

Analog to Asynchronous Interfaces or A2A Bridges

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Analog to Asynchronous Interfaces

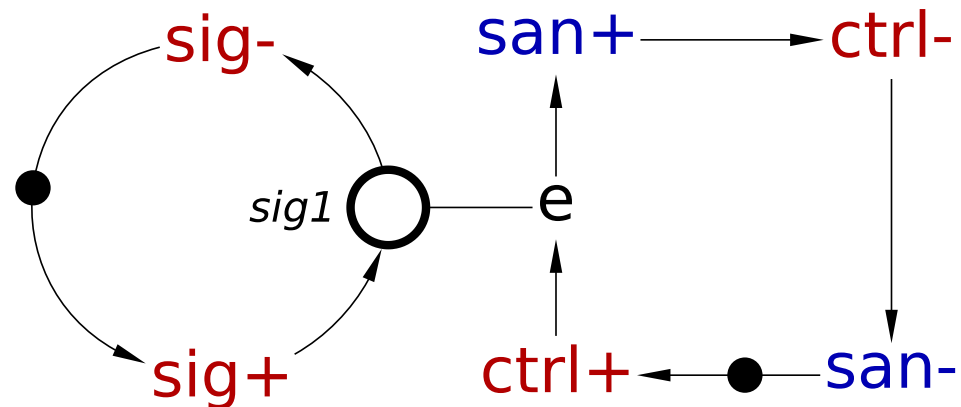
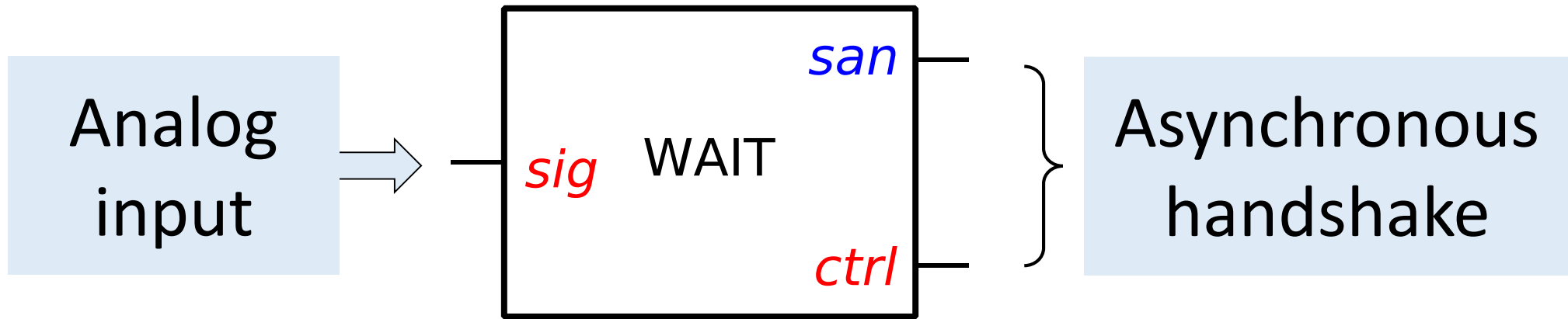
Synchronisation

- WAIT/WAIT0: synchronise with analog 1/0
- RWAIT/RWAIT0: synchronise with analog 1/0 (with release)
- WAIT01/WAIT10: synchronise with analog rising/falling edge
- WAIT2: synchronise analog and asynchronous handshakes

Decision-making

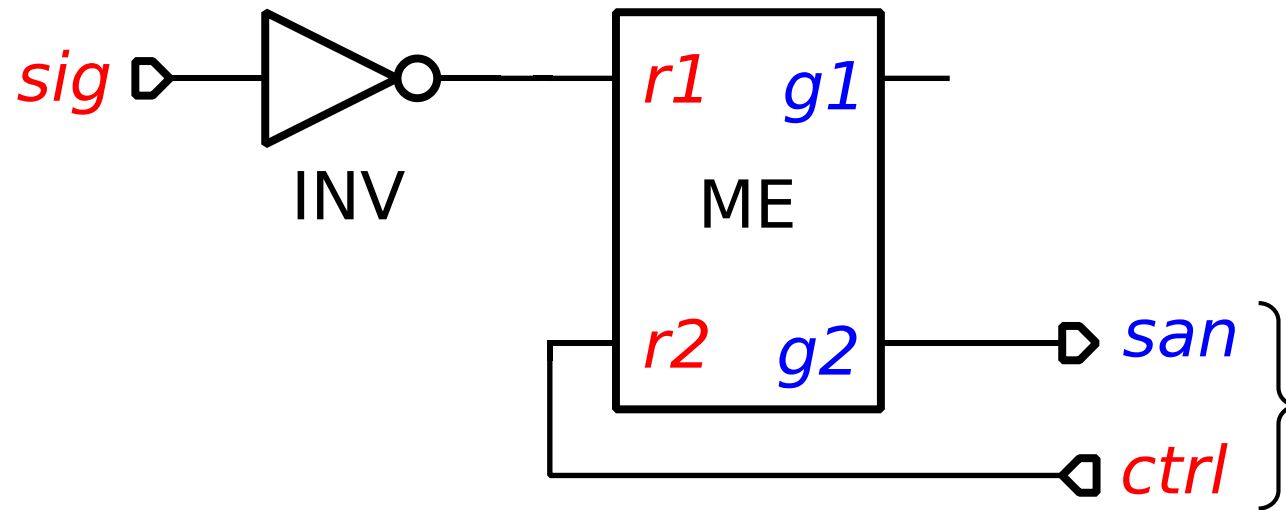
- WAITX: arbitrate between two analog inputs
- SAMPLE: sample an analog input

WAIT: synchronise a handshake with analog 1



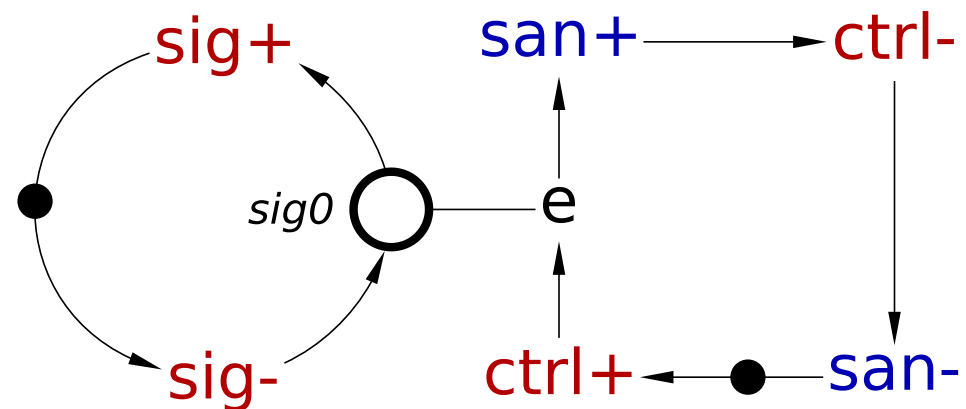
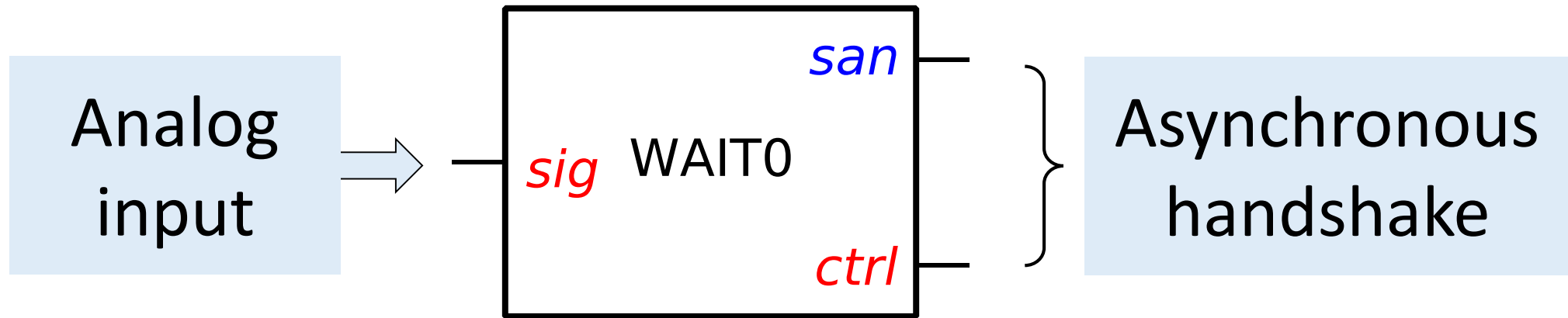
WAIT: synchronise a handshake with analog 1

Analog
input

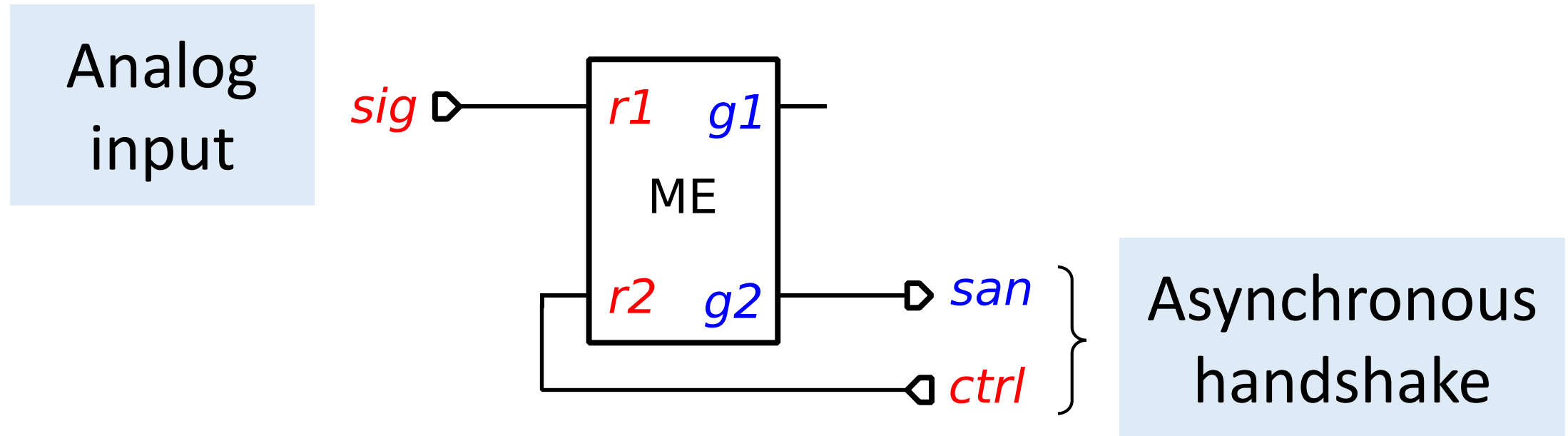


Asynchronous
handshake

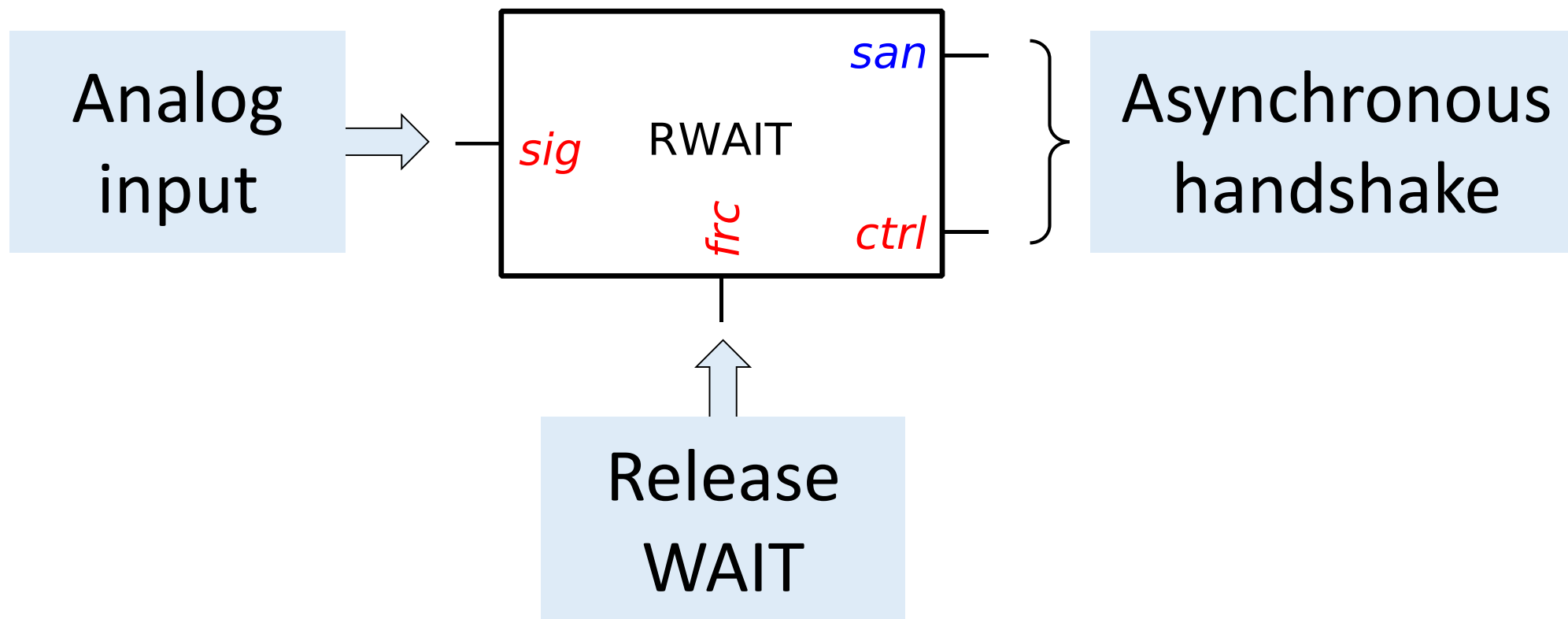
WAIT0: synchronise a handshake with analog 0



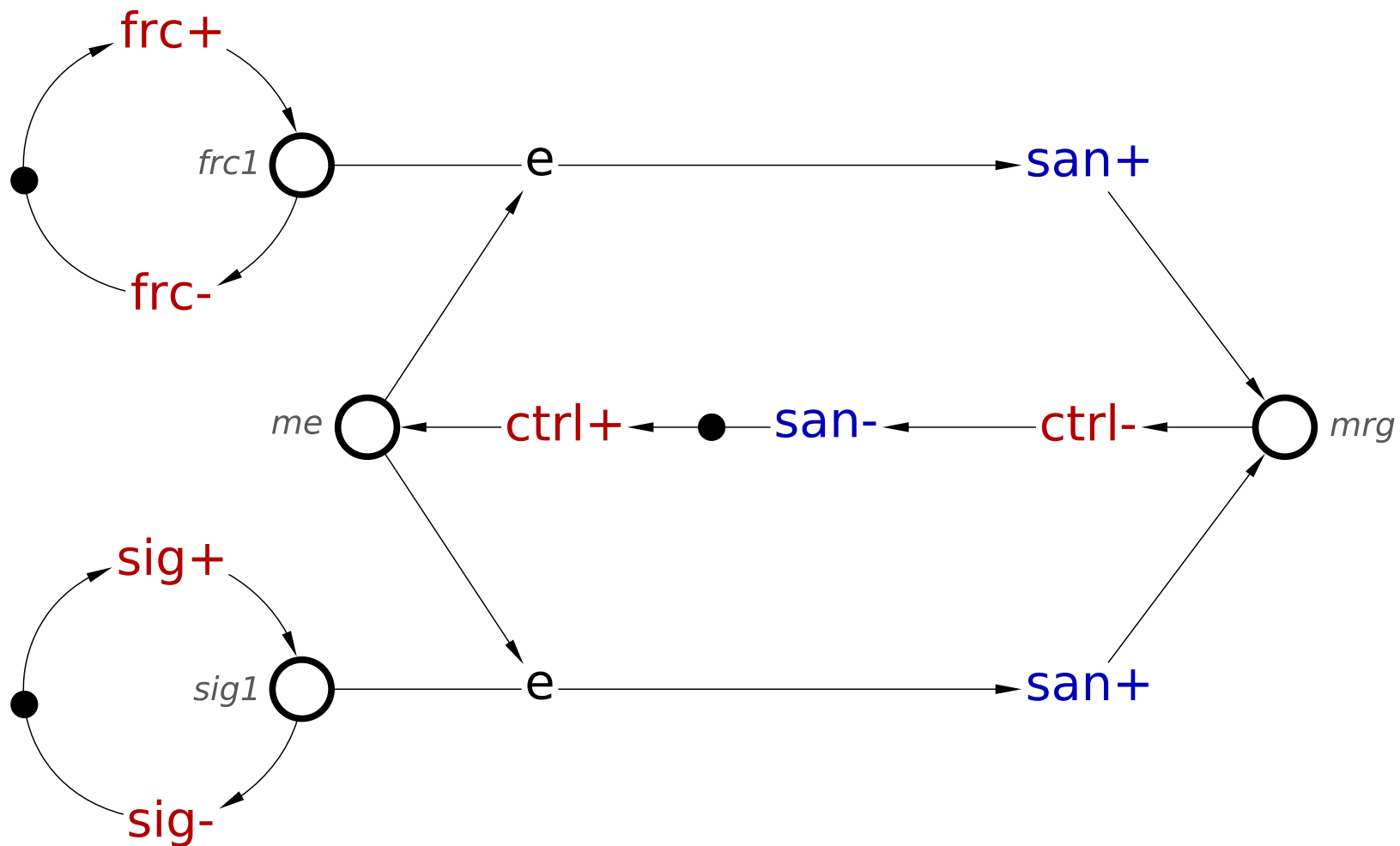
WAIT0: synchronise a handshake with analog 0



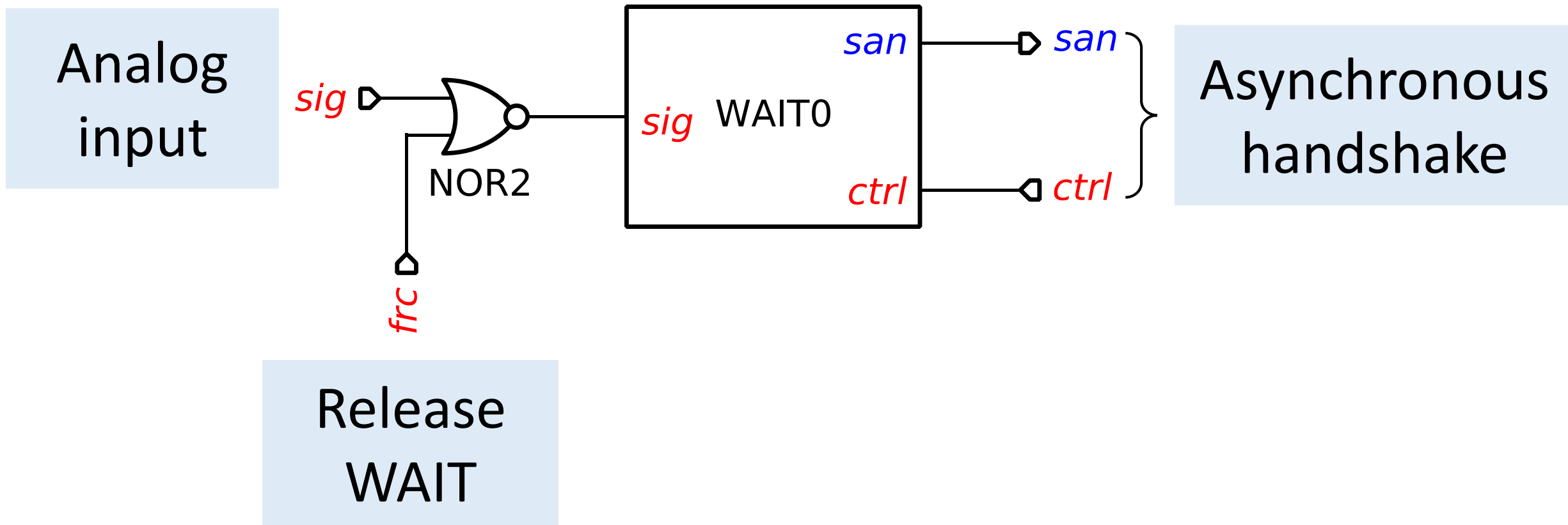
RWAIT: WAIT that can be released/cancelled



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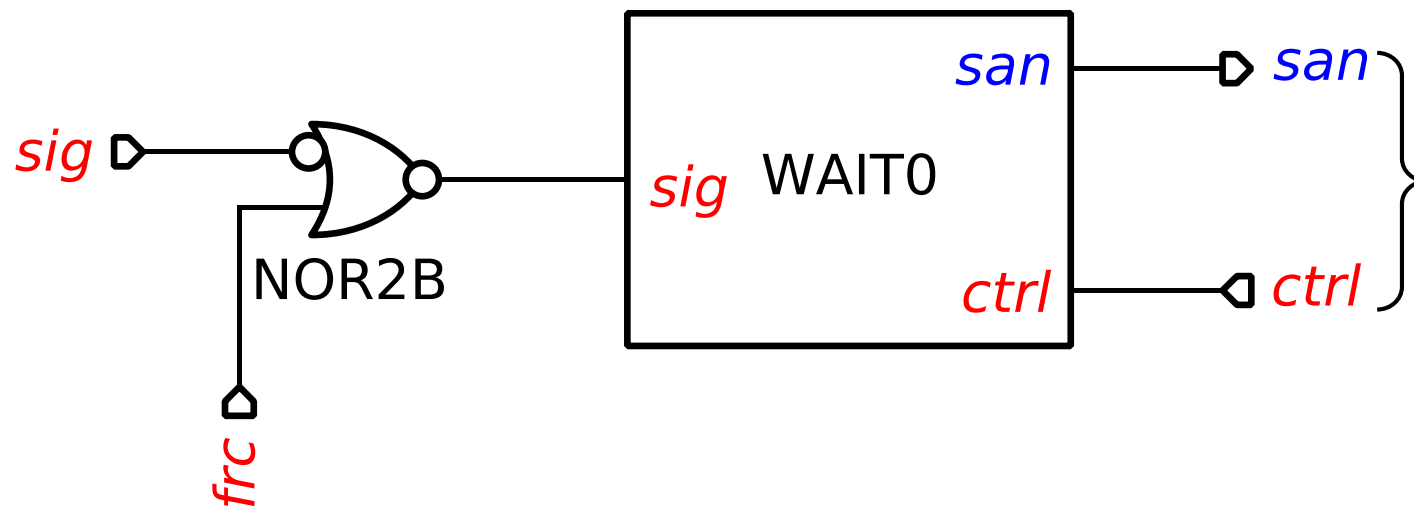


RWAIT: WAIT that can be released/cancelled



RWAIT0: WAIT0 that can be released/cancelled

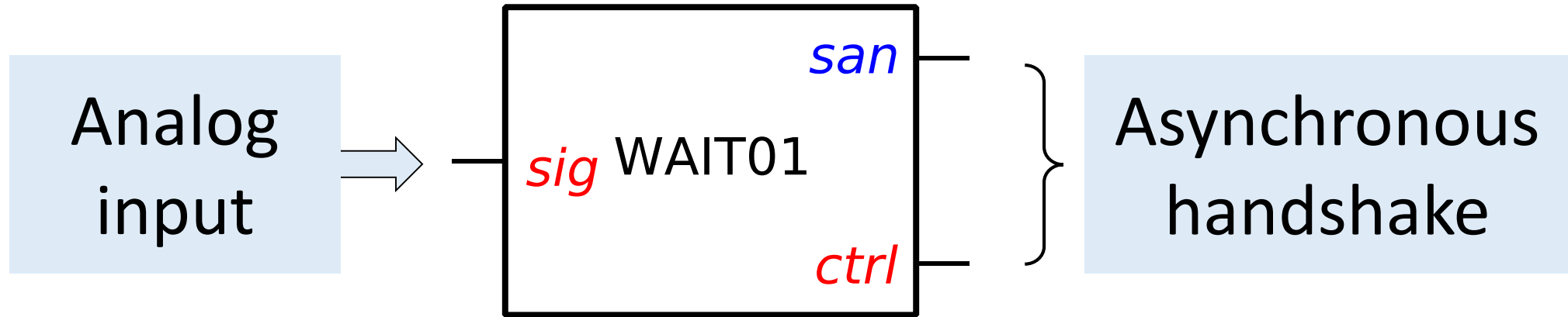
Analog
input



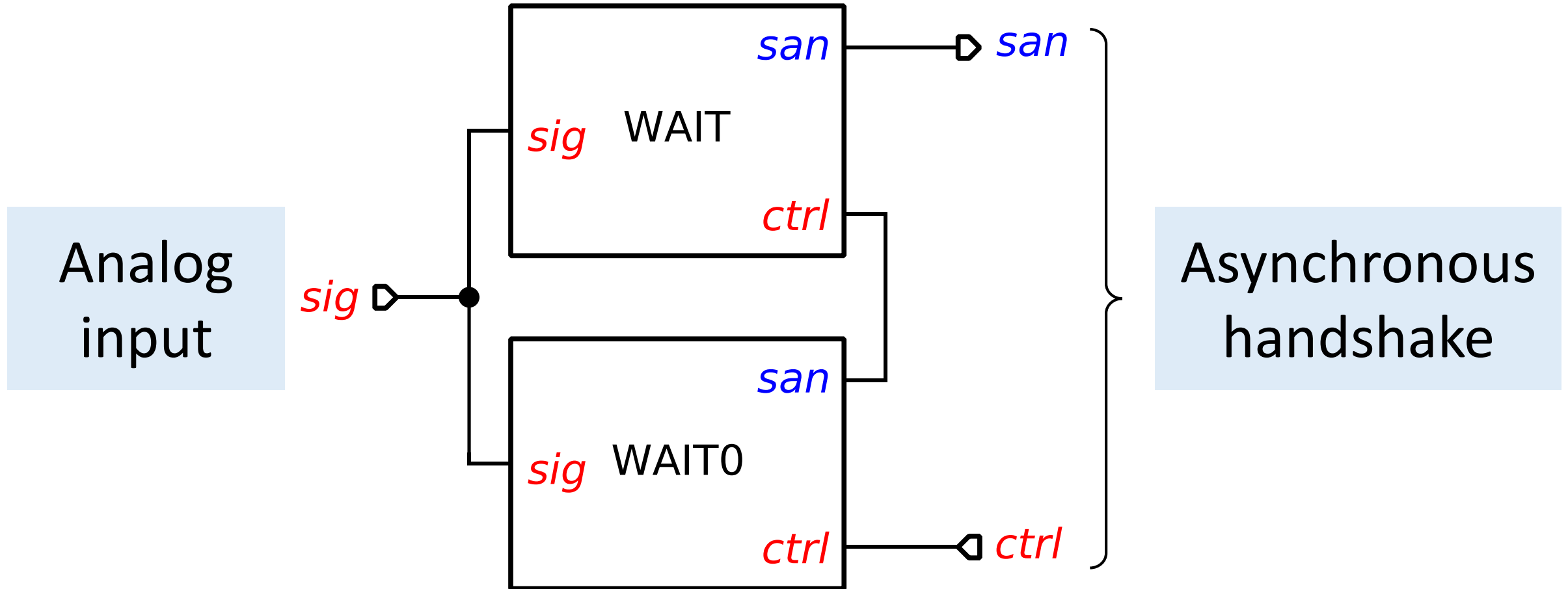
Release
WAIT

Asynchronous
handshake

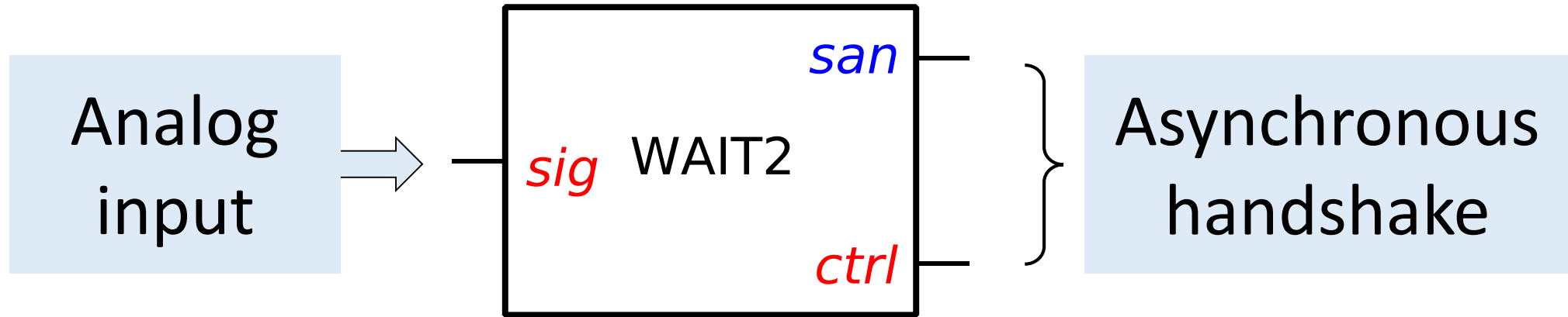
WAIT01: synchronise a handshake with analog rising edge



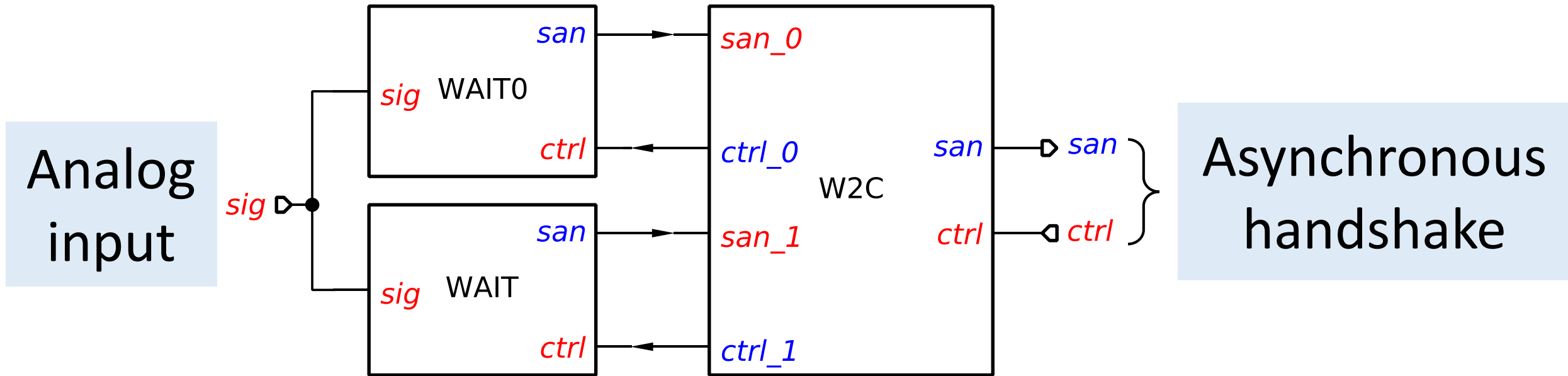
WAIT01: synchronise a handshake with analog rising edge



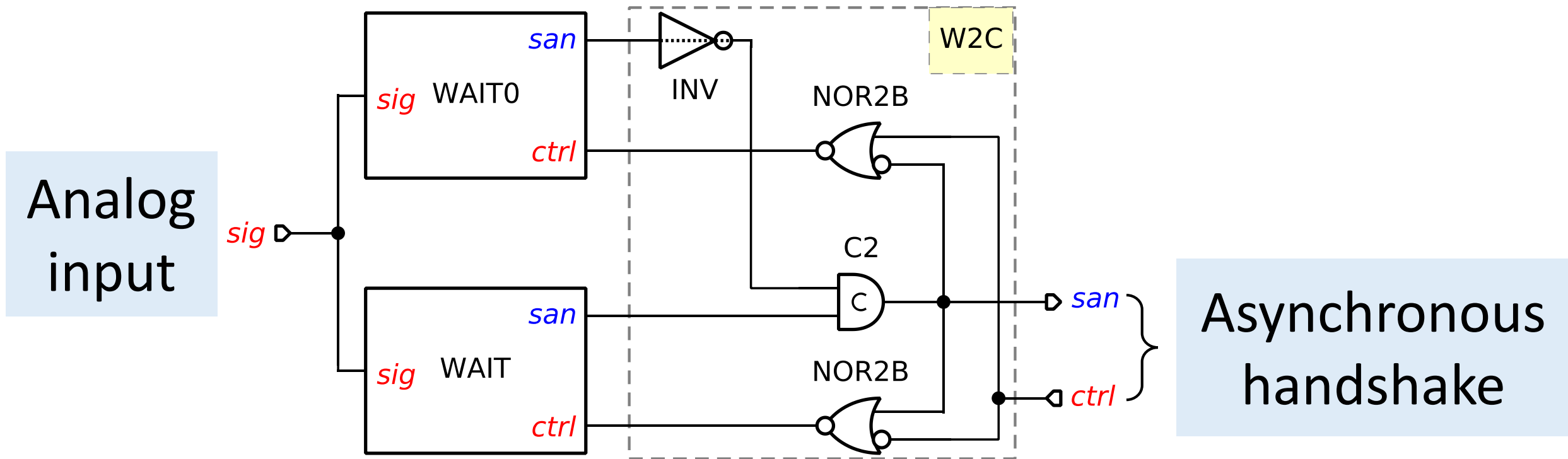
WAIT2: synchronise asynchronous and analog handshakes



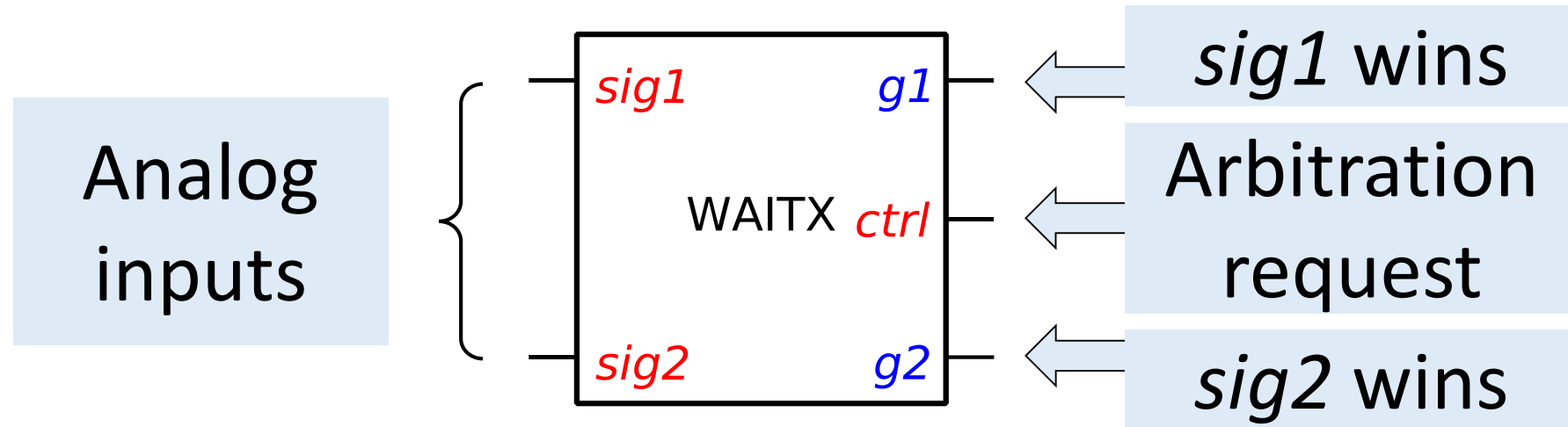
WAIT2: synchronise asynchronous and analog handshakes



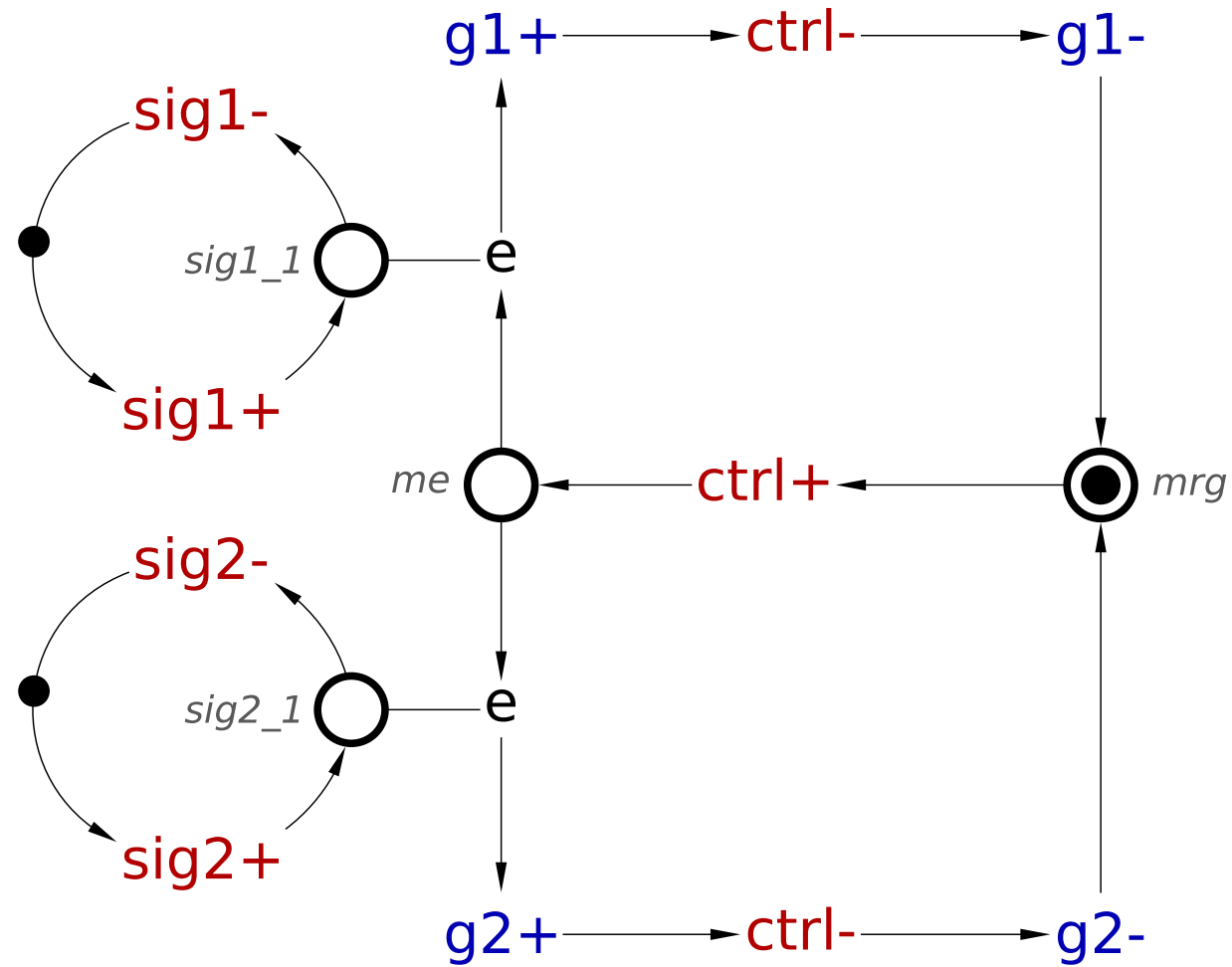
WAIT2: synchronise asynchronous and analog handshakes



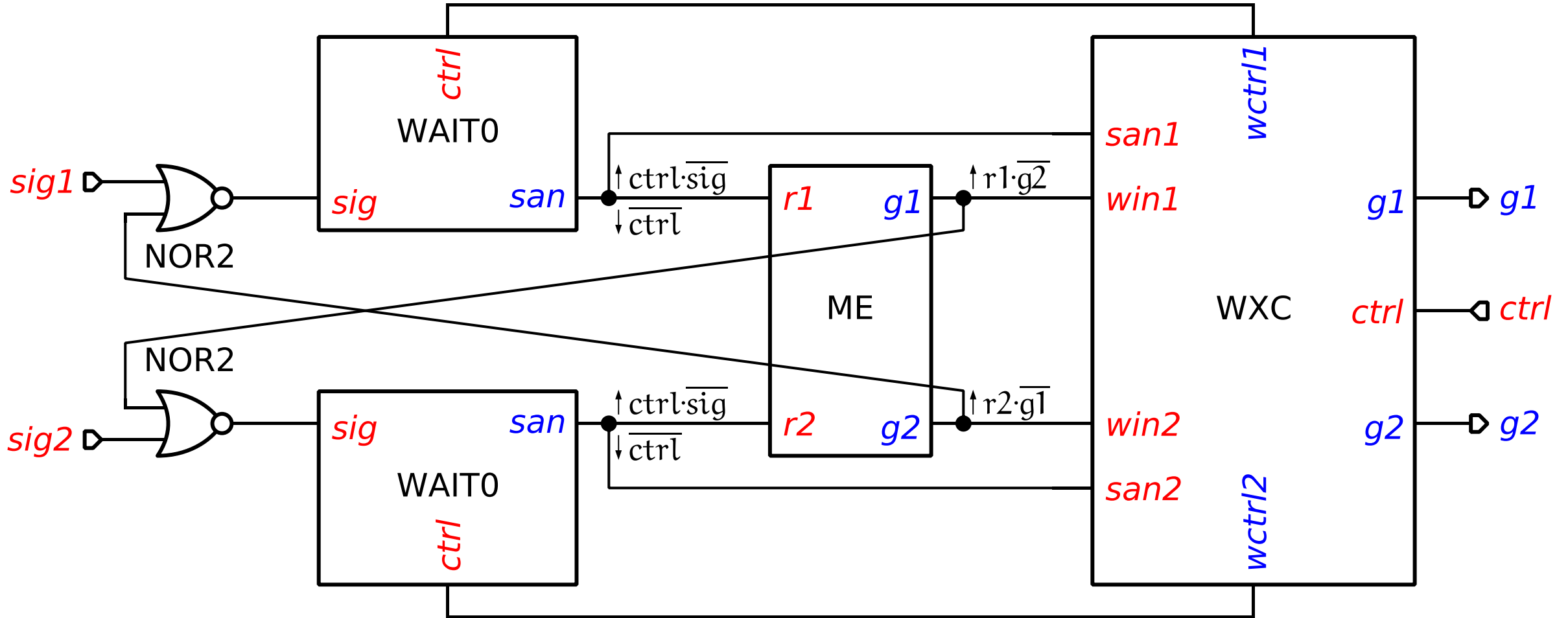
WAITX: arbitrate between two analog inputs



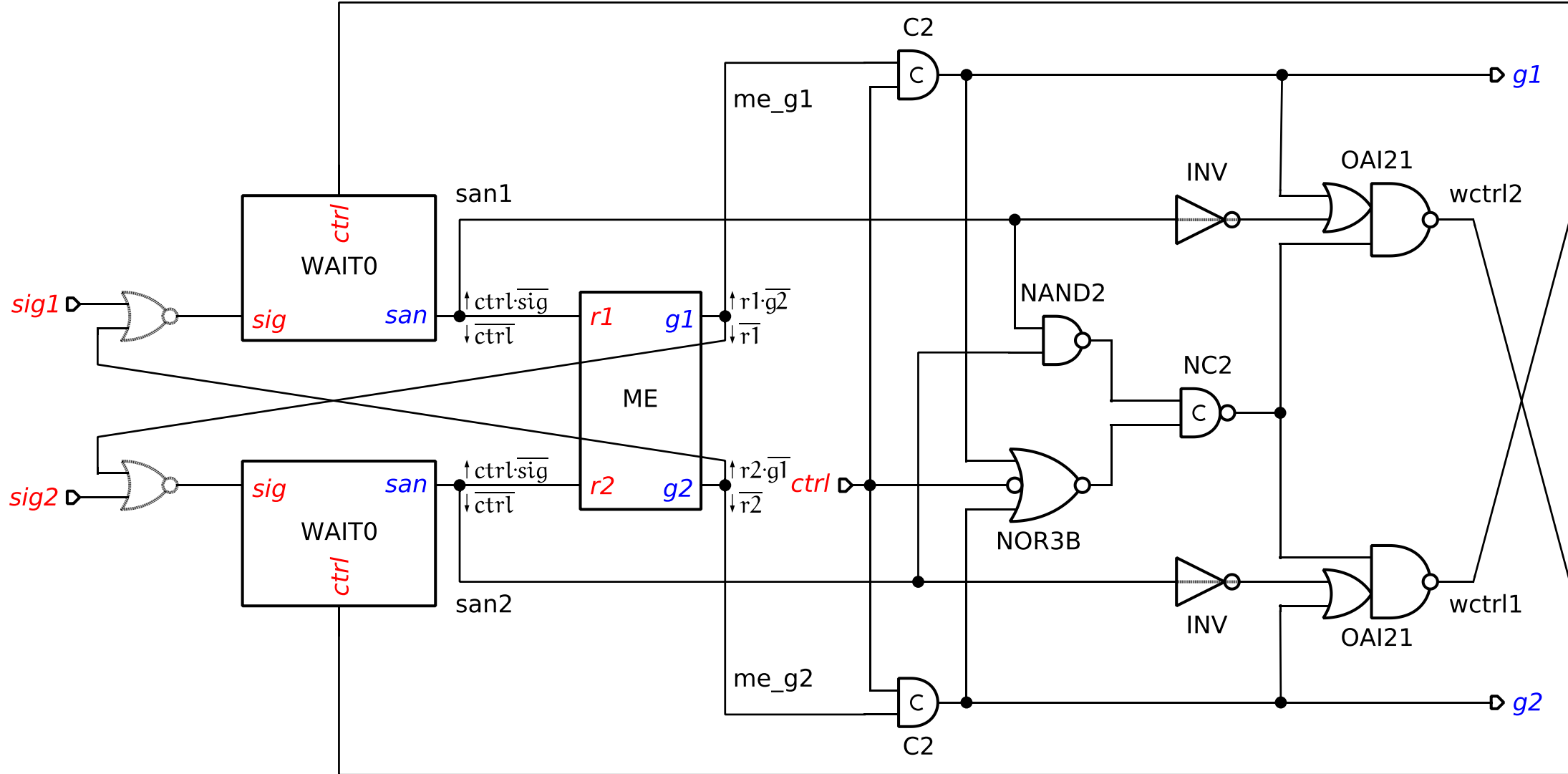
WAITX: arbitrate between two analog inputs



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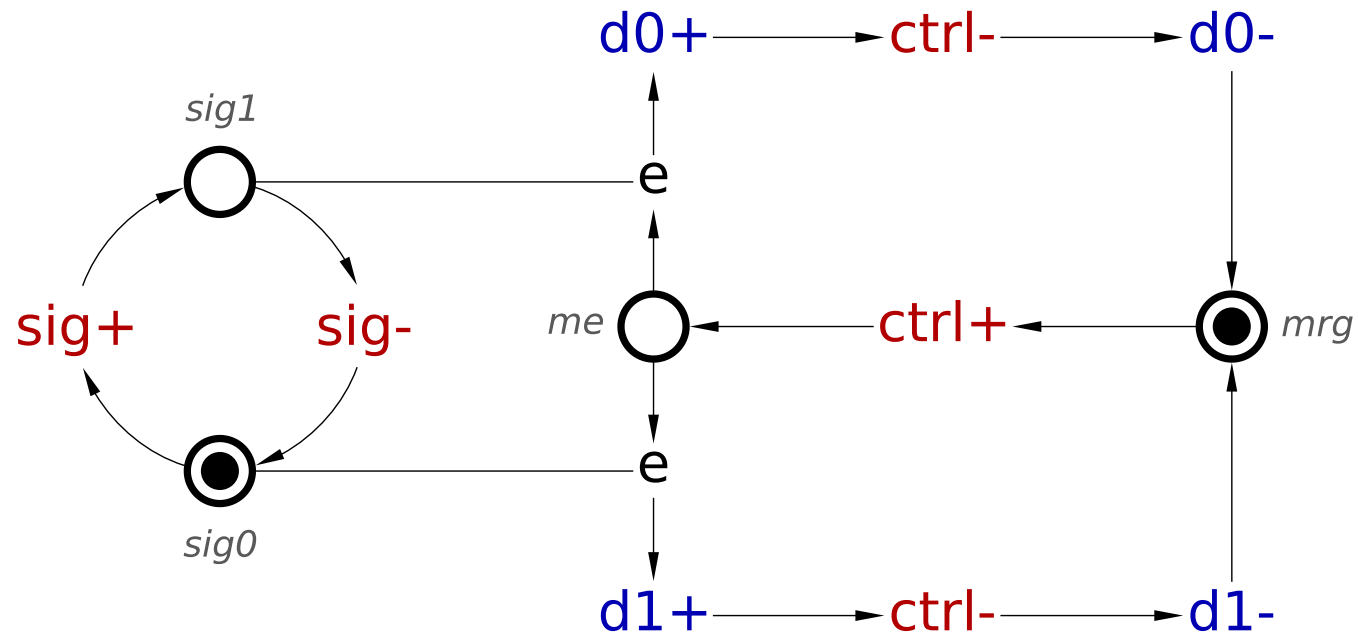
WAITX: arbitrate between two analog inputs



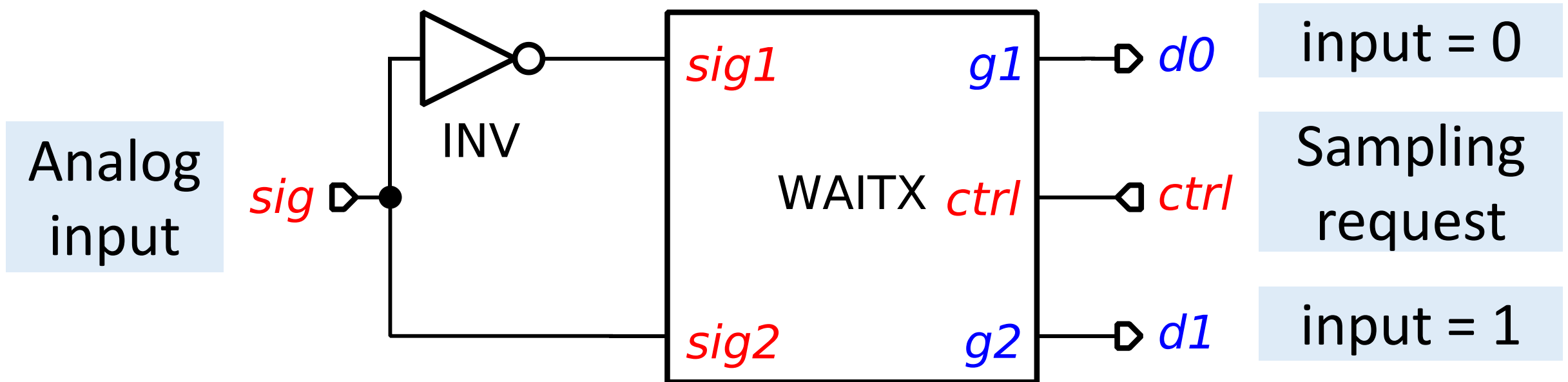
SAMPLE an analog input



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Overview

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