

Analysis, Design, and Implementation of a High Speed Serial Interface (SerDes) in GF22nm FDSOI

- Design and modelling of a complete high speed interface
- Bit-level, word-level, and lane-level synchronisation
- Implementation (design and layout) of core analog-mixed signal components
 - Comparators, equalising amplifiers, DFF, reserialiser
- Implementation of DSP blocks to process the received bit stream
- FPGA programming for the transmitter

- You need/will gain experience in:
 - CMOS design, VHDL/Verilog, Cadence, FPGA design
 - High speed serial interfaces
 - Understanding of digital design
 - Analog-Mixed-Signal design experience

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