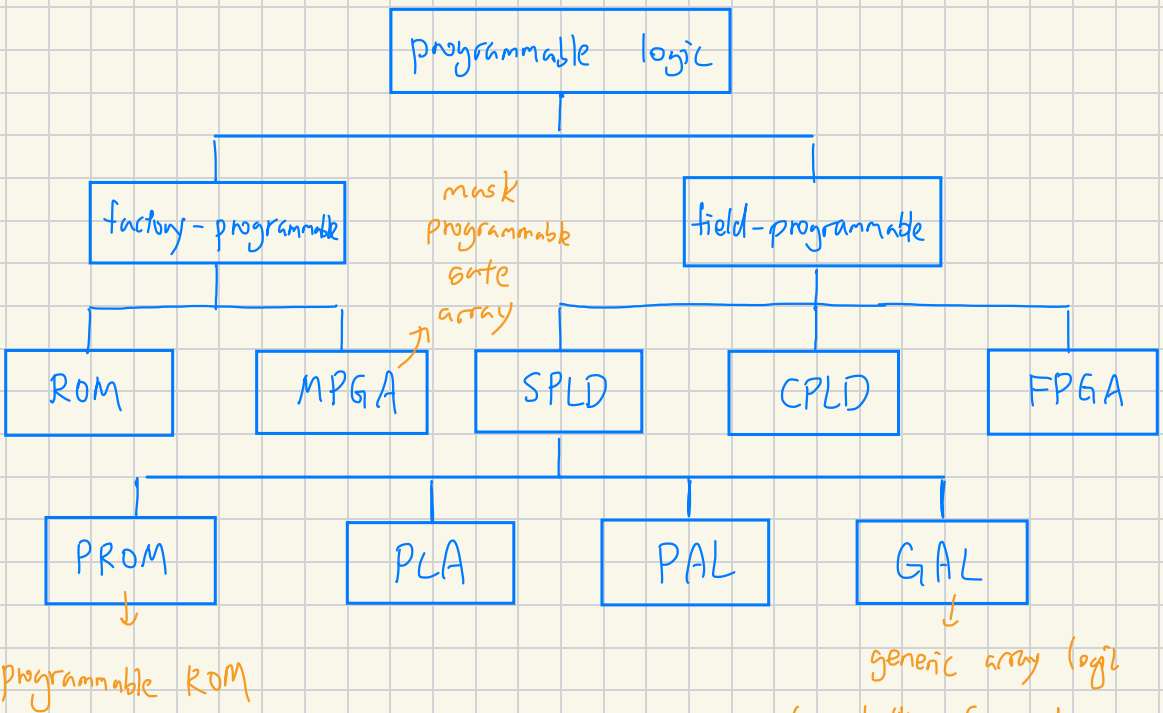
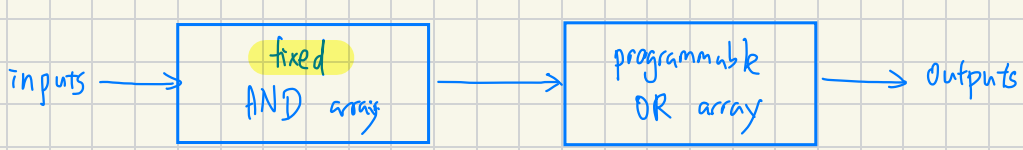
3.1 Brief Overview of Programmable Logic Devices (PLDs)

1 Classification of PLDs

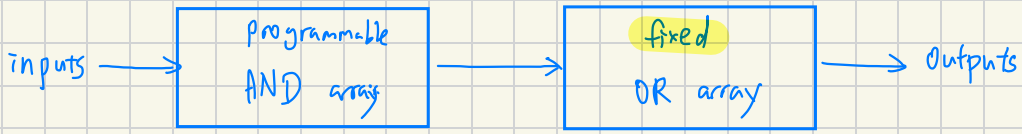


2 SPLDs

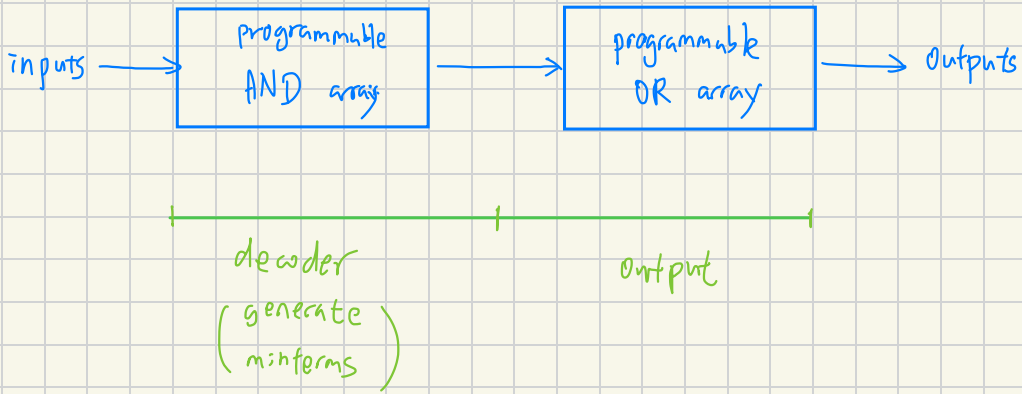
① PROM:



② PAL : (many also have FFs)



③ PLA :



- a few hundred gates

3 CPLDs

- multiple PLDs in the same chip
- better integration capability than SPLDs
- 500 ~ 16000 gates

4 FPGAs

- uses SRAM to hold configuration info.
- larger & more complex blocks containing SRAM & muxes
- > 5 million gates