

概述

1. General Description

This EPROM-Based 8-bit micro-

controller uses a fully static CMOS technology process

to achieve higher speed and smaller size with

the low power consumption and high noise immunity.

On chip memory includes 2K words of ROM, and

128 bytes of static RAM.

2. Features

The followings are some of the

features on the hardware and software:

- ? Fully CMOS static design
- ? 8-bit data bus
- ? On chip EPROM size: 2.0 K words
- ? Internal RAM size: 128 bytes
- ? 37 single word instructions
- ? 14-bit instructions
- ? 8-level stacks
- ? Operating voltage:2.5V~5.5V(PRD

disable)

4.5V~5.5V(PRD enable)

? Operating frequency: DC ~ 20 MHz

? The most fast execution time is 200

ns

under 20MHz in all single cycle instructions except the branch

instruction

? Addressing modes include direct,

indirect

and relative addressing modes

? Power-on Reset

? Power edge-detector Reset

? Power range-detector Reset

? Sleep Mode for power saving

? Capture, Compare, PWM module

? 7 interrupt sources:

-External INT pin

-TMR0 timer, TMR1 timer, TMR2 timer

-A/D conversion completion

-PortB<7:4>interrupt on change

-CCP

? A/D converter module:

-4 analog inputs multiplexed into one

A/D

converter

-8-bit resolution

? TMR0: 8-bit real time clock/counter

TMR1: 16-bit real time clock/counter

TMR2: 8-bit clock/counter

? 4 types of oscillator can be

selected by

programming option:

RC— Low cost RC oscillator

LFXT— Low frequency crystal

oscillator

XTAL— Standard crystal oscillator

HFXT— High frequency crystal

oscillator

? On-chip RC oscillator based

Watchdog

Timer (WDT)

? 13 I/O pins with their own

independent

direction control

3. Applications

The application areas of this 10P716 range from appliance motor control

and high speed auto-motive to low power remote transmitters/receivers, pointing

devices, and telecommunications processors, such

as Remote controller, small instruments,

chargers, toy, automobile and PC peripheral ...

etc.