	DQ5	5		True_of_IOB20B	True	
IOB20B	I/O	DQ5	5		Comp_of_IOB20A	True	
IOB22A	I/O	DQ5	5		True_of_IOB22B	True	
IOB22B	I/O	DQ5	5		Comp_of_IOB22A	True	
IOB24A	I/O	DQ5	5		True_of_IOB24B	True	33

Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOB24B	I/O	DQ5	5		Comp_of_IOB24A	True	34
IOB26A	I/O	DQ5	5		True_of_IOB26B	True	
IOB26B	I/O	DQ5	5		Comp_of_IOB26A	True	
IOB2A	I/O	DQ4	5		True_of_IOB2B	True	
IOB2B	I/O	DQ4	5		Comp_of_IOB2A	True	
IOB4A	I/O	DQ4	5		True_of_IOB4B	True	
IOB4B	I/O	DQ4	5		Comp_of_IOB4A	True	
IOB6A	I/O	DQ4	5		True_of_IOB6B	True	25
IOB6B	I/O	DQ4	5		Comp_of_IOB6A	True	26
IOB8A	I/O	DQ4	5		True_of_IOB8B	True	27
IOB8B	I/O	DQ4	5		Comp_of_IOB8A	True	28
<b>BANK4 True LVDS Pair</b>							
IOB30A	I/O	DQ6	4	GCLKT_4	True_of_IOB30B	True	35
IOB30B	I/O	DQ6	4	GCLKC_4	Comp_of_IOB30A	True	36
IOB32A	I/O	DQ6	4		True_of_IOB32B	True	
IOB32B	I/O	DQ6	4		Comp_of_IOB32A	True	
IOB34A	I/O	DQ6	4		True_of_IOB34B	True	37
IOB34B	I/O	DQ6	4		Comp_of_IOB34A	True	38
IOB36A	I/O	DQ6	4		True_of_IOB36B	True	
IOB36B	I/O	DQ6	4		Comp_of_IOB36A	True	
IOB38A	I/O	DQ6	4		True_of_IOB38B	True	
IOB38B	I/O	DQ6	4		Comp_of_IOB38A	True	
IOB40A	I/O	DQ6	4		True_of_IOB40B	True	39
IOB40B	I/O	DQ6	4		Comp_of_IOB40A	True	40
IOB42A	I/O	DQ6	4		True_of_IOB42B	True	
IOB42B	I/O	DQ6	4		Comp_of_IOB42A	True	
IOB44A	I/O	DQ6	4		True_of_IOB44B	True	
IOB44B	I/O	DQ6	4		Comp_of_IOB44A	True	
IOB48A	I/O	DQS7	4		True_of_IOB48B	True	
IOB48B	I/O	DQS7	4		Comp_of_IOB48A	True	
IOB50A	I/O	DQ7	4		True_of_IOB50B	True	
IOB50B	I/O	DQ7	4		Comp_of_IOB50A	True	

Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOB52A	I/O	DQ7	4		True_of_IOB52B	True	
IOB52B	I/O	DQ7	4		Comp_of_IOB52A	True	
IOB54A	I/O	DQ7	4		True_of_IOB54B	True	
IOB54B	I/O	DQ7	4		Comp_of_IOB54A	True	
<b>BANK3 True LVDS Pair</b>							
IOR29A	I/O	DQ9	3	GCLKT_3	True_of_IOR29B	True	63
IOR29B	I/O	DQ9	3	GCLKC_3	Comp_of_IOR29A	True	61
IOR31A	I/O	DQ9	3	MODE2	True_of_IOR31B	True	
IOR31B	I/O	DQ9	3	RECONFIG_N	Comp_of_IOR31A	True	
IOR33A	I/O	DQ9	3	MI/D7	True_of_IOR33B	True	
IOR33B	I/O	DQ9	3	MO/D6	Comp_of_IOR33A	True	
IOR35A	I/O	DQ9	3	FASTRD_N /D3	True_of_IOR35B	True	
IOR35B	I/O	DQ9	3	SI/D2	Comp_of_IOR35A	True	
IOR38A	I/O	DQ9	3	DIN/CLKHOLD_N	True_of_IOR38B	True	54
IOR38B	I/O	DQ9	3	DOOUT/WE_N	Comp_of_IOR38A	True	53
IOR40A	I/O	DQ9	3		True_of_IOR40B	True	
IOR40B	I/O	DQ9	3		Comp_of_IOR40A	True	
IOR42A	I/O	DQ9	3		True_of_IOR42B	True	
IOR42B	I/O	DQ9	3		Comp_of_IOR42A	True	
IOR44A	I/O	DQ9	3		True_of_IOR44B	True	
IOR44B	I/O	DQ9	3		Comp_of_IOR44A	True	
IOR47A	I/O	DQ8	3	RPLL2_T_fb	True_of_IOR47B	True	
IOR47B	I/O	DQ8	3	RPLL2_C_fb	Comp_of_IOR47A	True	
IOR49A	I/O	DQ8	3		True_of_IOR49B	True	49
IOR49B	I/O	DQ8	3		Comp_of_IOR49A	True	48
IOR51A	I/O	DQ8	3		True_of_IOR51B	True	
IOR51B	I/O	DQ8	3		Comp_of_IOR51A	True	
IOR53A	I/O	DQ8	3		True_of_IOR53B	True	
IOR53B	I/O	DQ8	3		Comp_of_IOR53A	True	
<b>BANK2 True LVDS Pair</b>							
IOR11A	I/O	DQ10	2		True_of_IOR11B	True	
IOR11B	I/O	DQ10	2		Comp_of_IOR11A	True	

Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOR13A	I/O	DQ10	2		True_of_IOR13B	True	
IOR13B	I/O	DQ10	2		Comp_of_IOR13A	True	
IOR15A	I/O	DQ10	2		True_of_IOR15B	True	
IOR15B	I/O	DQ10	2		Comp_of_IOR15A	True	
IOR17A	I/O	DQ10	2		True_of_IOR17B	True	
IOR17B	I/O	DQ10	2		Comp_of_IOR17A	True	
IOR20A	I/O	DQ10	2		True_of_IOR20B	True	
IOR20B	I/O	DQ10	2		Comp_of_IOR20A	True	
IOR22A	I/O	DQS10	2		True_of_IOR22B	True	
IOR22B	I/O	DQS10	2		Comp_of_IOR22A	True	
IOR24A	I/O	DQ10	2		True_of_IOR24B	True	
IOR24B	I/O	DQ10	2		Comp_of_IOR24A	True	
IOR26A	I/O	DQ10	2	TCK	True_of_IOR26B	True	6
IOR26B	I/O	DQ10	2	TDI	Comp_of_IOR26A	True	7
IOR2A	I/O	DQ11	2		True_of_IOR2B	True	
IOR2B	I/O	DQ11	2		Comp_of_IOR2A	True	
IOR4A	I/O	DQ11	2		True_of_IOR4B	True	
IOR4B	I/O	DQ11	2		Comp_of_IOR4A	True	
IOR6A	I/O	DQS11	2		True_of_IOR6B	True	
IOR6B	I/O	DQS11	2		Comp_of_IOR6A	True	
IOR8A	I/O	DQ11	2	RPLL1_T_fb	True_of_IOR8B	True	
IOR8B	I/O	DQ11	2	RPLL1_C_fb	Comp_of_IOR8A	True	
<b>BANK1 True LVDS Pair</b>							
IOT30A	I/O	DQ13	1	GCLKT_1	True_of_IOT30B	True	77
IOT30B	I/O	DQ13	1	GCLKC_1	Comp_of_IOT30A	True	76
IOT32A	I/O	DQ13	1		True_of_IOT32B	True	
IOT32B	I/O	DQ13	1		Comp_of_IOT32A	True	
IOT34A	I/O	DQ13	1		True_of_IOT34B	True	75
IOT34B	I/O	DQ13	1		Comp_of_IOT34A	True	74
IOT36A	I/O	DQ13	1		True_of_IOT36B	True	
IOT36B	I/O	DQ13	1		Comp_of_IOT36A	True	
IOT38A	I/O	DQ13	1		True_of_IOT38B	True	

Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOT38B	I/O	DQ13	1		Comp_of_IOT38A	True	
IOT40A	I/O	DQ13	1		True_of_IOT40B	True	73
IOT40B	I/O	DQ13	1		Comp_of_IOT40A	True	72
IOT42A	I/O	DQ13	1		True_of_IOT42B	True	
IOT42B	I/O	DQ13	1		Comp_of_IOT42A	True	
IOT44A	I/O	DQ13	1		True_of_IOT44B	True	71
IOT44B	I/O	DQ13	1		Comp_of_IOT44A	True	70
IOT48A	I/O	DQS12	1		True_of_IOT48B	True	
IOT48B	I/O	DQS12	1		Comp_of_IOT48A	True	
IOT50A	I/O	DQ12	1		True_of_IOT50B	True	
IOT50B	I/O	DQ12	1		Comp_of_IOT50A	True	
IOT52A	I/O	DQ12	1		True_of_IOT52B	True	
IOT52B	I/O	DQ12	1		Comp_of_IOT52A	True	
IOT54A	I/O	DQ12	1		True_of_IOT54B	True	
IOT54B	I/O	DQ12	1		Comp_of_IOT54A	True	
<b>BANK0 True LVDS Pair</b>							
IOT12A	I/O	DQ14	0		True_of_IOT12B	True	
IOT12B	I/O	DQ14	0		Comp_of_IOT12A	True	
IOT14A	I/O	DQ14	0		True_of_IOT14B	True	
IOT14B	I/O	DQ14	0		Comp_of_IOT14A	True	
IOT16A	I/O	DQ14	0		True_of_IOT16B	True	
IOT16B	I/O	DQ14	0		Comp_of_IOT16A	True	
IOT18A	I/O	DQ14	0		True_of_IOT18B	True	
IOT18B	I/O	DQ14	0		Comp_of_IOT18A	True	
IOT20A	I/O	DQ14	0		True_of_IOT20B	True	
IOT20B	I/O	DQ14	0		Comp_of_IOT20A	True	
IOT22A	I/O	DQ14	0		True_of_IOT22B	True	
IOT22B	I/O	DQ14	0		Comp_of_IOT22A	True	
IOT24A	I/O	DQ14	0		True_of_IOT24B	True	
IOT24B	I/O	DQ14	0		Comp_of_IOT24A	True	
IOT26A	I/O	DQ14	0		True_of_IOT26B	True	
IOT26B	I/O	DQ14	0		Comp_of_IOT26A	True	

Pin Name	Function	DQS	BANK	Configuration Function	Differential Pair	LVDS	QN88
IOT2A	I/O	DQ15	0		True_of_IOT2B	True	
IOT2B	I/O	DQ15	0		Comp_of_IOT2A	True	
IOT4A	I/O	DQ15	0		True_of_IOT4B	True	86
IOT4B	I/O	DQ15	0		Comp_of_IOT4A	True	85
IOT6A	I/O	DQ15	0		True_of_IOT6B	True	84
IOT6B	I/O	DQ15	0		Comp_of_IOT6A	True	83
IOT8A	I/O	DQ15	0		True_of_IOT8B	True	
IOT8B	I/O	DQ15	0		Comp_of_IOT8A	True	