I2C Write

State Machine
- Initalize Request/Resource
- Send Command to
- Send STOP Command
- End the Process

Interrupt or Response to Decide Next State
- ACK Interrupt
- Data is Ready to be sent
- Data Sent
- DATA Empty
- Data in Register
- Stop Interrupt

Resource Avaliable

IF Transmit Register == 0

No

Yes

Yes

No

Thunderboard Sense 2

Block Sleep Mode

Unblock Sleep Mode

Si1133

Start Bit

Slave ID << 1 | Write Bit

ACK

Register Address

ACK

Send Data

ACK

Send P (Stop Condition)