BST14288 CPLD
Product Brochure
Ver . 5.3

Product Overview

BST14288 is a high-density, high-performance complex programmable logic device (CPLD) based on the "product term" principle, with 6400 available gates; core power supply voltage is 3.3V/5V, I/O voltage is 3.3V/5V; the number of logic arrays (FB) is 16, with 288 trigger resources; operating temperature range is -55℃～+125℃, Pin-to-Pin maximum delay time : 10 ns , maximum system frequency is 93.3MHz; ESD protection is not less than 4000V.

Table 1Basic information of products

Package	C QFP208 (ceramic)	LQFP208 (Plastic)	C QFP 160 (Ceramic)
Available	168		133
Macrocell	2 88		
Available	6 400		
T_{PD} (ns)	1 0		
F_{CNT}	9 3.3		

Product features

- 5V in-system programming capability based on IEEE Std.1149.1 JTAG protocol ;
- Compatible with Xilinx burning software IMPACT to perform JTAG operations on the chip ;
- The core power supply voltage is 5V/3.3V , and the IO voltage is 5V/3.3V ;
- Maximum pin delay of 10ns ;
- 16 -bit counter frequency Fcnt (same FB) up to 93.3 MHz ;
- In the same FB , 90 Product Terms can drive any macro cell (MC);
- The power consumption mode of each macro cell can be independently programmed to reduce its power consumption by 20% or more;

- Each output can configure its slew rate;
- Support hot-swap;
- ESD protection is greater than or equal to 4 000V ;
- Macrocell registers can be programmed for independent clear, set, clock, and clock enable control;
- Programmable device encryption bits protect user designs;
- It has three invertible global clocks;
- Unconfigured pins can be configured to be grounded;
- Applications: These devices are widely used in applications such as bus bridging, I/O expansion, power-on reset (POR), timing control, and device initialization control.

Functional Block Diagram

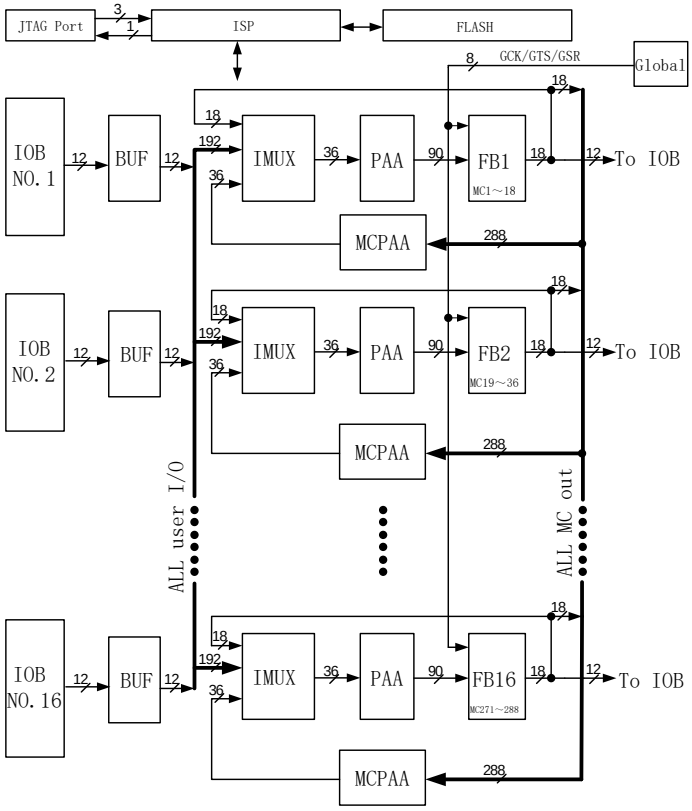

Figure 1 BST14288 block diagram

Ordering Information

Product Model	Quality Grade	Package	Lead material	Packaging materials	Detailed specifications	Product Status
BST14288 MCPCQFP208	Class B	CQFP208	Nickel plating Gold plating	ceramics	Q/BST 20304-2017	Mass production
BST14288-10MLQFP208N	N -level	QFP208	Tinning	plastic	Q/BST 20242-2015	Mass production
BST14288 -ACQFP160M1	Class B	CQFP208	Nickel plating Gold plating	ceramics	Q/BST 50043-2021	Mass production