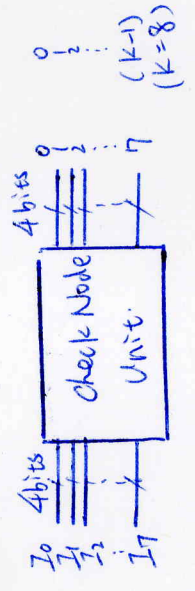
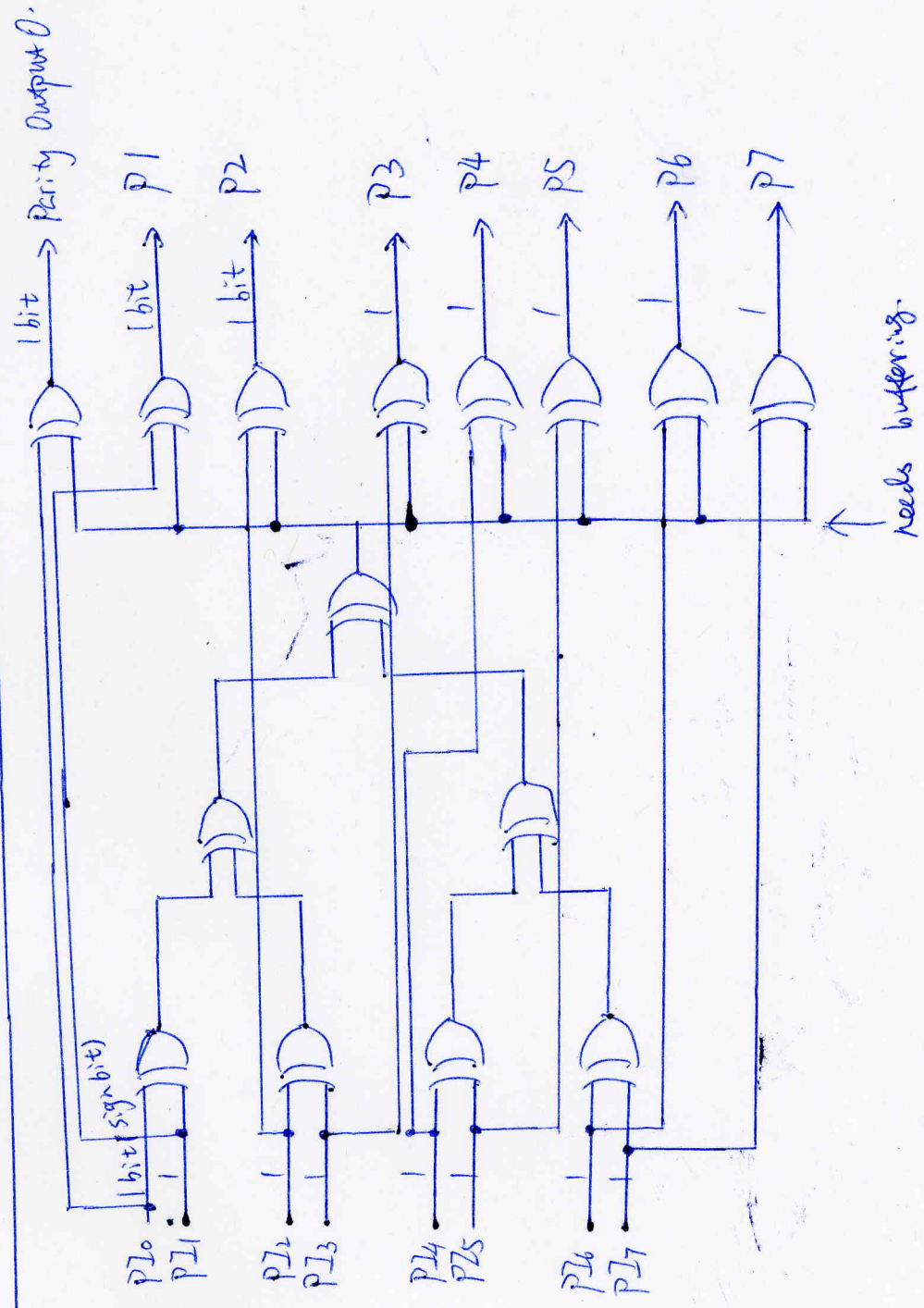


[ Version 1.1 ]

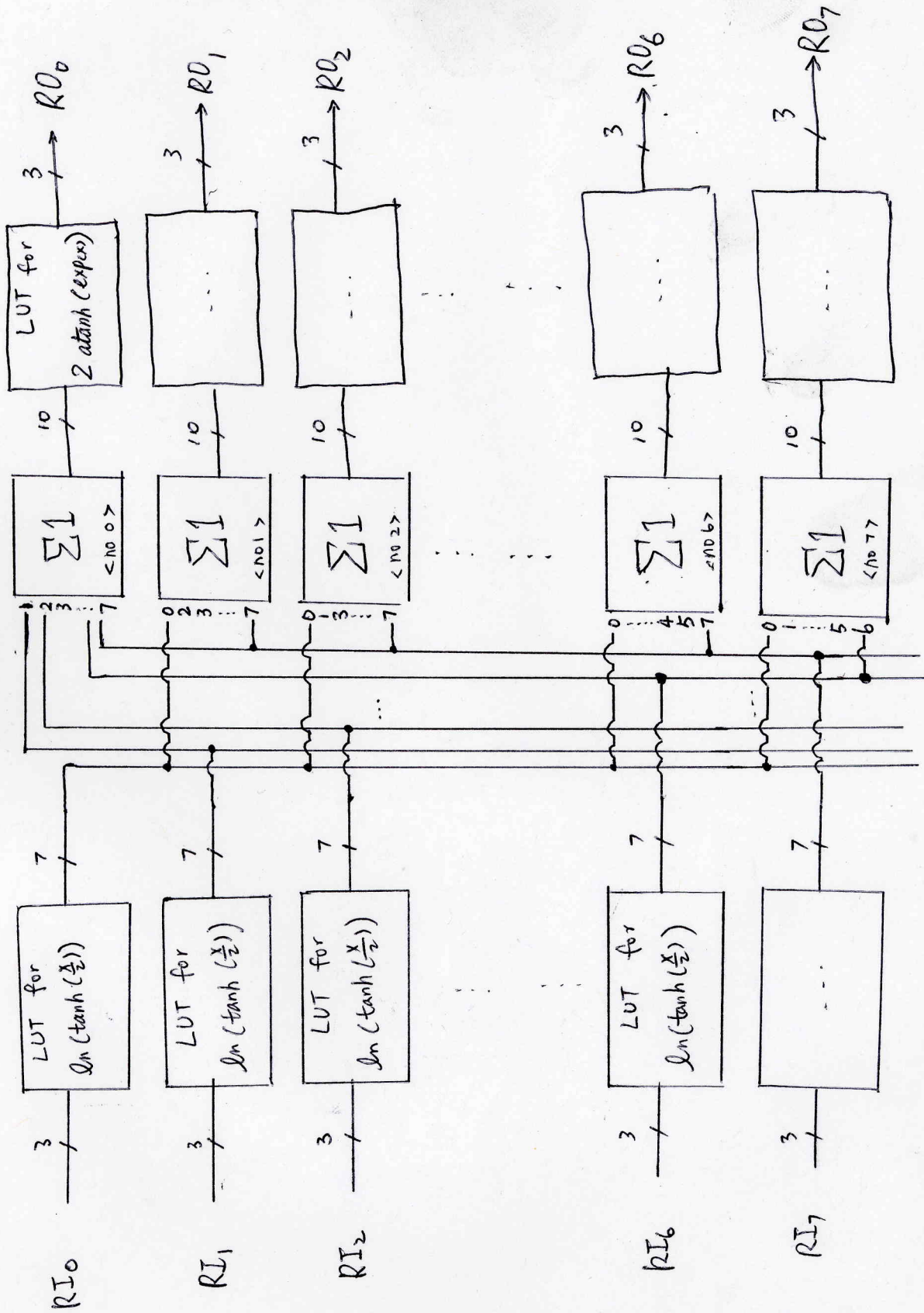


Parity Update  
+ Reliability Update.



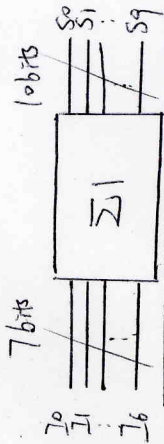
Parity Update.

# Part 2. Reliability Update

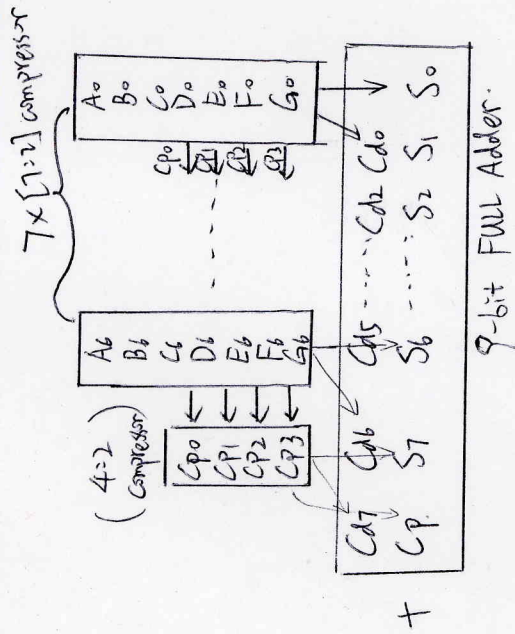


- list: 1. LUT for  $\ln(\tanh(\frac{x}{2}))$
- 2. LUT for  $2 \cdot \operatorname{atanh}(x)$
- 3.  $\Sigma 1$

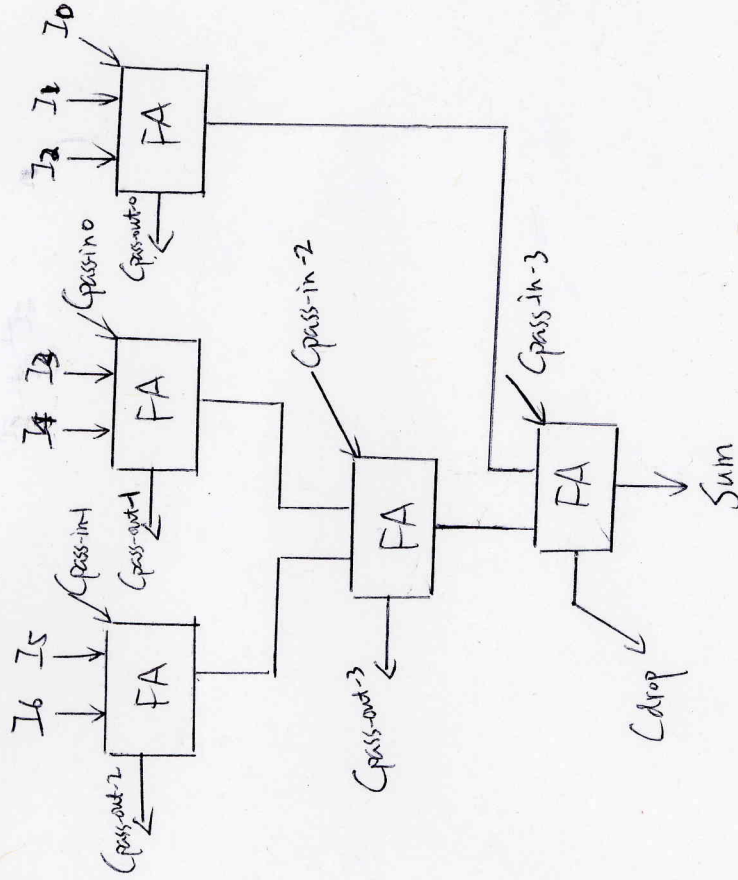
(if  $k=8$ )



$7 \times [1:2]$  compressor +  $[4:2]$  compressor + 9-bit Full Adder

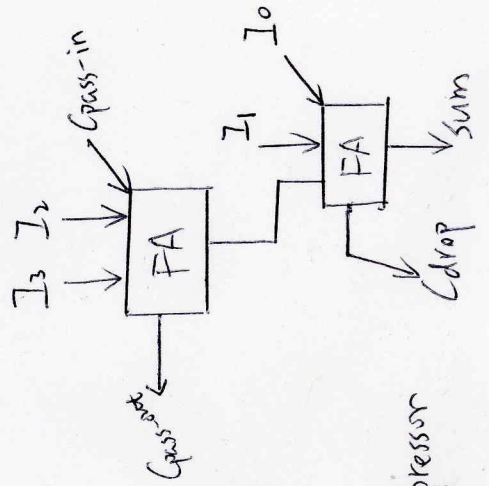


Σ1

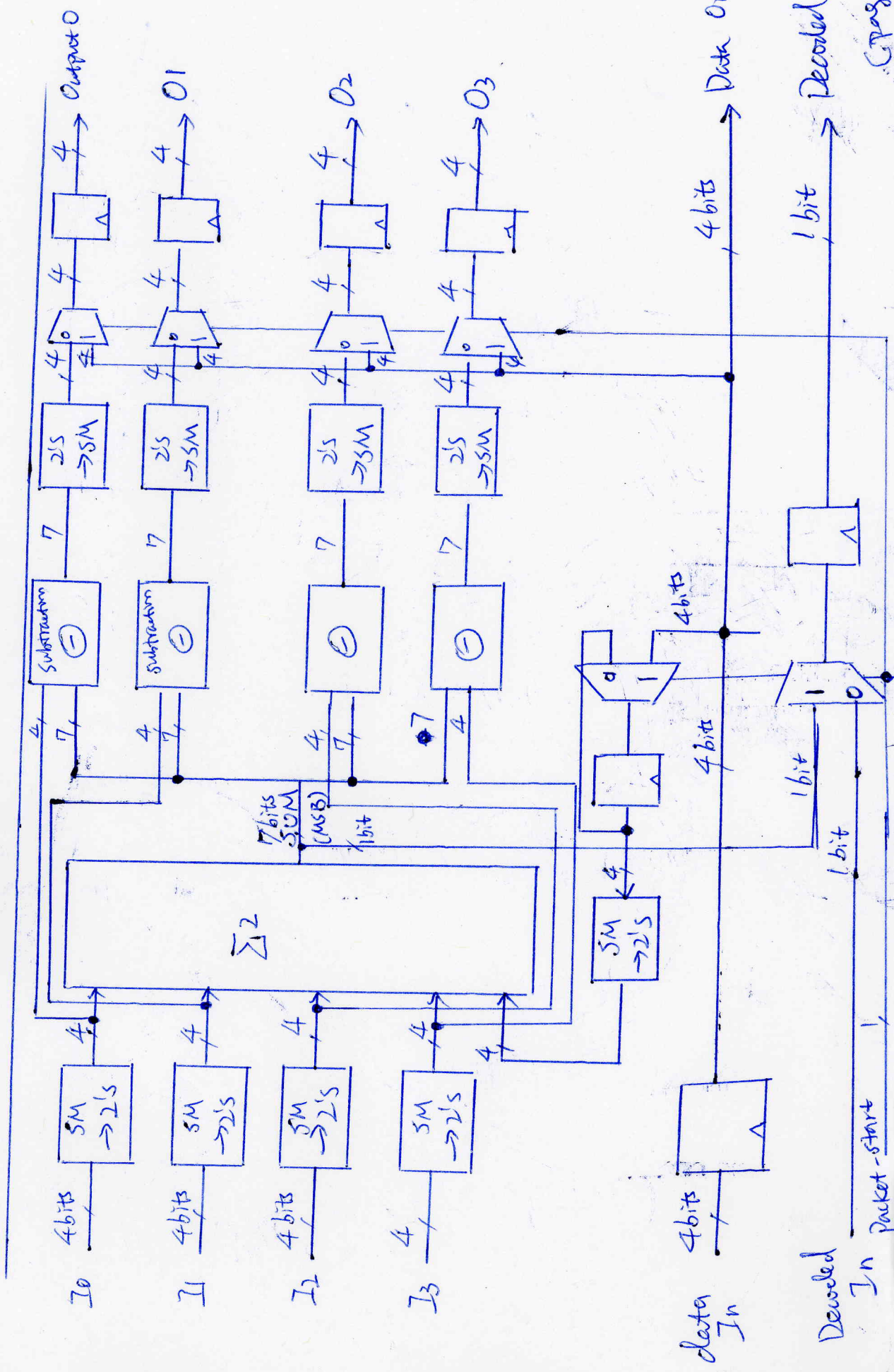
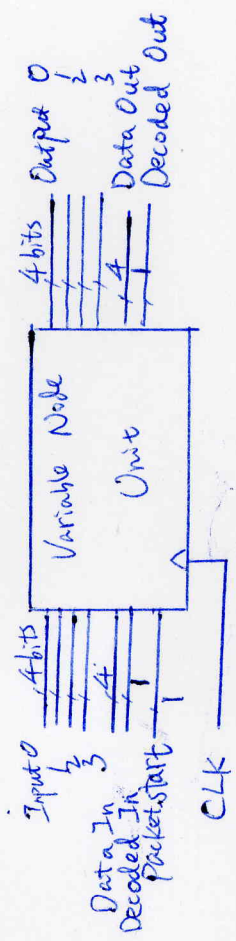


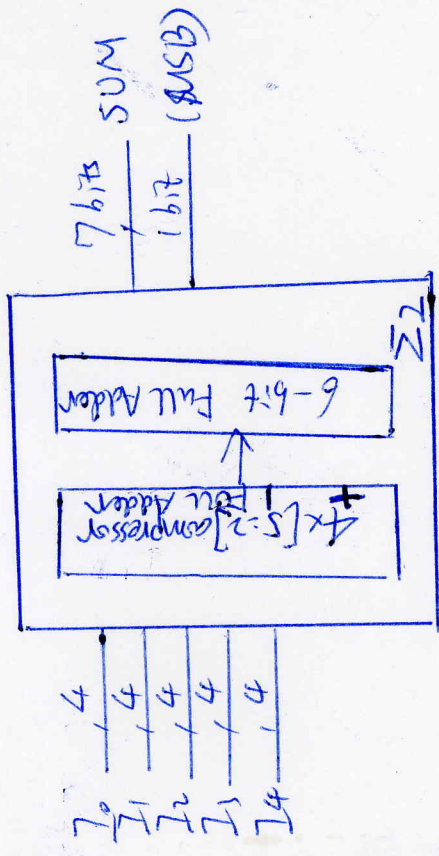
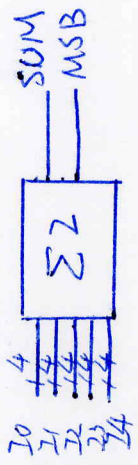
[1:2] compressor

9-bit Full Adder.



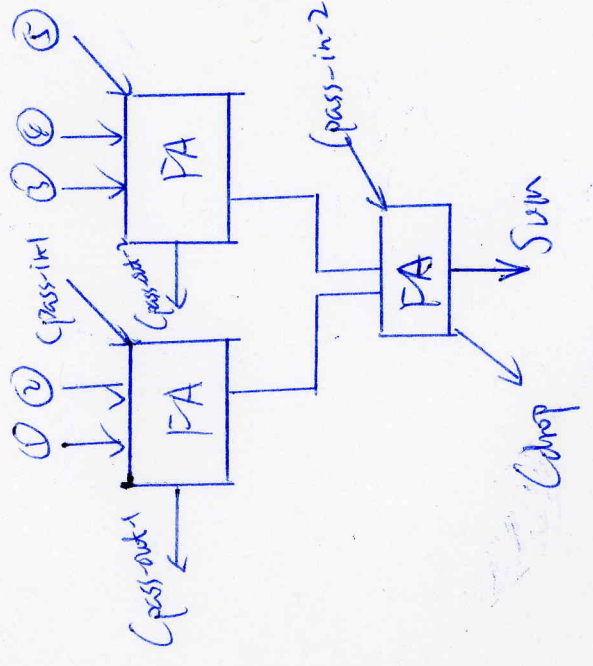
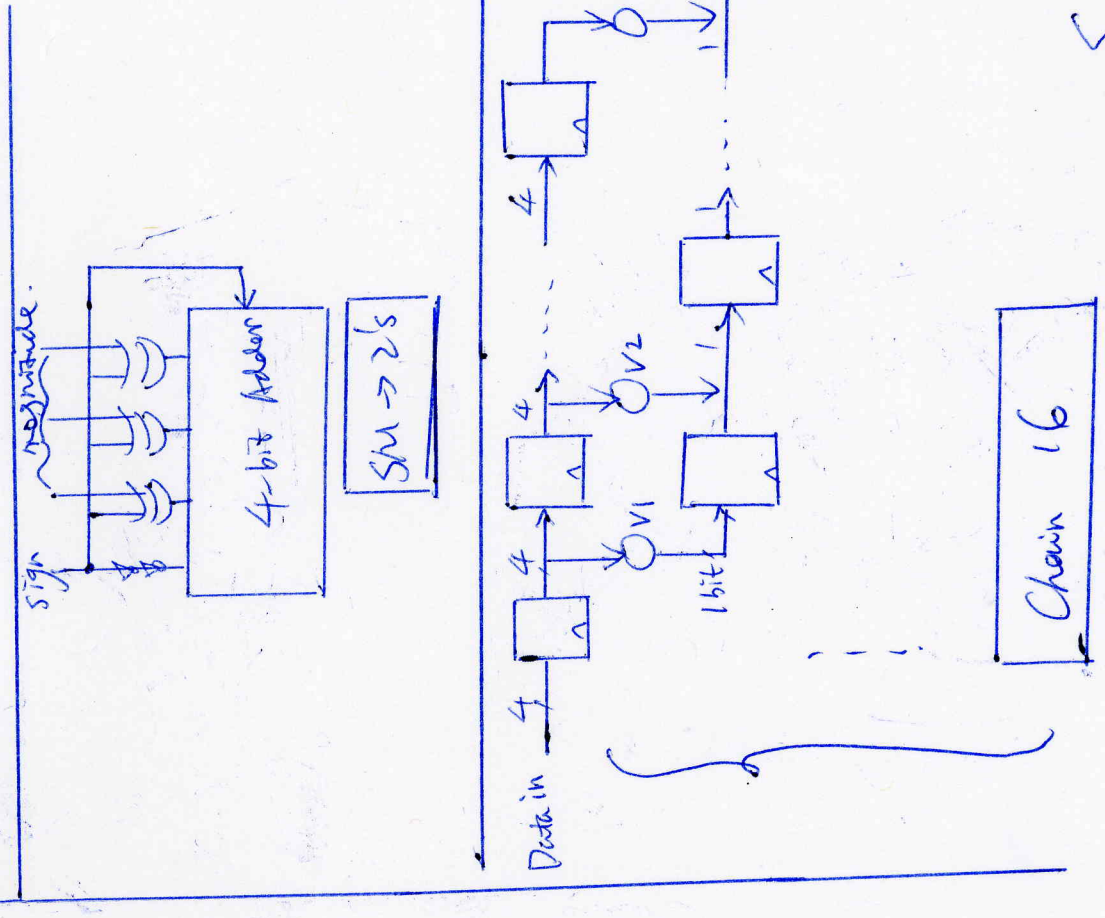
[4:2] compressor





6-bit Full Adder.

7-bit Subtraction (Adder)



[S:2] compressor