Link: <http://www.studytonight.com/computer-architecture/basics-of-digital-components>

Under **Encoder**: add the following **after** the **Types** section:

Advantages:

* Highly reliable and accurate
* Low-cost feedback
* High resolution
* Integrated electronics
* Fuses optical and digital technology
* Can be incorporated into existing applications
* Compact size

Disadvantages:

* Subject to magnetic or radio interference (Magnetic Encoders)
* Direct light source interference (Optical Encoders)
* Susceptible to dirt, oil and dust contaminates

**Replace** points under **Advantages** of Multiplexing by:

Advantages:

* it reduces number of wires.
* it reduces circuit complexity and cost.
* it simplifies logic design.
* we can implement many combinational circuits using MUX.
* it does not need k-maps and simplification.

Disadvantages:

The following disadvantages arise while using multiplexer chips to expand I/O ports on an Arduino:

* Added delays in switching ports.
* Added delays in I/O signals propagating through the multiplexer.
* Limitations on which ports can be used simultaneously.
* Added firmware complexity to handle switching ports.
* Extra I/O ports required to control the multiplexer.

**Rest of the content is perfect!**