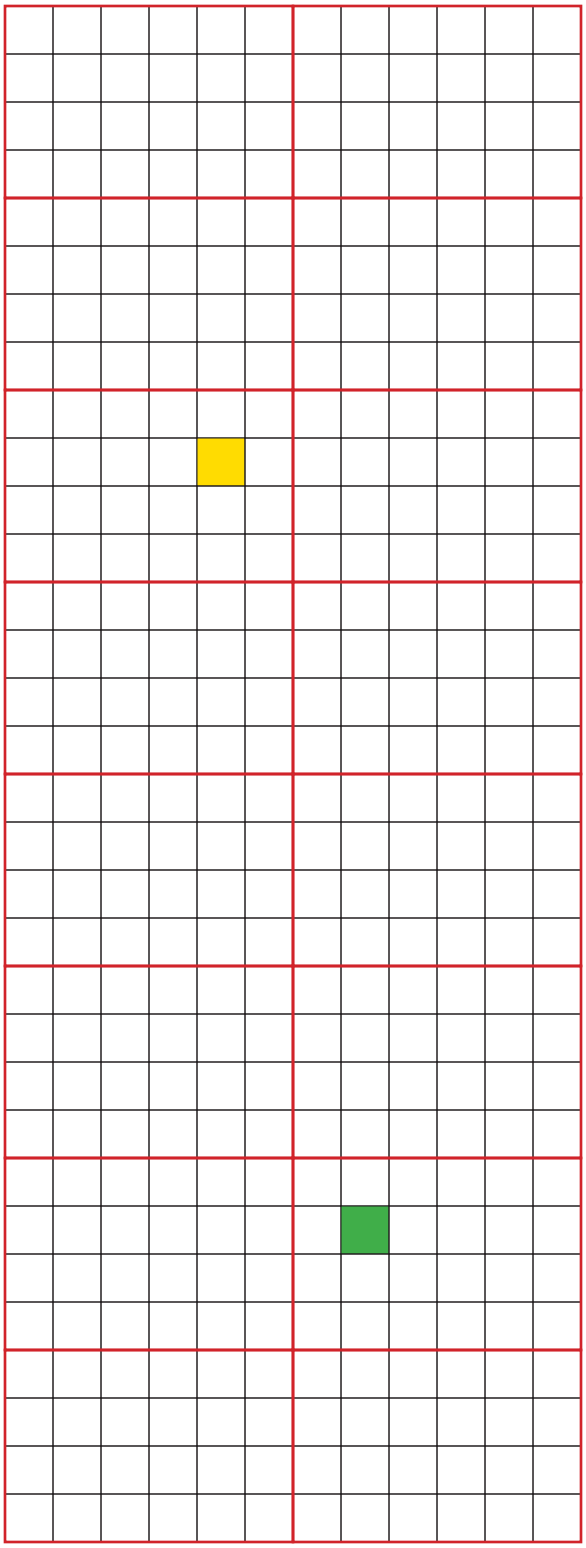
nlowrey
020724

Example

Suppose bhabha showers (high showers) hit the shaded regions. What are the inputs to the barrel TPRO boards?



Shower:

Hits crystals sent to mixer-shaper crate 14, card 17. This signal is sent to motherboard 14, daughterboard 17. This daughterboard's output is a high shower: high bit on and low bit off. MB 14 sends its outputs to TPRO 3, QPR pair (8,7). Since it's a high shower, only QPR 8 receives a signal. Daughterboard 17 sends its output to bit 16. In hex, the input for TPRO 3, QPR 8 will be 0x010000

Shower:

Hits crystals sent to mixer-shaper crate 2, card 17. This signal is sent to motherboard 2, daughterboard 14. This daughterboard's output is a high shower: high bit on and low bit off. MB 2 sends its outputs to TPRO 1, QPR pair (6,5). Since it's a high shower, only QPR 6 receives a signal. Daughterboard 14 sends its output to bit 13. In hex, the input for TPRO 1, QPR 6 will be 0x002000

	QPR8	QPR7	QPR6	QPR5	QPR4	QPR3	QPR2	QPR1
TPRO1	0x000000	0x000000	0x002000	0x000000	0x000000	0x000000	0x000000	0x000000
TPRO2	0x000000	0x000000	0x000000	0x000000	0x000000	0x000000	0x000000	0x000000
TPRO3	0x010000	0x000000	0x000000	0x000000	0x000000	0x000000	0x000000	0x000000
TPRO4	0x000000	0x000000	0x000000	0x000000	0x000000	0x000000	0x000000	0x000000