I2C Annotations

These are the annotated diagrams taken on my employer's Saleae logic analyzer.

As noted in the README, the "Should be TMP102" comments imply that I was only ever able to receive a NACK; this was the main symptom of my communication not working in the end.

Read operation of the temperature register. Contains the steps:

- 1) Write `144`, which is `0x48<<1|0x00`, the write command for the TMP102 slave.
 - a) Then an erroneous NACK
- 2) Write 0x00, the temperature pointer register on the TMP102.
 - a) Then an erroneous NACK
- 3) Read `145`, which is `0x48<<1|0x01`, the read command for the TMP102 slave.
 - a) Then an erroneous NACK
- 4) A dummy read with the master ACK.
- 5) A real read of the MSB with a master ACK.
- 6) A real read of the LSB with a master NACK.
- 7) Master stop.



This one is a write operation to the low temp register on the TMP102.

- 1) Write `144`, which is `0x48<<1|0x00`, the write command for the TMP102 slave.
 - a) Then an erroneous NACK
- 2) Write 0x02, the low temperature pointer register on the TMP102.
 - a) Then an erroneous NACK
- 3) A write of the MSB
 - a) Then an erroneous NACK
- 4) A write of the LSB
 - a) Then an erroneous NACK
- 5) Master stop.

