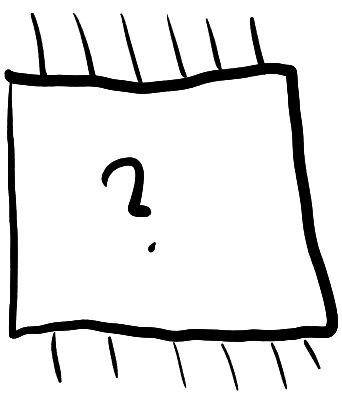
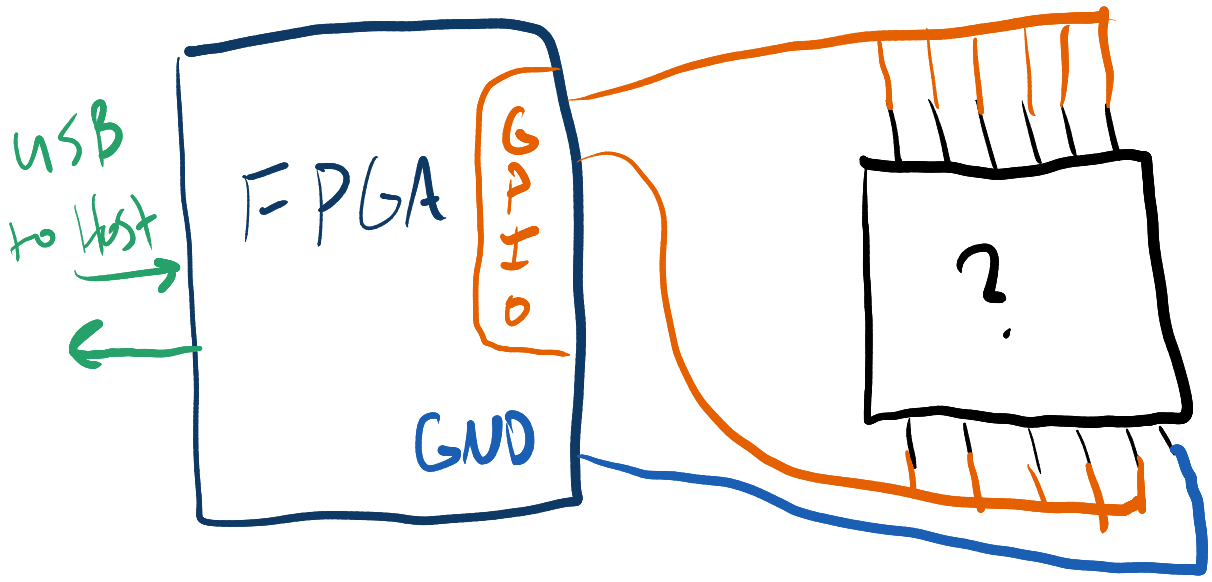
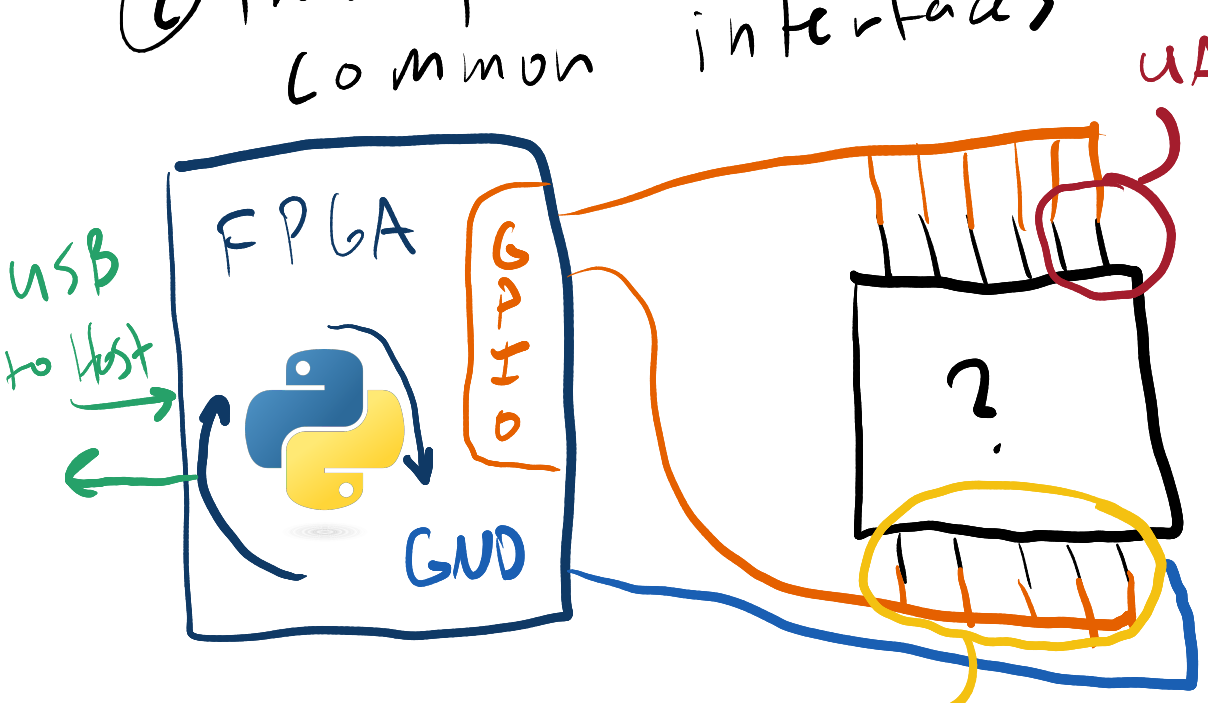
Unknown Device.
what is it?



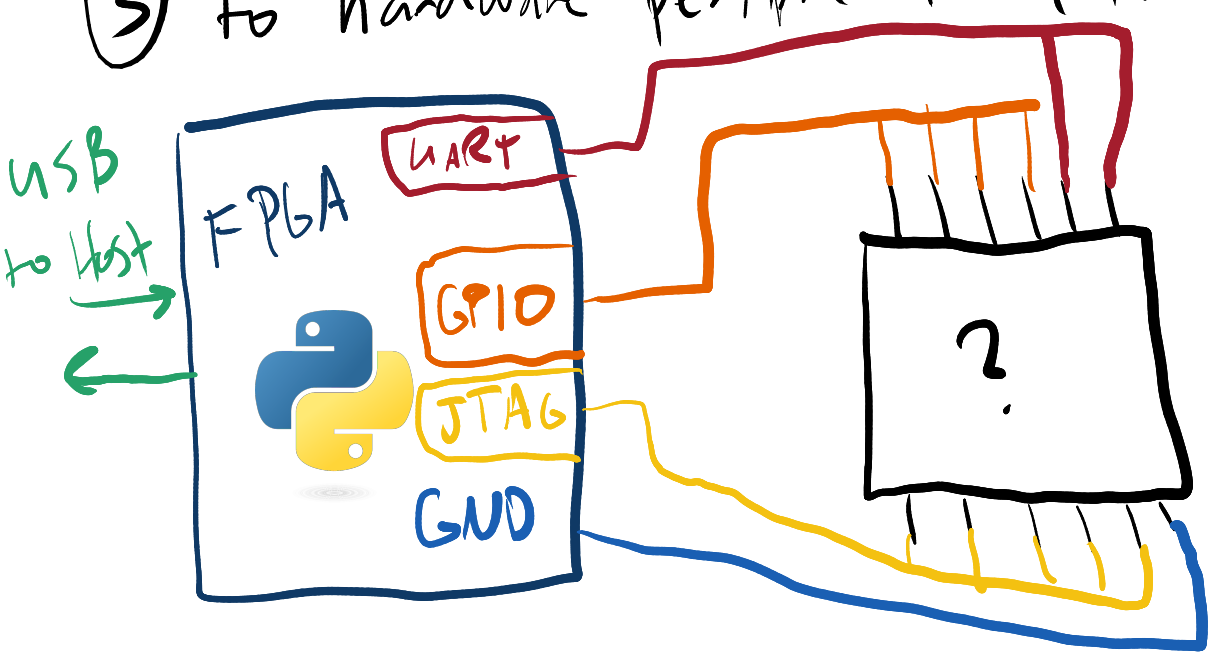
① Hook up to our device



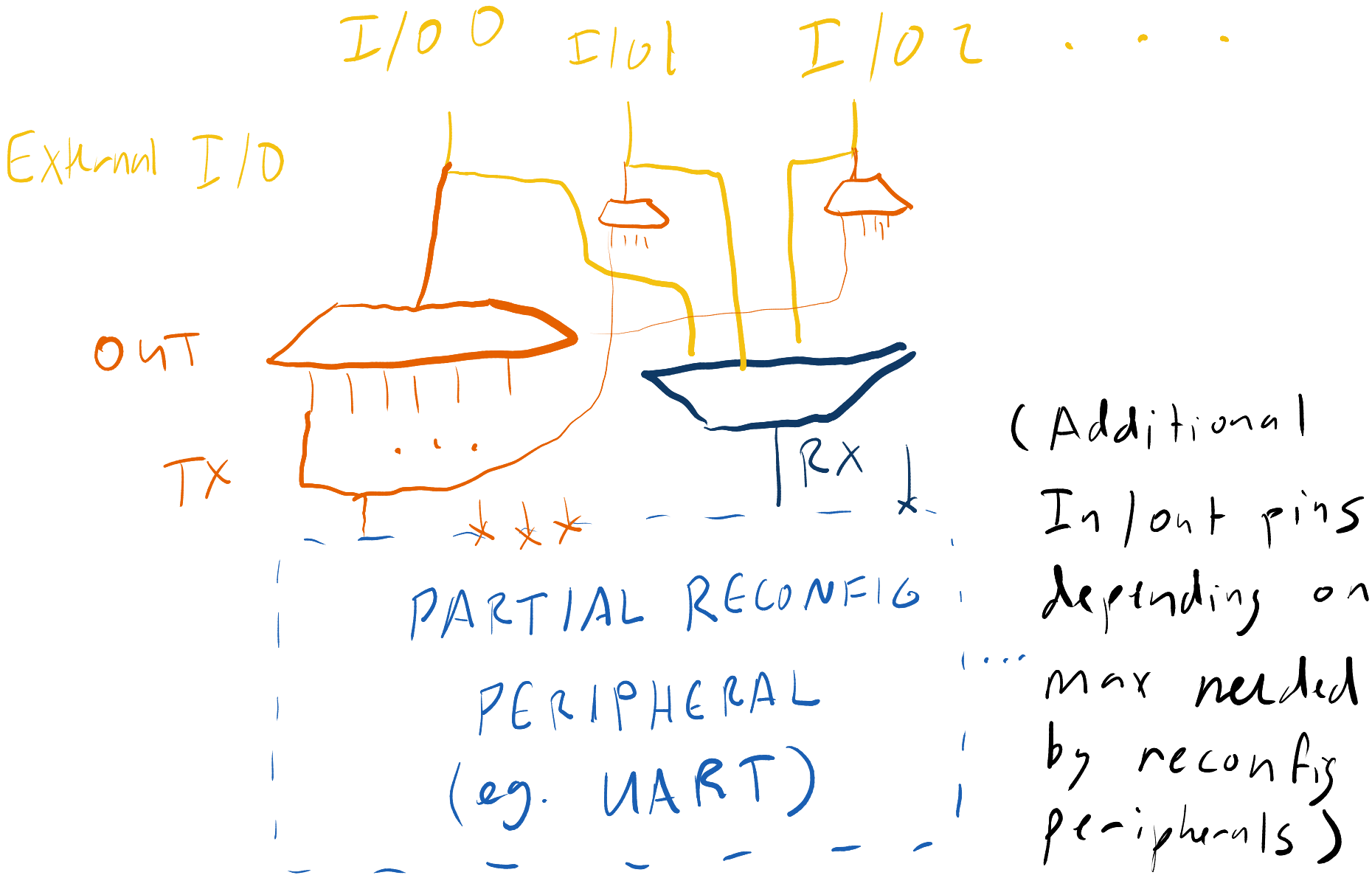
② Probe pins through Python API to identify common interfaces

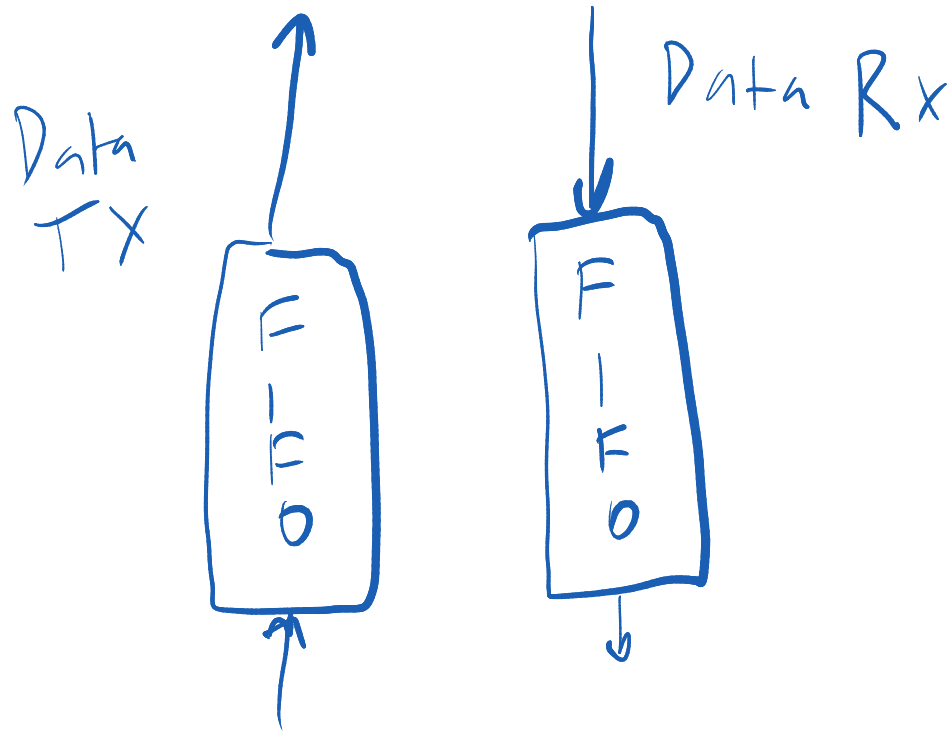


③ Reconfigure FPGA to connect detected interfaces to hardware peripherals (no bit-banging!)



④ Interact with DUT through USB like you had multiple physical adapters connected.





to USB INTERFACE (Cypress FX3 ??)

Peripherals to implement:

	In	Out	Either?
UART	RX	TX	
SPI	MISO	MOSI	SCK, CS
JTAG	SPI	SDO, TMS, TCK, RST x2	
SWD			

What other: I2C

Questions:

Partial reconfig
- + how to do it?
- + how to determine correct area to allocate?
- + how many blocks are needed? | what interface signals

USB
- + How to present multiple peripherals to host?
- + How to prioritize IO of specific peripherals

Hardware
- + what level shifting is required? Do we want ADCs?
- + High-speed PCB design? :—:

How is bidirectional IO implemented on an FPGA
is it better than dedicated I and O lines on reconfig block?