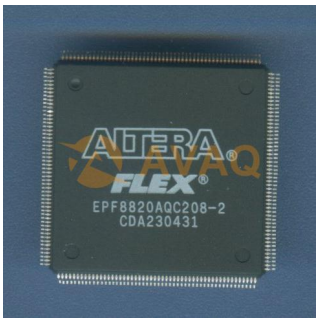
EPF8820AQC208-2

FPGA FLEX 8000 Family 8K Gates 672 Cells 125MHz 0.42um Technology 5V 208-Pin PQFP



Images are for reference only

Manufacturer:	Intel Corp
Package/Case:	QFP
Product Type:	Programmable Logic ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Obsolete

Inquiry

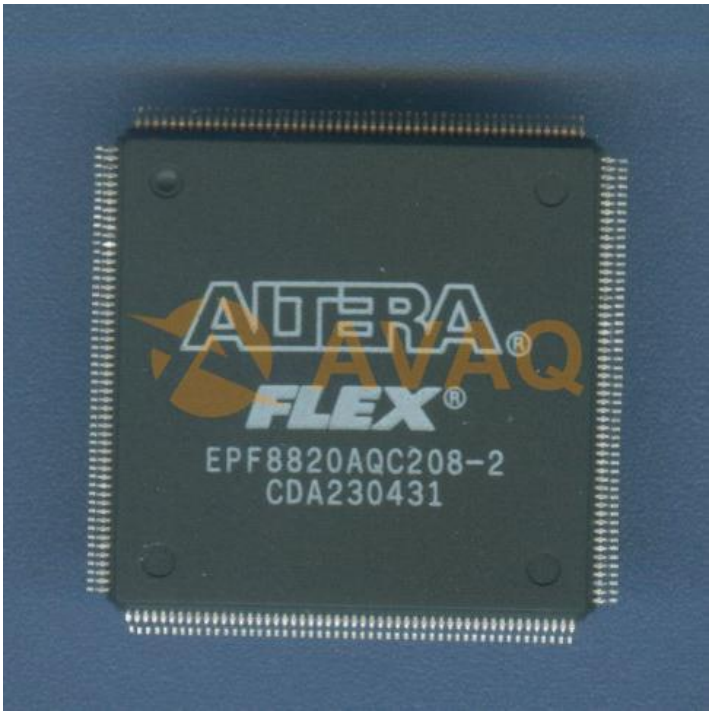
General Description

Altera's Flexible Logic Element MatriX (FLEX®) family combines the benefits of both erasable programmable logic devices (EPLDs) and fieldprogrammable gate arrays (FPGAs). The FLEX 8000 device family is ideal for a variety of applications because it combines the fine-grained architecture and high register count characteristics of FPGAs with the high speed and predictable interconnect delays of EPLDs. Logic is implemented in LEs that include compact 4-input look-up tables (LUTs) and programmable registers. High performance is provided by a fast, continuous network of routing resources.

FLEX 8000 devices provide a large number of storage elements for applications such as digital signal processing (DSP), wide-data-path manipulation, and data transformation. These devices are an excellent choice for bus interfaces, TTL integration, coprocessor functions, and high-speed controllers. The high-pin-count packages can integrate multiple 32-bit buses into a single device.

All FLEX 8000 device packages provide four dedicated inputs for synchronous control signals with large fan-outs. Each I/O pin has an associated register on the periphery of the device. As outputs, these registers provide fast clock-to-output times; as inputs, they offer quick setup times.

The logic and interconnections in the FLEX 8000 architecture are configured with CMOS SRAM elements. FLEX 8000 devices are configured at system power-up with data stored in an industry-standard parallel EPROM or an Altera serial configuration devices, or with data provided by a system controller. Altera offers the EPC1, EPC1213, EPC1064, and EPC1441 configuration devices, which configure FLEX 8000 devices via a serial data stream. Configuration data can also be stored in an industry-standard 32 K × 8 bit or larger configuration device, or downloaded from system RAM. After a FLEX 8000 device has been configured, it can be reconfigured in-circuit by resetting the device and loading new data. Because reconfiguration requires less than 100 ms, realtime changes can be made during system operation.



Recommended For You

EPM3256AQC208-10N
Intel Corp
QFP208

EPCQ32ASI8N
Intel Corp
SOP8

EPCQ32SI8N
Intel Corp
SOP8

EPCQ64ASI16N
Intel Corp
SOP16

EPCQ16SI8N
Intel Corp
SOP8

EPC2TI32
Intel Corp
QFP

EPM7128STC100-15N
Intel Corp
QFP100

EP1C6Q240I7N
Intel Corp
QFP240

EPCQ128SI16N
Intel Corp
SOP16

EPM7128SLC84-15N
Intel Corp
PLCC

EPC1213PC8
Intel Corp
DIP8

EP1K30TC144-3N
Intel Corp
QFP

EPCS1SI8
Intel Corp
SOP-8

EPC1PI8N
Intel Corp
DIP8

EPC2LI20N
Intel Corp
PLCC