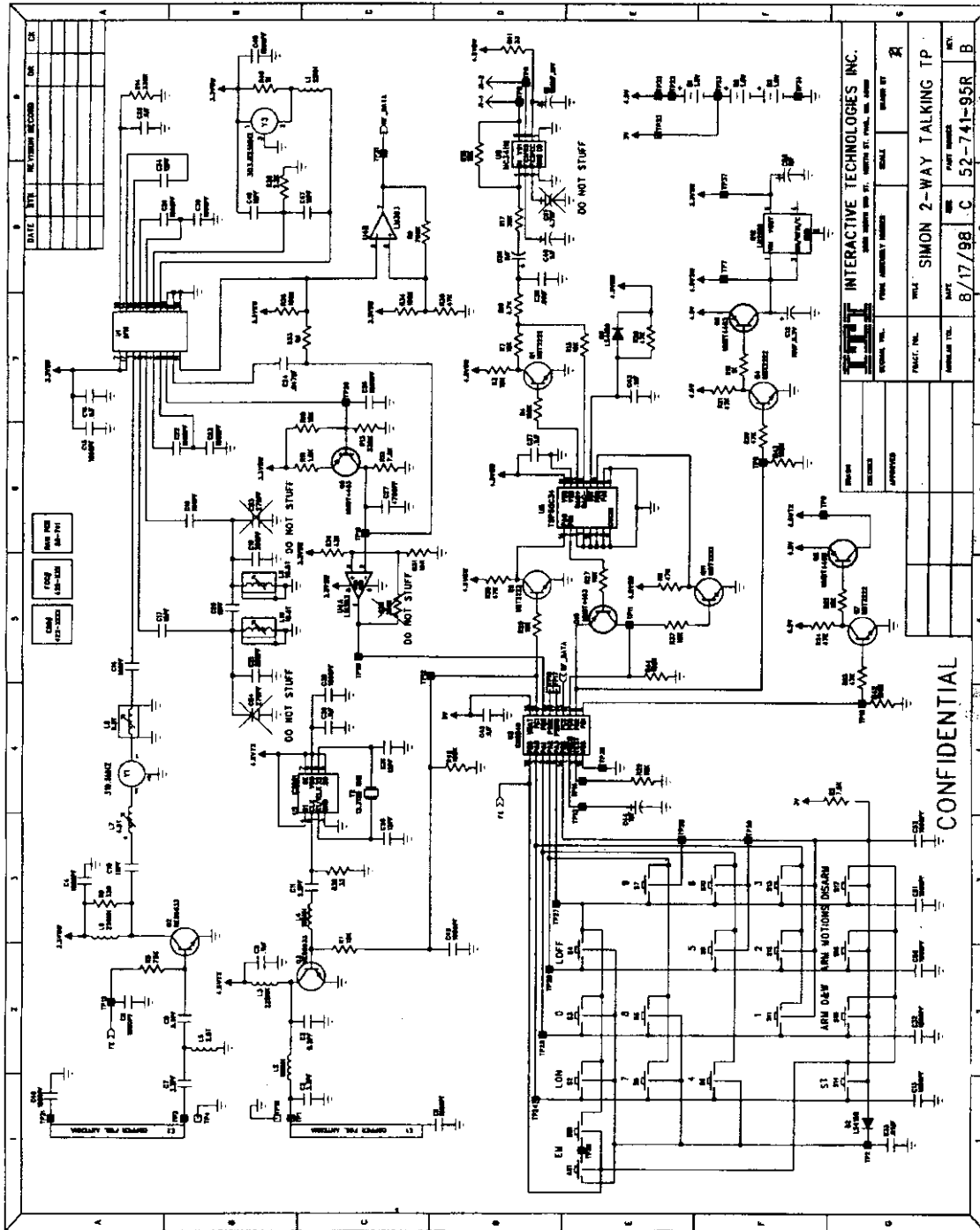




INTERACTIVE TECHNOLOGIES INCORPORATED

PRODUCT SCHEMATICS

* **NOTE:**Schematics give pertinent information on oscillators, crystal frequency and microprocessors.



EM MICROELECTRONIC-MARIN SA

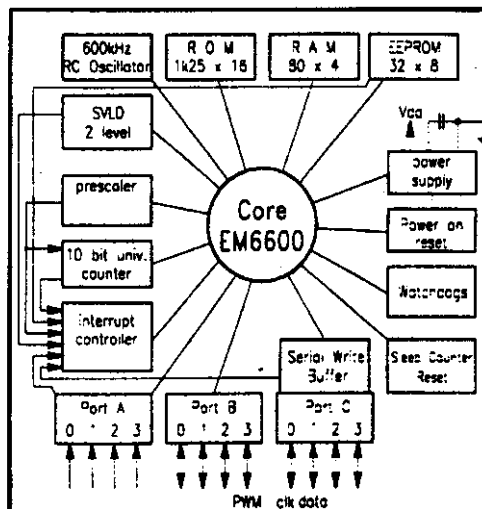
une société de la **STET**

EM6640 4 bit Microcontroller

Features

- Low Power
 - 28µA active mode
 - 11µA standby mode
 - 0.3µA sleep mode
- @ 1.8V, 600kHz, 25°C, typ
- Voltage Range - 1.8 to 3.6 V
- Supply voltage level detection (SVLD)
- ROM - 1k25 x 16
- RAM - 80 x 4
- EEPROM - 32 x 8
- 2 clocks per instruction cycle
- 72 basic instructions
- RC oscillator
- Oscillation detection circuit / Digital watchdog timer reset.
- max. 12 inputs (3 ports)
- max. 8 outputs (2 ports)
- Serial Write Buffer - 256 bits (SWB)
- 10 bit up/down counter with PWM capability
- frequency output 600kHz, 37.5kHz, 2.3kHz, PWM
- Sleep Counter Reset (SCR) programmable.
- 8 internal interrupt sources (3xprescaler, 2xtimer, 1xSWB, 1xSVLD, 1xEEPROM)
- 4 external interrupt sources (port A)
- Reset with input combinations

Figure 1 Architecture



Description

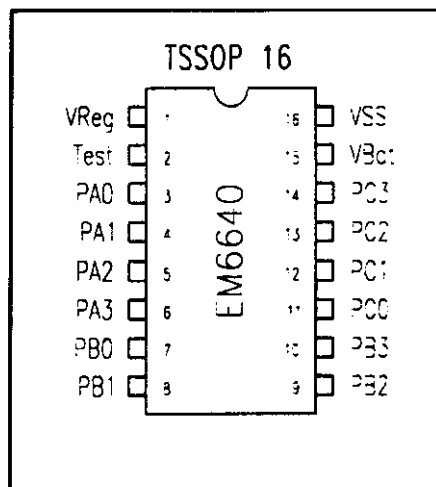
The EM66XX series is an advanced single chip low cost CMOS 4-bit microcontroller. It contains ROM, RAM, EEPROM, watchdog timer, oscillation detection circuit, 10 bit up/down counter, prescaler, supply voltage level detector (SVLD), sleep counter reset (SCR), frequency output and SWB.

The low voltage feature and low power consumption make it the most suitable controller for battery, stand alone and mobile equipment. The EM66XX series is manufactured using EM's Advanced Low Power (ALP) CMOS Process.

Typical Applications

- remote controls
- medical applications
- domestic appliance
- safety and security devices
- measurement equipment
- interactive system
- keyless entry with rolling code

Figure 2 Pin Configuration



B4Z-741-HHTP