BANK 1

Pull Up Resistors:

Pull Up Resistors

A1
Arduino_UNO_R3

U2E
74CBTLV3257

U1E
74CBTLV3257

U24
PCA9306DC

U1A
74CBTLV3257

U2A
74CBTLV3257
SDA Sel

U1C
74CBTLV3257

U2C
74CBTLV3257
SCL Sel

5V must be 2
3.3V must be 1

R1 10K   R2 10K   R3 200k

R10 10k   R11 10k
R12 10k
R13 10k   R14 10k
R15 10k

Pull Up Resistors:
R4 10K   R5 10K   R6 10K   R7 10K   R8 10K   R9 10K

BANK 2

BANK 3

U11 AT24CS01-SSHM   U14 AT24CS01-SSHM   U17 AT24CS01-XHM   AT24CS01-XHM U20
000   001   010   011

U7   U8   U9   U10 CAT24C 512XHM
CAT24C 512   CAT24C 512   CAT24C 512XHM
100   101   110   111

U12 AT24CS32-SSHM   U15 AT24CS32-SSHM   U18 AT24CS32-XHM   U21 AT24CS32-XHM
000   001   010   011

U13   U16   U19   U22 CAT24C128 XHM
CAT24C128 SSHM   CAT24C128 SSHM   CAT24C128 XHM
100   101   110   111

U3 AT24CS04-SSHM   U4 AT24CS04-SSHM   U5 AT24CS04-XHM   AT24CS04-XHM U6
000   001   010   011

D12, D13 run SDA/SCL Selection Lines

D12 | D13 | Out

L | X | Bank 1
H | L | Bank 2
H | H | Bank 3

ISSUES:

1 — EEPROMs Not Easily Mountable on Breadboard
solution: PCB!

switches use 3.3Vcc so be wary

1, 8, 32, 128, 512

AT24CS

SSHM and XHM

from datasheet: standard operating voltage:

from +2.5V to +5.5V

so +3.3V or +5V should be fine

sticking with Vcc = 5V so voltages consistent

arduino uses +5V logic

arduino logic +5V so
use i2c logic shifter to send to 3.3V

08 has 2 bit addressing
everything else 3 bit :)

all chips run in +3.3V so should be ok