

Touchscreen protocol

Command to the touchscreen driver

Power Down mode is pretty irrelevant for this

SER/DFR also seems irrelevant as the x pos measure and y pos measure commands are the same for A bits

Touchscreen driver running on 3.3 Volts - teensy should control it just fine

MOSI - Rising

MISO - Falling

First bit is MOSI saying 132:

MOSI bits

1. HIGH - Setting
2. LOW - A2
3. LOW - A1
4. LOW - A0
5. LOW - Mode (12 bit conversion, not 8 bit)
6. HIGH - SER/DFR (It's in single ended mode)
7. LOW - PD1
8. LOW - PD0

If it's pressed then it alternates between 209 and 0 4 times (MOSI)

A bits saying it's measuring the X pos

209:

1. Start (always high) - HIGH
2. A2 - HIGH
3. A1 - LOW
4. A0 - HIGH
5. Mode (12 bit vs 8 bit) - LOW - 12 bits
6. SER - DFR - LOW
7. PD1 - LOW
8. PD0 - HIGH

11010001 - X pos measure

10010001 - Y pos measure

1000 01000

1011 0101 - z pos

1100 0101 - z pos

Reference mode - Single ended