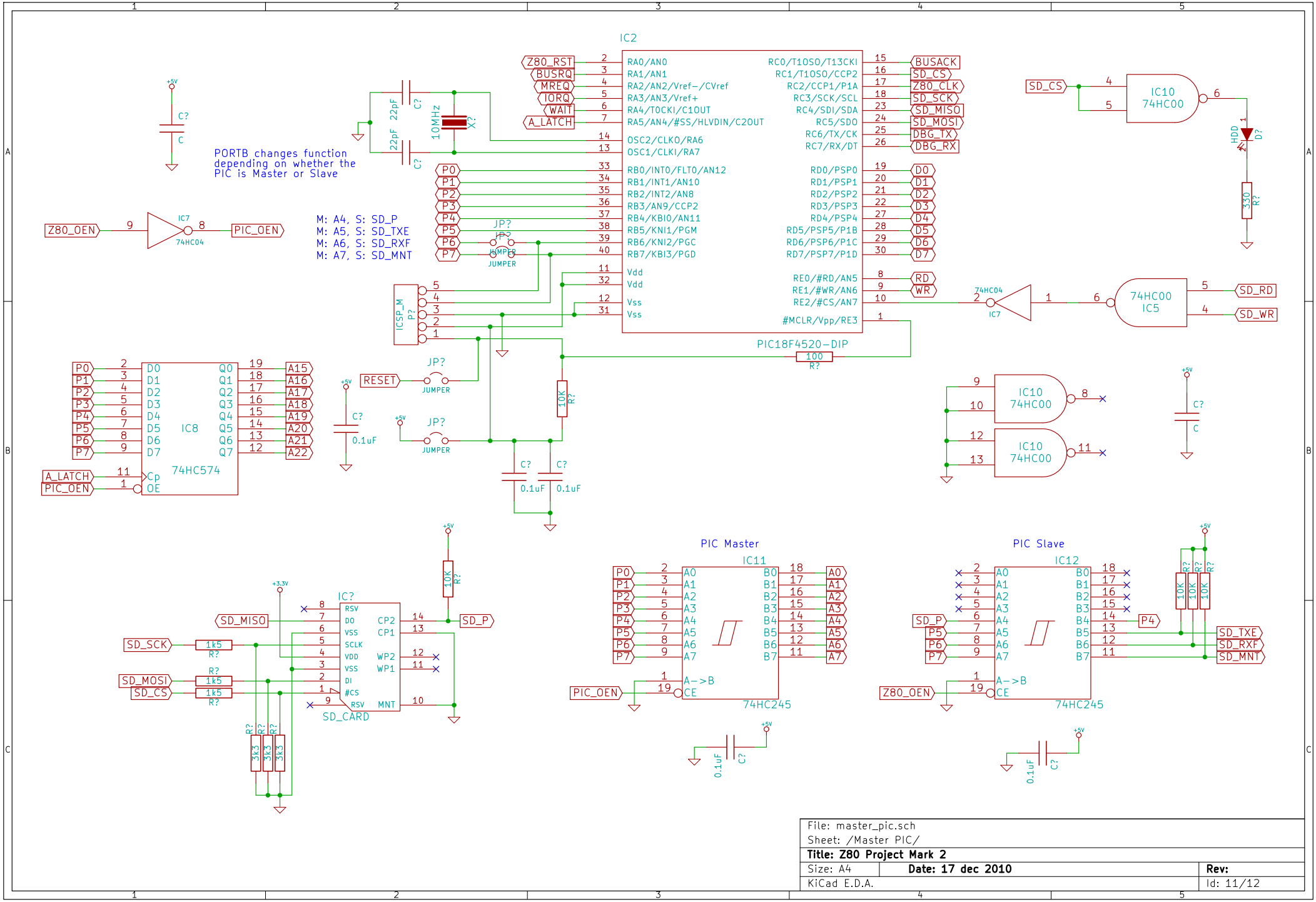
IC2
PIC18F4520-DIP
RA0/AN0
RA1/AN1
RA2/AN2/Vref-/CVref
RA3/AN3/Vref+
RA4/T0CKI/C1OUT
RA5/AN4/#SS/HLVDIN/C2OUT
OSC2/CLKO/RA6
OSC1/CLKI/RA7
RB0/INT0/FLT0/AN12
RB1/INT1/AN10
RB2/INT2/AN8
RB3/AN9/CCP2
RB4/KBI0/AN11
RB5/KNI1/PGM
RB6/KNI2/PGC
RB7/KBI3/PGD
Vdd
Vdd
Vss
Vss
RC0/T1OSO/T13CKI
RC1/T1OSO/CCP2
RC2/CCP1/P1A
RC3/SCK/SCL
RC4/SDI/SDA
RC5/SDO
RC6/TX/CK
RC7/RX/DT
RD0/PSP0
RD1/PSP1
RD2/PSP2
RD3/PSP3
RD4/PSP4
RD5/PSP5/P1B
RD6/PSP6/P1C
RD7/PSP7/P1D
RE0/#RD/AN5
RE1/#WR/AN6
RE2/#CS/AN7
#MCLR/Vpp/RE3
Z80_RST
BUSRQ
MREQ
IORQ
WAIT
A_LATCH
BUSACK
SD_CS
Z80_CLK
SD_SCK
SD_MISO
SD_MOSI
DBG_TX
DBG_RX
D0
D1
D2
D3
D4
D5
D6
D7
RD
WR
P0
P1
P2
P3
P4
P5
P6
P7
10MHz
X?
22pF
C?
PORTB changes function depending on whether the PIC is Master or Slave
M: A4, S: SD_P
M: A5, S: SD_TXE
M: A6, S: SD_RXF
M: A7, S: SD_MNT
JP?
JUMPER
ICSP_M
P?
RESET
10K
R?
100
0.1uF
IC10
74HC00
IC5
74HC04
IC7
Z80_OEN
PIC_OEN
HDD
D?
330
IC8
74HC574
D0
D1
D2
D3
D4
D5
D6
D7
Q0
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Cp
OE
A_LATCH
PIC_OEN
A15
A16
A17
A18
A19
A20
A21
A22
SD_RD
SD_WR
PIC Master
IC11
74HC245
A0
A1
A2
A3
A4
A5
A6
A7
B0
B1
B2
B3
B4
B5
B6
B7
A->B
CE
PIC_OEN
PIC Slave
IC12
74HC245
SD_P
P4
SD_TXE
SD_RXF
SD_MNT
Z80_OEN
IC?
SD_CARD
RSV
DO
VSS
SCLK
VDD
VSS
DI
#CS
RSV
CP2
CP1
WP2
WP1
MNT
SD_MISO
SD_SCK
SD_MOSI
SD_CS
1k5
R?
3k3
+5V
+3.3V
C?
C
File: master_pic.sch
Sheet: /Master PIC/
Title: Z80 Project Mark 2
Size: A4
Date: 17 dec 2010
Rev:
KiCad E.D.A.
Id: 11/12