

# **Inside a CPU.**

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**Camboard**

A step by step illustrative guide to how data moves around a CPU. Inside a CPU shows the steps data makes as it travels through the CPU.

The book begins with data entering the CPU through the system bus.

Next we see data entering the bus interface unit.

From here a copy of data is made to the CPU caches.

The fetch/decode unit and branch target buffer is next followed by the re-order buffer.

The arithmetic and logic unit followed by the dispatch/execute unit .

The book concludes as data is transferred into system memory.

This full color guide will be useful to students studying computer science

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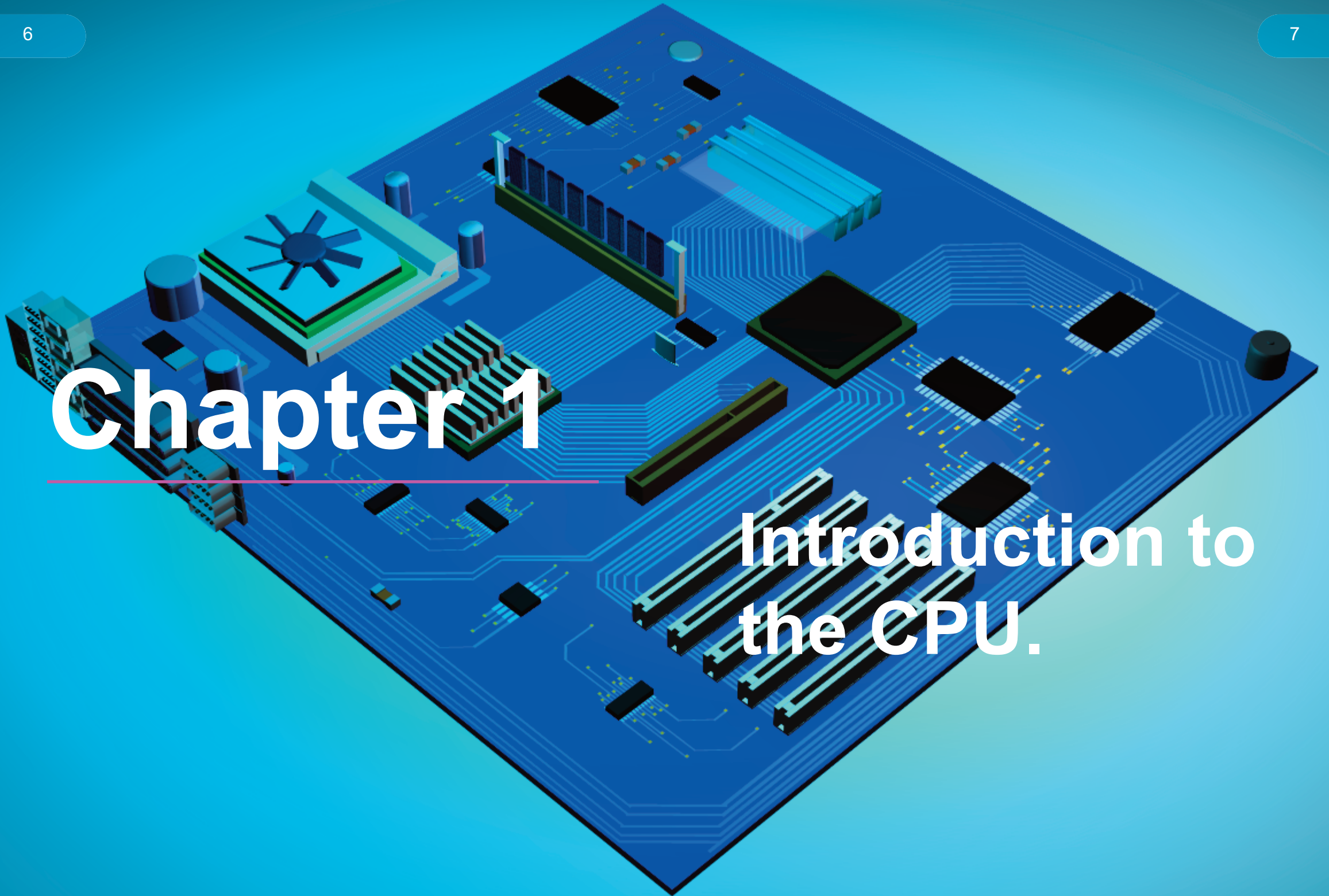
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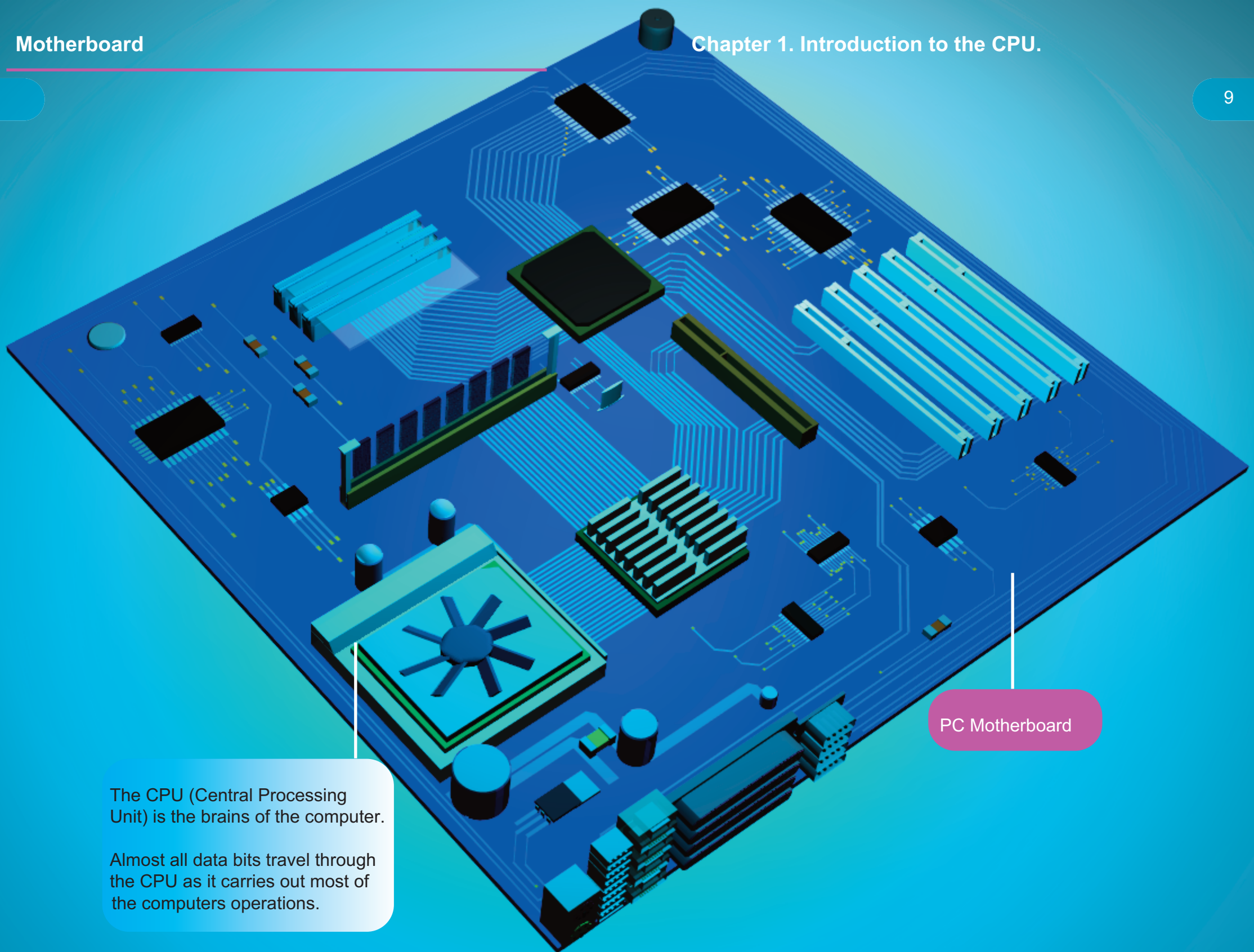
# Chapter 1

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Introduction to  
the CPU.







The CPU (Central Processing Unit) is the brains of the computer.

Almost all data bits travel through the CPU as it carries out most of the computers operations.

PC Motherboard



CPU with cooling fan

System Memory

The real time clock is an electrical crystal quartz that sends out a timing signal at a certain frequency that all the microprocessors synchronize with. The clock ensures all data bits are transferred in step at the right time.

In this book as data moves around the CPU we show this in red.



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