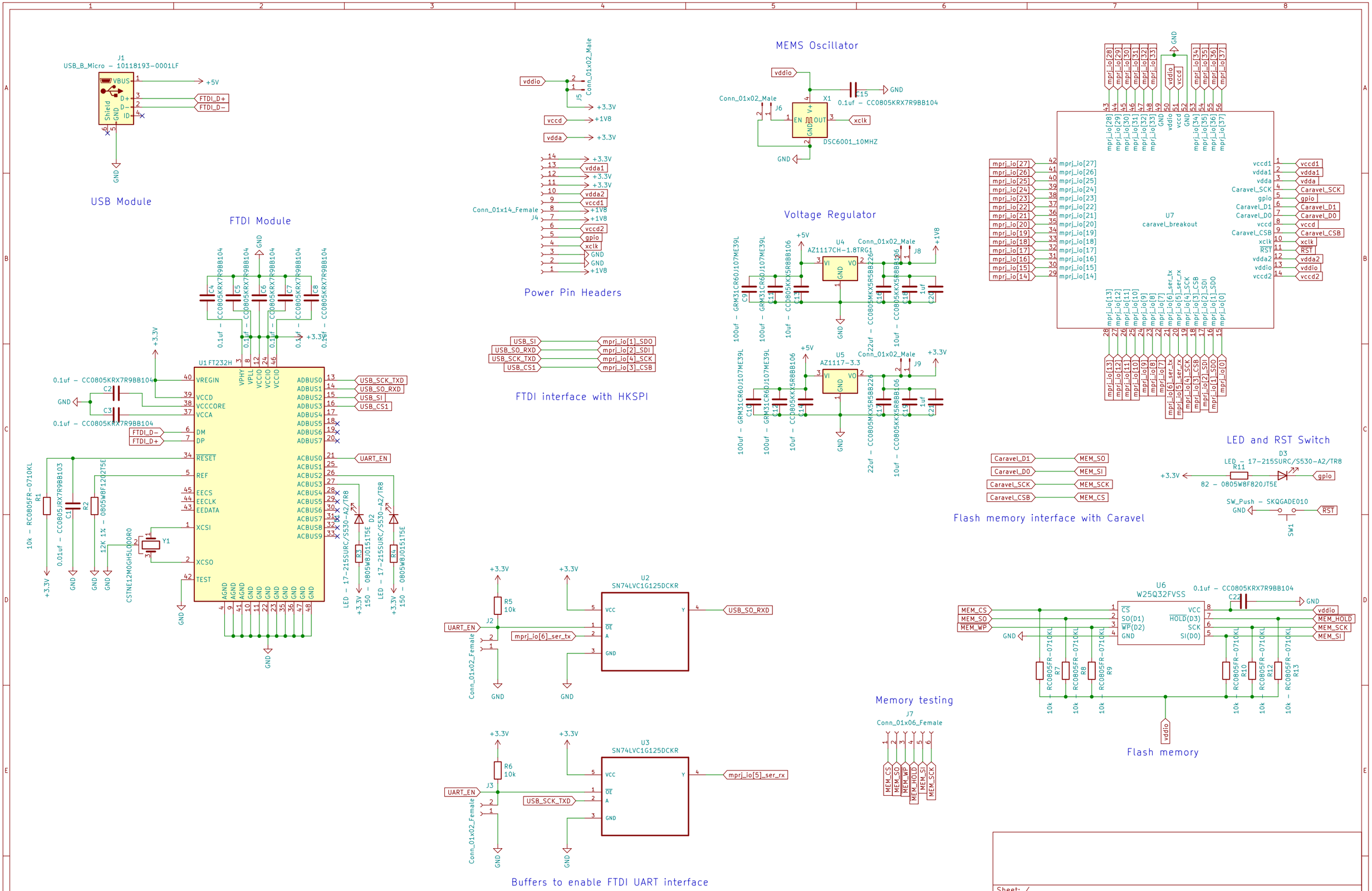
USB Module
J1
USB_B_Micro – 10118193-0001LF
VBUS
D+
D–
ID
GND
Shield
+5V
FTDI_D+
FTDI_D–
FTDI Module
U1 FT232H
VREGIN
VCCD
VCCCORE
VCCA
DM
DP
RESET
REF
EECS
EECLK
EEDATA
XCSI
XCSO
TEST
VPHY
VPLL
VCCIO
ADBUS0
ADBUS1
ADBUS2
ADBUS3
ADBUS4
ADBUS5
ADBUS6
ADBUS7
ACBUS0
ACBUS1
ACBUS2
ACBUS3
ACBUS4
ACBUS5
ACBUS6
ACBUS7
ACBUS8
ACBUS9
USB_SCK_TXD
USB_SO_RXD
USB_SI
USB_CS1
UART_EN
Y1
CSTNE12M0GH5L000R0
R1
10k – RC0805FR-0710KL
R2
12K 1% – 0805W8F1202T5E
C1
0.01uf – CC0805JRX7R9BB103
C2
C3
0.1uf – CC0805KRX7R9BB104
C4
C5
C6
C7
C8
+3.3V
D2
LED – 17-215SURC/S530-A2/TR8
R3
150 – 0805W8J0151T5E
R4
Power Pin Headers
Conn_01x02_Male
J5
vddio
vccd
vdda
Conn_01x14_Female
J4
vdda1
vdda2
vccd1
vccd2
gpio
xclk
+1V8
FTDI interface with HKSPI
mprj_io[1]_SDO
mprj_io[2]_SDI
mprj_io[3]_CSB
mprj_io[4]_SCK
MEMS Oscillator
X1
DSC6001_10MHZ
EN
OUT
J6
C15
0.1uf – CC0805KRX7R9BB104
Voltage Regulator
U4
AZ1117CH-1.8TRG1
U5
AZ1117-3.3
VI
VO
J8
J9
Conn_01x02_Male
GRM31CR60J107ME39L
100uf – GRM31CR60J107ME39L
CC0805KKX5R8BB106
10uf – CC0805KKX5R8BB106
CC0805MKX5R5BB226
22uf – CC0805MKX5R5BB226
CC0805KKX5R8BB106
10uf – CC0805KKX5R8BB106
1uf
U7
caravel_breakout
mprj_io[27]
mprj_io[26]
mprj_io[25]
mprj_io[24]
mprj_io[23]
mprj_io[22]
mprj_io[21]
mprj_io[20]
mprj_io[19]
mprj_io[18]
mprj_io[17]
mprj_io[16]
mprj_io[15]
mprj_io[14]
mprj_io[13]
mprj_io[12]
mprj_io[11]
mprj_io[10]
mprj_io[9]
mprj_io[8]
mprj_io[7]
mprj_io[6]_ser_tx
mprj_io[5]_ser_rx
mprj_io[4]_SCK
mprj_io[3]_CSB
mprj_io[2]_SDI
mprj_io[1]_SDO
mprj_io[0]
mprj_io[28]
mprj_io[29]
mprj_io[30]
mprj_io[31]
mprj_io[32]
mprj_io[33]
mprj_io[34]
mprj_io[35]
mprj_io[36]
mprj_io[37]
vccd1
vdda1
vdda
Caravel_SCK
gpio
Caravel_D1
Caravel_D0
vccd
Caravel_CSB
xclk
RST
vdda2
vddio
vccd2
Flash memory interface with Caravel
Caravel_D1
Caravel_D0
Caravel_SCK
Caravel_CSB
MEM_SO
MEM_SI
MEM_SCK
MEM_CS
LED and RST Switch
D3
LED – 17-215SURC/S530-A2/TR8
R11
82 – 0805W8F820JT5E
SW_Push – SKQGADE010
SW1
U2
SN74LVC1G125DCKR
U3
SN74LVC1G125DCKR
VCC
OE
A
Y
R5
10k
R6
10k
J2
J3
Conn_01x02_Female
UART_EN
mprj_io[6]_ser_tx
USB_SCK_TXD
USB_SO_RXD
mprj_io[5]_ser_rx
Buffers to enable FTDI UART interface
Memory testing
J7
Conn_01x06_Female
MEM_CS
MEM_SO
MEM_WP
MEM_HOLD
MEM_SI
MEM_SCK
U6
W25Q32FVSS
CS
SO(D1)
WP(D2)
SI(D0)
HOLD(D3)
C22
0.1uf – CC0805KRX7R9BB104
R7
R8
R9
R10
R12
R13
10k – RC0805FR-0710KL
Flash memory
Sheet: /
File: caravel_pcb_v3_FTDI.kicad_sch
Title:
Size: A3
Date:
Rev:
KiCad E.D.A. eeschema (6.0.5-0)
Id: 1/1