Parallel Ports

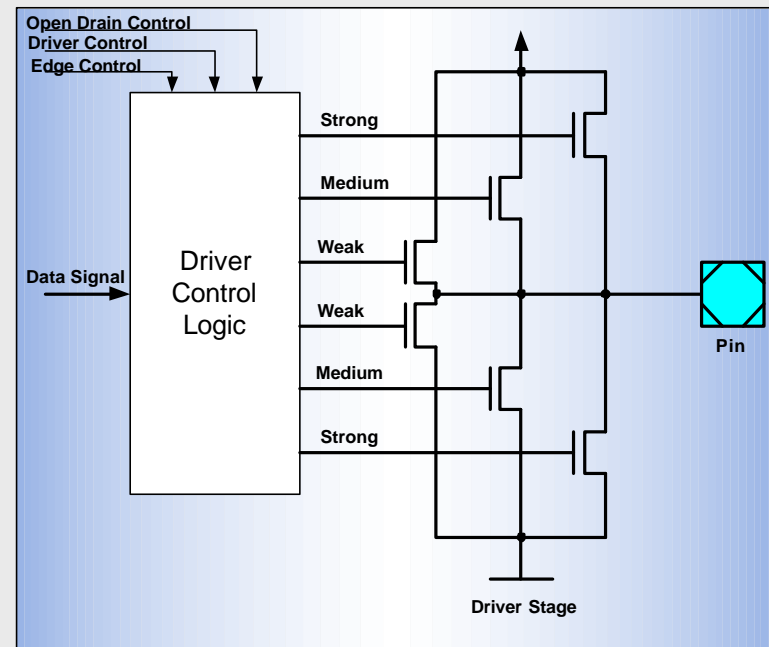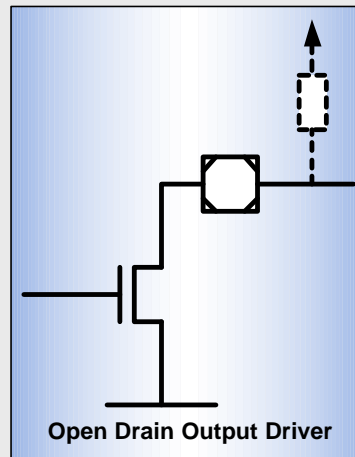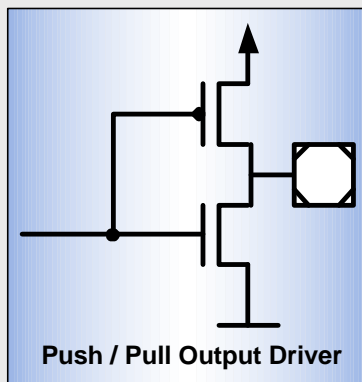■ **Number of Port Pins**

  – 99 I/O lines (XC161CJ), 5 Volt +/- 10 %

  – 79 I/O lines (XC 164CS), 5 Volt +/- 10 %

■ **Organized in nine input/output ports and one input port (XC161CJ)**

■ **Organized in six input/output ports and one input port (XC164CS)**

■ **Input Threshold Control**

  – TTL standard

  – CMOS

■ **Output Driver Control**

XC16x peripherals

Parallel Ports

■ **Output Driver Control**

    – Open Drain Mode

    – Driver Characteristic

    – Edge Characteristic

Push / Pull Output Driver

Open Drain Output Driver

XC16x peripherals

Parallel Ports

■ **Port20 has been added**

    – Allows the pins previously dedicated to be used as
       general purpose I/O when the external bus is not enabled.

    – Provides up to 6 additional I/O

        ◆ /RD

        ◆ /WR

        ◆ /EA

        ◆ /READY

        ◆ ALE

        ◆ /RSTOUT

XC16x peripherals

Parallel Ports
Additional features to C16x

XC16x

- Voltages
  - 5V I/Os & ADC
  - 2.5V logic,
  - 2.5V oscillator supply
- Power Management
  - idle,sleep,power down

C16x

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