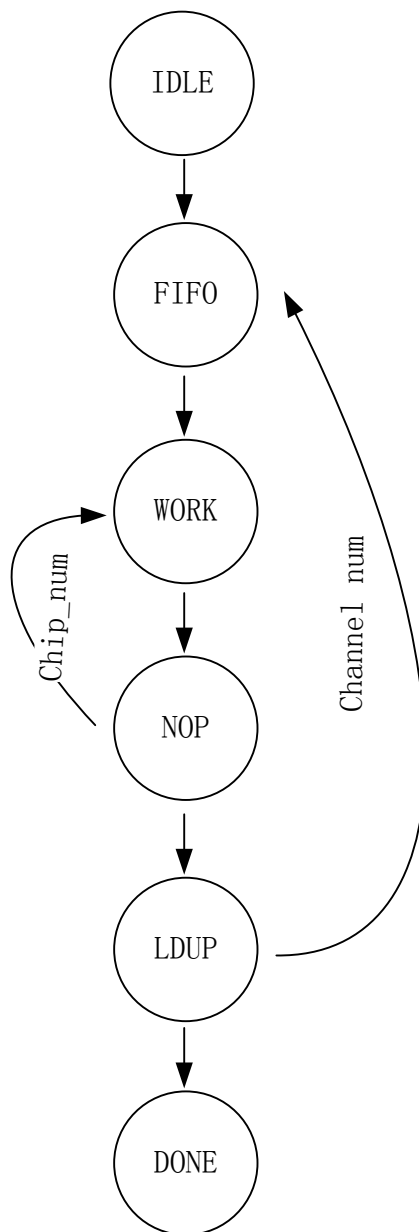


MM Update for A3222Q56

1. aLink[Update For MM DOC Chapter 5]

1.1 FSM



NOTE.

(1) Chip_num: the number of chip under a SPI String.

(2) Ch_num: the number of SPI String.

1.2 Register Description (Base Address 0x80000500)

Register Name	Address	Address Offset within Register Word	Description
TXFIFO	0x00	TxFIFO Data Input, MSB , [W] A Message Block Include: Nonce[1w]+WORK[17w]+nonce2[2W]+cpm2[1w]+cpm1[1w]+cpm0[1w]	TxFIFO Data Input
RXFIFO	0x04	RxFIFO Data Output, [R] A Receive Block Include: Nonce2[2w]+nonce[1w]+nocne[1w]	RxFIFO Data Output
STATE	0x08	[0] TxFIFO Full; [1] Flush; [11:2] TxFIFO Counter MAX 1024;(Word) [12] Reserved; [15:13] State of FSM; [16] RxFIFO Empty; [19:17] Reserved; [28:20] RxFIFO Counter MAX 512;(Word) [31:29] Reserved;	State Register
TIMEOUT	0x0c	Time Out Counter [WR] [24:0] Time Out Counter; [31:25] Reserved;	Time Out Counter
SCK	0x10	[7:0] Half SCK Timing Register; Duty Cycle Always be 50%; [15:8] Reserved; [21:16] Channel Number; [23:22] Reserved; [29:24] Chip Number; [31:30] Reserved	SCK Register

2. ATWI [Replace the UART0 For MM]

2.1 Register Description (Base Address 0x80000100)

Register Name	Address	Address Offset within Register Word	Description
CTRL	0x00	[10] ATWI Write Stop, Write 1 to clear;[RW] When this bit = 1, data in RxFIFO is valid for read. [11] ATWI Read Stop, Write 1 to clear;[RW] When this bit = 1, data in TxFIFO already sent to Mater. [12] ATWI Read Error, Write 1 to clear;[RW] When this bit = 1, a data read error occur, may set TxFIFO Reset. [13] Rx FIFO Reset; [14] Tx FIFO Reset; [15] Logic Reset;	
ADDR	0x04	[6:0] Slave Address[RW]	
TX	0x08	[31:0] Tx FIFO [W]	
RX	0x0c	[31:0] Rx FIFO [R]	

3. DNA [NEW Feature]

3.1 Register Description (Base Address 0x80000100)

Register Name	Address	Address Offset within Register Word	Description
DNAL	0x10	[31:0] DNA Low 32bit[R]	
DNAH	0x14	[24:0] DNA High 25bit[R] [30:25] Reserved; [31] DNA Ready[R], ONLY DNA_Ready = 1, the DNAL & DNAH[24:0] is valid;	

NOTE: FPGA_DNA[56:0] = {DNAH[24:0], DNAL};