

BSTS4028

Programmable logic array circuit

Military Product Manual

Product overview

The circuit is based on an SRAM-type field programmable logic array, which can replace a 28,000-gate fixed digital logic circuit, including a 32×32 CLB array, a total of 2432 logic cells and 2560 D flip-flops. The chip has a maximum user IO of 256 and a maximum system frequency of 60MHz.

Product features

- This circuit is fully pin and functionally compatible with the XQ4028EXPG299-4 circuit.
- Field Programmable Gate Array-Featured Systems
 - Select-RAMTM Memory: On-chip ultra-fastRAM Configuration
 - Synchronous write option
 - Dual Port RAM Options
 - Rich triggers
 - Flexible function generator
 - Dedicated high-speed carry logic
 - Broadside Decoder
 - Interconnect layer structure
 - Internal tri-state bus performance
 - Eight general-purpose low-skew clock signal distribution networks
- Over 60 MHz system performance
- Flexible array architecture
- Low power segmented wiring architecture

- System-oriented features
 - Support and IEEE 1149.1 Compatible boundary scan logic n
 - Independently programmable output slew rate
 - Programmable input pull-up or pull-down resistors
- Load the binary file to complete the configuration
 - Unlimited reprogrammability
- Readback function
 - Program Verification
 - Internal Node Testability
- Backward compatible with XC4000 devices
- Development system that runs on most common computer platforms
- Interfaces to popular design environments
 - Fully automatic mapping, placement and routing
 - Interactive design editor for optimized design