# Section 1

# Introduction

The TMS7000 is a family[1] of 8-bit single-chip microcontrollers. These microcontrollers incorporate a CPU, memory (ROM, RAM, EPROM), bit I/O, serial communications port, timers, interrupts, and external bus interface logic, all on a single chip. The CMOS members of the family provide an outstanding speed/power ratio as a result of the reliable silicon-gate CMOS technology.

Eight-bit microcontrollers have the versatility to cover a wide spectrum of applications. Texas Instruments has two microcontroller families -- TMS7000 and TMS370 -- which provide reliable alternatives to satisfy the design requirements.
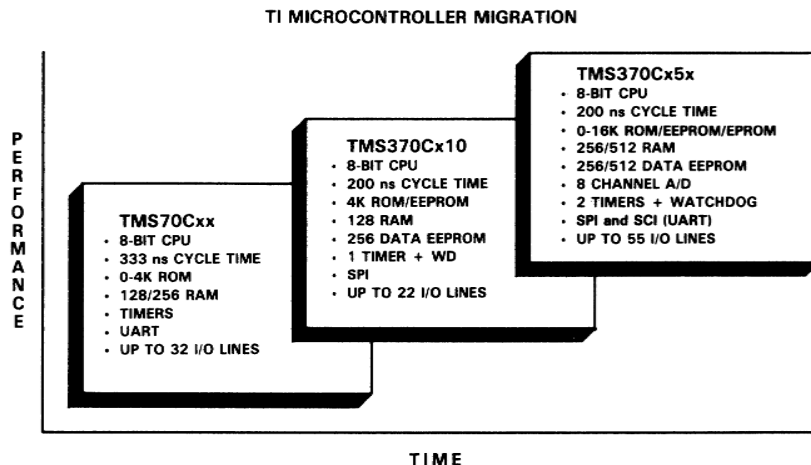
TI MICROCONTROLLER MIGRATION



Figure 1-1. TI CMOS 8-bit Microcontroller Spectrum

As shown in Figure 1-1, the TMS7000 satisfies those applications in the low to mid range. On the other hand, the TMS370 family with its on-chip EEPROM, superior performance and other peripheral support functions in-

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[1] The terms *TMS7000* and *TMS7000 family* refer to all TMS7000 devices: TMS7000, TMS7020, TMS7040, TMS7002, TMS7042, TMS70C00, TMS70C20, TMS70C40, TMS70C02, TMS70C42, TMS70CT20, TMS70CT40, TMS7742 and all future members, unless otherwise stated.