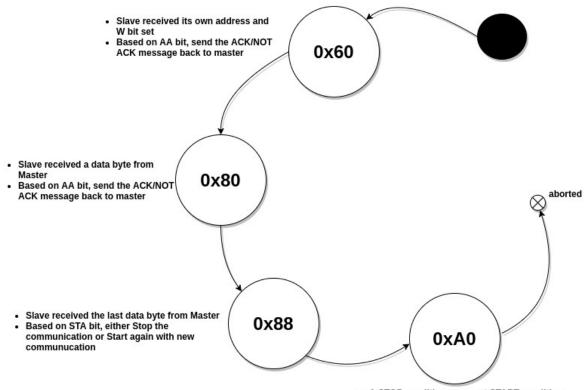
Group: LAB_GROUP_9 I2C State Diagram

Slave Receive Mode - State Table		
HW State	Why you got here?	Action to take
0x60	SLA+W Received from	Set AA bit
	master	Clear SI flag
	ACK returned	Set up Rx buffer for slave
0x80	Register address received	Send ACK
		Set AA bit
		Clear SI flag
0x80	Data received in I2DAT	Send ACK
		Copy data from I2DAT to
		Rx buffer of slave
		Clear SI flag
0x88	Data received in I2DAT	Send NACK
	(Last byte)	Set AA bit
		Clear SI flag
0xA0	STOP received	Set AA bit
		Clear SI flag

Slave Receiver Mode



- A STOP condition or repeat START condition has been received
- Based on the STA bit, either STOP the communication or repeat START the communication

Group: LAB_GROUP_9 I2C State Diagram

Slave Transmit Mode - State Table		
HW State	Why you got here?	Action to take
0xA8	SLA+R Received from master	Load I2DAT with slave TX buffer value Set AA bit Clear SI flag Initialize slave TX data buffer
0xB8	Data byte from I2DAT transmitted ACK received	Load I2DAT with slave TX buffer value Set AA bit Clear SI flag
0xC0	Data byte from I2DAT transmitted NACK received	Set AA bit Clear SI flag
0xC8	Last data byte from I2DAT transmitted ACK received	Set AA bit Clear SI flag

Slave Transmitter Mode

