

XC2C128-7VQG100I

Data Sheet

CPLD CoolRunner - II Family 3K Gates 128 Macro Cells 152MHz 0.18um (CMOS) Technology 1.8V

Manufacturers	AMD Xilinx, Inc		
Package/Case	100-TQFP	✓ 502000 × 202122 × 41 × 610094512 × 10094512 × 10094512 × 10094512 × 10094512 × 10094512 × 10094512 × 100945 × 10095 × 10095 × 10095 × 10095 × 10095 × 10095 × 1009 × 10095 × 1009 × 100 × 100	XC20128 ¹⁴ VOG1008451211 F1382492X 71
Product Type	Programmable Logic ICs		N
		Images are	for reference only
RoHS			
Lifecycle			
Please submit RFQ	for XC2C128-7VQG100I or Email to us: sales@e	<u>ovaga.com</u> We will contact you in 12 hours.	RFQ

General Description

XC2C128-7VQG100I is a specific model of the Xilinx CoolRunner-II CPLD (Complex Programmable Logic Device) family. It is a CPLD that has 128 macrocells, operates with a maximum of 7.5ns pin-to-pin delay (7V speed grade), and comes in a VQG100 package, which has 100 pins in a quad flat no-lead (QFN) configuration. The "I" at the end of the part number indicates the industrial temperature range, which typically covers a temperature range of -40°C to 100°C.

Features

128 macrocells: These are programmable logic cells that can be registered logic, and state machine logic.

600 usable gates: These are equivalent gates that can be utilized for implementing digital logic circuits.

64 user I/O pins: These are general-purpose input/output pins that can be used to interface with external devices or other digital logic circuits.

3.3V operation: The XC2C128-7VQG100I operates with a supply voltage of 3.3V, which is a common voltage level used in many digital systems.

In-system programmable (ISP): The CPLD can be programmed while it is in the system, allowing for updates and reconfiguration without the need for physical reprogramming.

Application

Embedded control systems: The CPLD can be used for implementing configured to perform various functions, such as combinational logic, various control functions, such as interfacing with sensors, driving actuators, and implementing custom logic for system control.

> Communications systems: The XC2C128-7VQG100I can be used for implementing digital signal processing (DSP) functions, protocol converters, and other communication-related functions.

> Industrial automation: The CPLD can be used in industrial control systems for implementing logic functions, interfacing with sensors and actuators, and controlling other subsystems.



Related Products



XC18V01S020C AMD Xilinx, Inc



SOP-20

XCF04SV0G20C AMD Xilinx, Inc TSSOP20





BGA-225







XCF08PV0G48C

AMD Xilinx, Inc TSOP-48

XC6SLX25-3FTG256C

AMD Xilinx, Inc **BGA-256**

XC6SLX16-3CSG324C

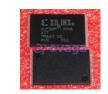
AMD Xilinx, Inc **BGA-324**

Ovaga Technologies Limited



XCV50-6BG256C

AMD Xilinx, Inc BGA256



XCF32PVO48C AMD Xilinx, Inc TSOP48