MOS IC

Туре	Ordering code	Package
SDA 2085	Q67120-C220	PLCC 68
SDA 2087	Q67120-C262	PLCC 68

This application-oriented single-chip microcomputer is an upgraded version of the SDA 2040/60/80/82, i.e. all the features of the SDA 2040/60/80/82 are available as a subset. Component SDA 2085 has an internal program memory, SDA 2087, however, does not.

Features

- Fully compatible with SAB 8051
- Program memory either 8 Kbyte internal ROM (SDA 2085 only)

or 64 Kbyte external ROM

Data memory 256 byte internal RAM

64 Kbyte RAM can be connected externally

(internal and external RAM can be used simultaneously)

- Six 8-bit ports
- 56 I/O ports
- 12 interrupt sources (5 internal, 7 external)
- High degree of interference resistance due to built-in watchdog timer
- 8 analog inputs
- High-precision 8-bit A/D converter, total conversion time 20 μs at 12 MHz clock frequency
- Programmable reference voltage in 16 steps to define the A/D converter operating voltage, thus making possible an input voltage quantisation in 4096 steps
- Power-down mode with data retention of 40 bytes of internal RAM at a typical supply current of 1 mA
- Temperature range 0 to 70 °C

A detailed data sheet for the SDA 2085/2087 is available upon request.