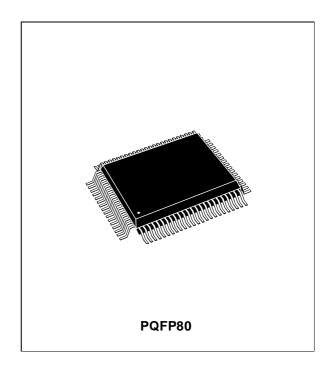


## ST7285C

## 8-BIT MCU FOR RDS WITH 48K ROM, 3K RAM, ADC, TWO TIMERS, TWO SPIs, I<sup>2</sup>C AND SCI INTERFACES

**BRIEF DATA** 

- 4.5 V to 5.5 V Supply Operating Range
- Operates at 8.664MHz Oscillator Frequency for RDS compatibility
- Fully Static operation
- -40°C to + 85°C Maximum Operating Temperature Range
- Run, Wait, Slow, Halt and RAM Retention modes
- User ROM: 48 Kbytes
- Data RAM: 3 Kbytes, including 128 byte stack
- 80 pin plastic package
- 62 multifunctional bidirectional I/O lines:
  - Programmable Interrupt inputs on some I/Os
  - 8 Analog inputs
  - EMI filtering
- Two 16-bit Timers, each featuring:
  - 2 Input Captures
  - 2 Output Compares
  - External Clock input (on Timer A)
  - PWM and Pulse Generator modes
- RDS Radio Data System Filter, Demodulator and GBS circuits
- 8-bit Analog-to-Digital converter with 8 channel analog multiplexer
- Digital Watchdog
- Two SPI Serial Peripheral Interfaces
- SCI Serial Communications Interface
- Full I<sup>2</sup>C multiple Master/Slave interface
- 2KHz Beep signal generator
- Master Reset and Power-On Reset
- 8-bit Data Manipulation
- 63 Basic Instructions
- 17 main Addressing Modes
- 8 x 8 Unsigned Multiply Instruction
- True Bit Manipulation
- Complete Development Support on PC/DOS/ Windows<sup>TM</sup> Real-Time Emulator
- Full Software Package (C-Compiler, Cross-Assembler, Debugger)



October 1997 1/1