

BST14144XL Series FPGA

Product Brochure

Ver.1.1

Product Overview

BST 14144XL is a high-density, high-performance complex programmable logic device (CPLD) based on the "product term" principle , with 3200 available gates; core power supply voltage is 3.3 V , IO voltage is 3.3V/2.5v ; 144 macro units, 144 registers; operating temperature range is -55 °C ~ +125 °C, Pin-to-Pin maximum delay time: 10 ns (-55 °C ~ +125 °C), the highest system frequency is 150 MHz ; the package form is ceramic CQFP100, the user can use IO for 81; ESD protection is greater than or equal to 2000V . This type of chip is widely used in computer bus systems and industrial control, military, communications, office automation and other fields. This product is compatible with foreign device information as follows:

Product Features

It has 144 macrocells and up to 81 user-available I/Os. Users can customize chip functions and program them through a universal in-system programming interface. It uses a 3.3V core power supply, and I/O can be selected from a variety of voltages such as 3.3V and 2.5V . The chip has low power consumption and a typical system clock frequency of up to 150MHZ.

- In-system programmable
- -Quick connect switch matrix
- 54-input function block
- Up to 90 product terms per macrocell
- Clock resources have 3 global clocks
- -Each output pin has independent output enable
- All user input pins have bus hold function
- Support hot plug
 - 144 macrocells , 3200 usable gates
 - Fast programmable
 - Output slow slew rate control
 - High performance and high reliability
- 10,000 program/erase cycles
- 20 years data retention

Compatible models

Our product model	Replacement	Alternative	Alternative
BST14144XL-10M CQFP100	XC95144XL CQFP100	Xilinx	USA

Functional Block Diagram

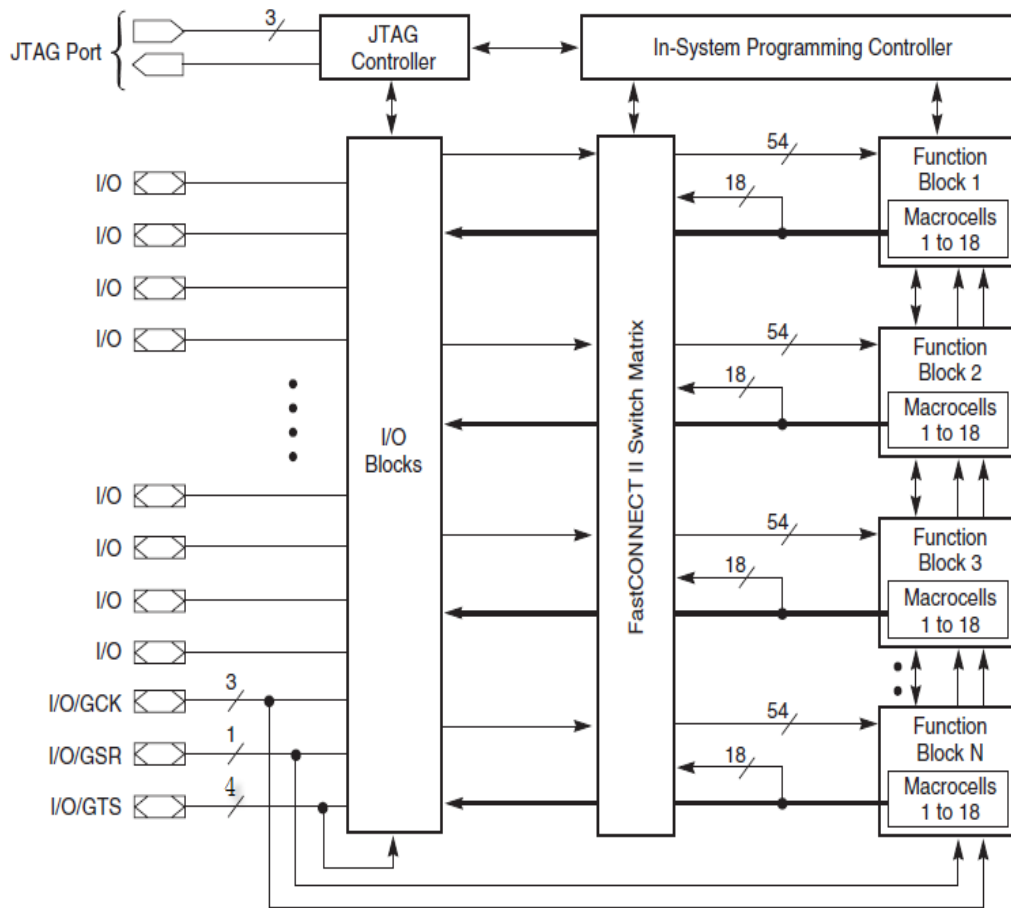


Figure 1: BST14144XL block diagram

Note : The output of the functional module (indicated by bold lines) directly drives the I/O module