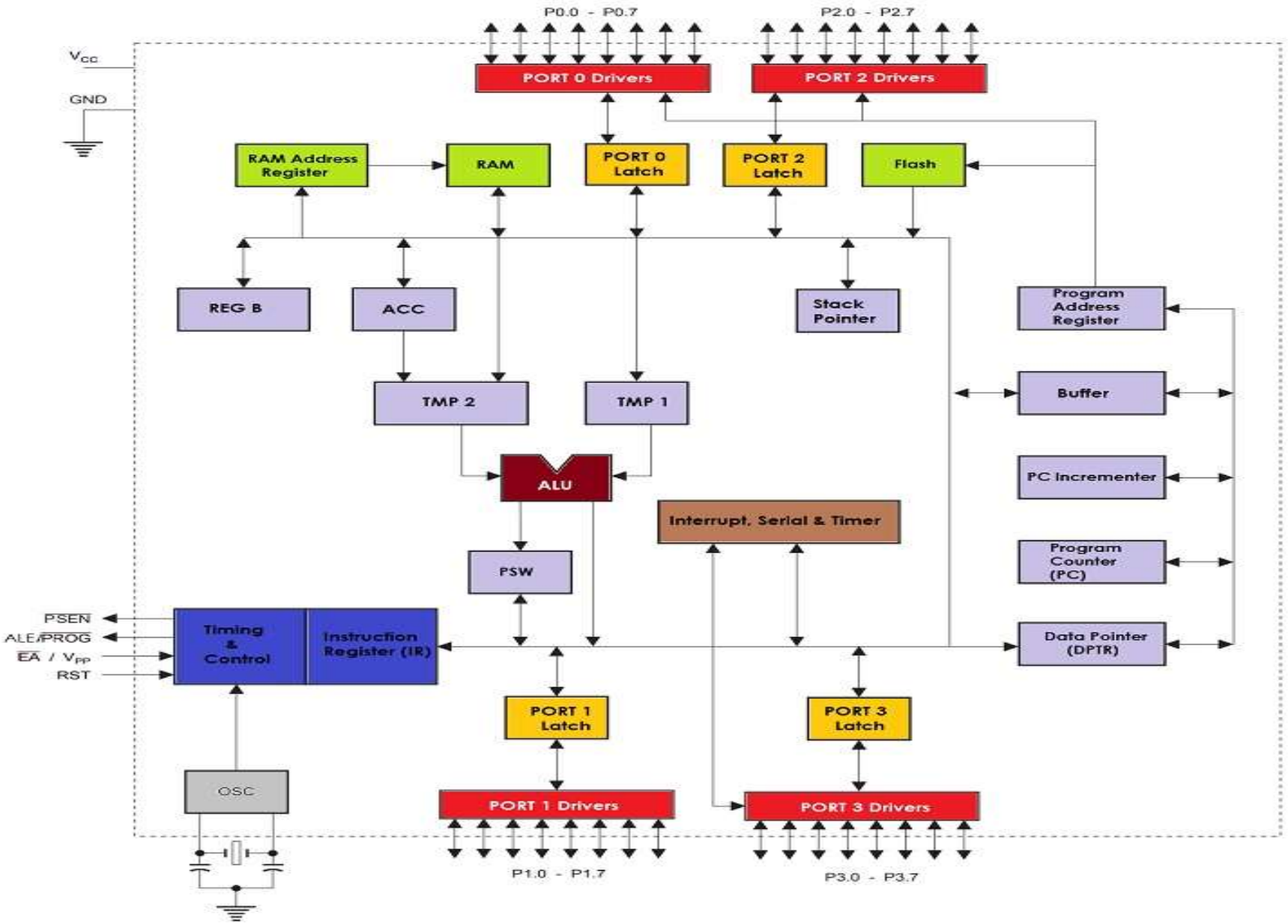
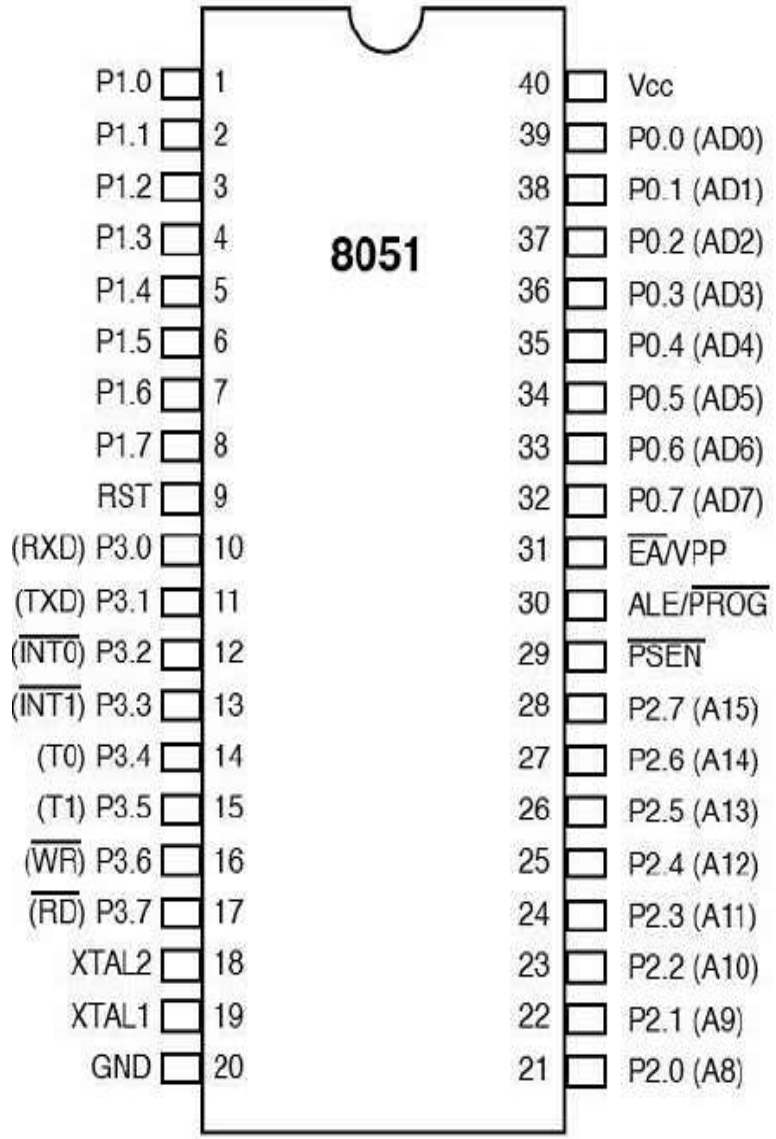
8051 ARCHITECTURE



8051 PIN DIAGRAM



8051 PIN DIAGRAM

- **Pins 1 to 8** − known as Port 1 and doesn't serve any other functions. It is internally pulled up, bi-directional I/O port.
- **Pin 9** − RESET pin, which is used to reset the microcontroller to its initial values.
- **Pins 10 to 17** − known as Port 3 and serves some functions like interrupts, timer input, control signals, serial communication signals RxD and TxD, etc.
- **Pins 18 & 19** − used for interfacing an external crystal to get the system clock.
- **Pin 20** − provides the power supply to the circuit.
- **Pins 21 to 28** − known as Port 2. It serves as I/O port. Higher order address bus signals are also multiplexed using this port.

8051 PIN DIAGRAM

- **Pin 29** − PSEN pin which stands for Program Store Enable and is used to read a signal from the external program memory.
- **Pin 30** − EA pin which stands for External Access input and used to enable/disable the external memory interfacing.
- **Pin 31** − ALE pin which stands for Address Latch Enable and used to demultiplex the address-data signal of port.
- **Pins 32 to 39** − known as Port 0. It serves as I/O port. Lower order address and data bus signals are multiplexed using this port.
- **Pin 40** − used to provide power supply to the circuit.

8051 PIN DIAGRAM

- **Pin 29** − PSEN pin which stands for Program Store Enable and is used to read a signal from the external program memory.
- **Pin 30** − EA pin which stands for External Access input and used to enable/disable the external memory interfacing.
- **Pin 31** − ALE pin which stands for Address Latch Enable and used to demultiplex the address-data signal of port.
- **Pins 32 to 39** − known as Port 0. It serves as I/O port. Lower order address and data bus signals are multiplexed using this port.
- **Pin 40** − used to provide power supply to the circuit.