Control registers definition:

1-7: reserved.

8: Set TLB

8:TLB virtual address lower bits

9:TLB virtual address higher bits

10:TLB physical address lower bits

11:TLB physical address higher bits

12:TLB is base address (head of huge page)

13:TLB write valid

14-19: reserved.

20: Enable completion for host polling

50: h2d DMA

- 50: DMA host start address higher bits
- 51: DMA host start address lower bits
- 52: DMA FPGA HBM start address higher bits
- 53: DMA FPGA HBM start address lower bits
- 54: DMA transfer length
- 55: DMA packet size
- 56: DMA queue number (*not for QDMA, for queue implemented by logics)
- 57: polling host memory address for completion higher bits
- 58: polling host memory address for completion lower bits
- 59: h2d command input valid (rising edge)

70: c2h DMA

- 70: DMA host start address higher bits
- 71: DMA host start address lower bits
- 72: DMA FPGA HBM start address higher bits
- 73: DMA FPGA HBM start address lower bits
- 74: DMA transfer length
- 75: DMA packet size
- 76: DMA queue number (*not for QDMA, for queue implemented by logics)
- 77: polling host memory address for completion higher bits
- 78: polling host memory address for completion lower bits
- 79: d2h command input valid (rising edge)
- 80: pfch_tag for QDMA IP (follow example code)

90: p2p DMA monitor

91: enable monitor (rising edge)

92: p2p completion polling host memory higher bits

93: p2p completion polling host memory lower bits

94: p2p transfer length