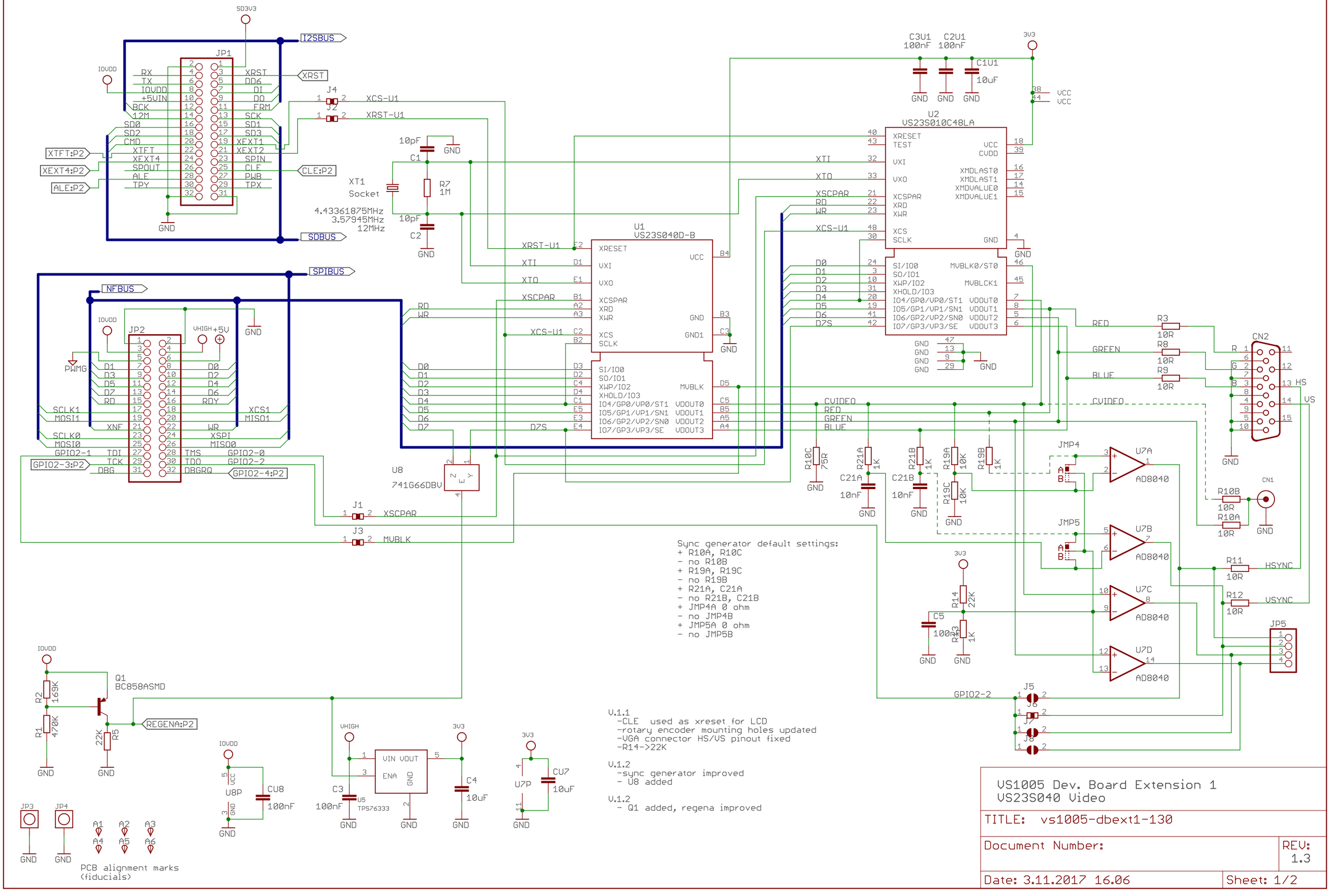
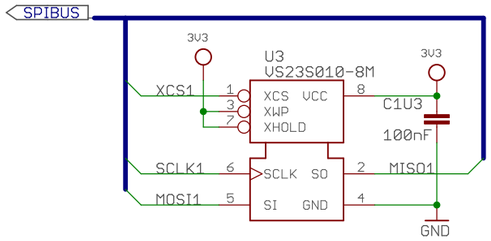
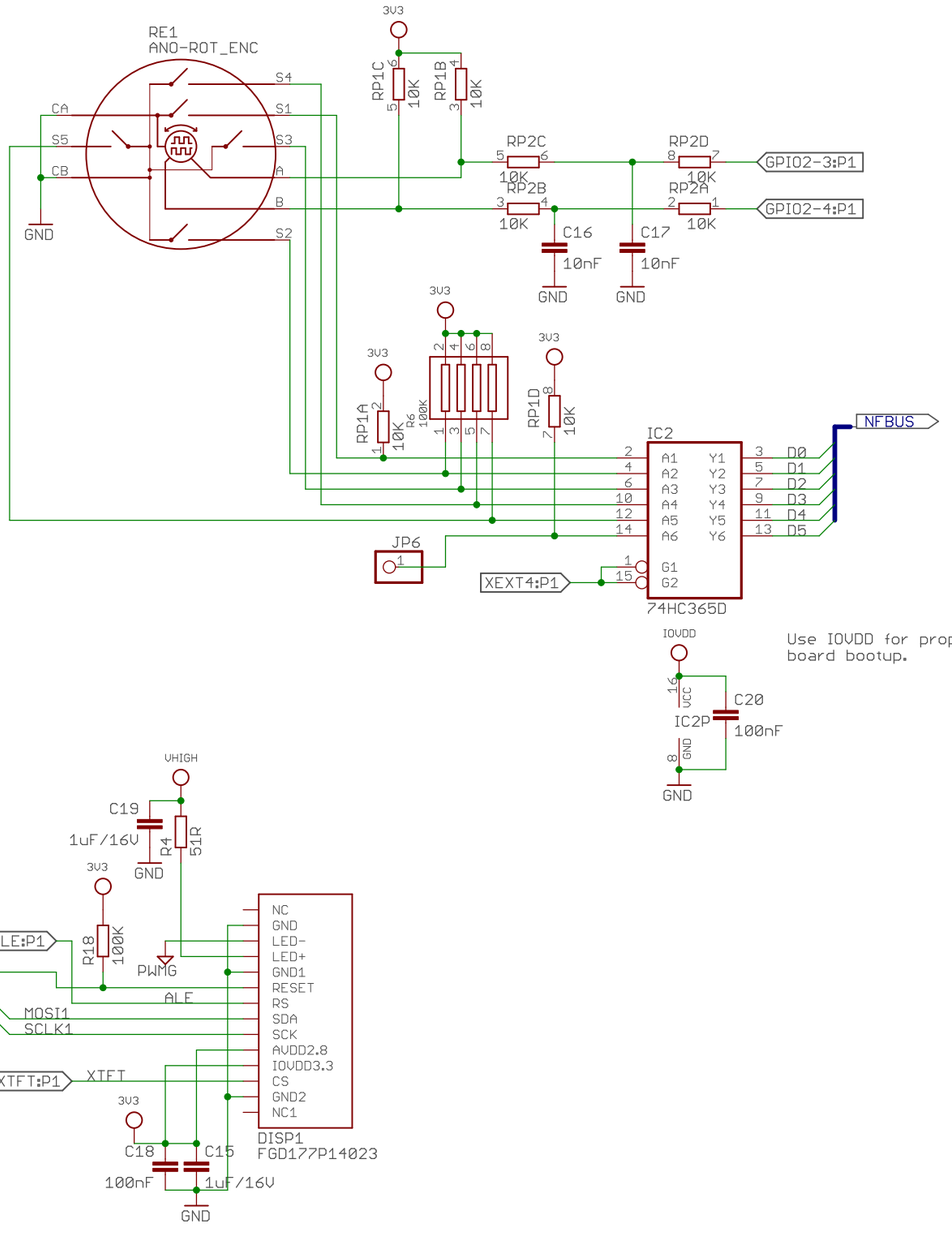
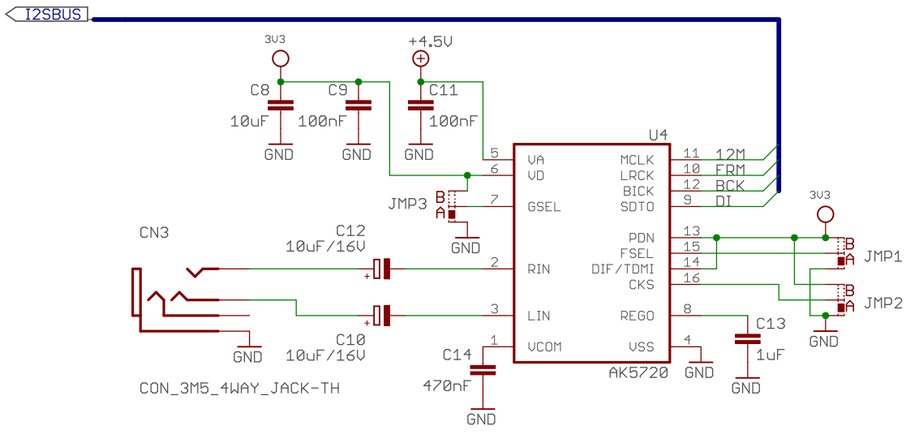
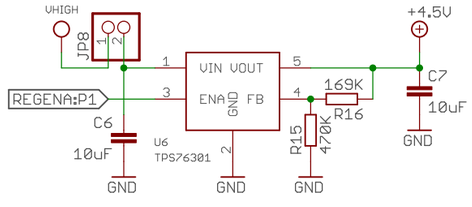

SD3V3
I2SBUS
JP1
IOVDD
RX
TX
IOVDD
+5VIN
BCK
12M
SD0
SD2
CMD
XTFT
XFXT4
SPOUT
ALE
TPY
XRST
DD6
DI
DO
FRM
SCK
SD1
SD3
XFXT1
XFXT2
SPIN
CLF
PWB
TPX
XTFT:P2
XFXT4:P2
ALE:P2
CLE:P2
GND
SDBUS
J4
J2
XCS-U1
XRST-U1
10pF
C1
GND
XT1
Socket
R7
1M
4.43361875MHz
3.57945MHz
12MHz
10pF
C2
GND
U1
VS23S040D-B
XRESET
VCC
VXI
VXO
XCSPAR
XRD
XWR
GND
XCS
SCLK
GND1
SI/IO0
SO/IO1
XWP/IO2
MVBLK
XHOLD/IO3
IO4/GP0/VP0/ST1
IO5/GP1/VP1/SN1
IO6/GP2/VP2/SN0
IO7/GP3/VP3/SE
VDOUT0
VDOUT1
VDOUT2
VDOUT3
DZS
C3U1
100nF
C2U1
100nF
C1U1
10uF
3V3
VCC
VCC
U2
VS23S010C48LA
XRESET
TEST
VCC
CVDD
VXI
VXO
XCSPAR
XRD
XWR
XCS
SCLK
GND
XMDLAST0
XMDLAST1
XMDVALUE0
XMDVALUE1
SI/IO0
SO/IO1
XWP/IO2
XHOLD/IO3
IO4/GP0/VP0/ST1
IO5/GP1/VP1/SN1
IO6/GP2/VP2/SN0
IO7/GP3/VP3/SE
MVBLK0/ST0
MVBLCK1
VDOUT0
VDOUT1
VDOUT2
VDOUT3
XTI
XTO
XSCPAR
RD
WR
XCS-U1
D0
D1
D2
D3
D4
D5
D6
DZS
RED
GREEN
BLUE
R3
10R
R8
10R
R9
10R
CN2
HS
VS
CVIDEO
R10C
75R
R21A
1K
C21A
10nF
R21B
1K
C21B
10nF
R19A
10K
R19C
10K
R19B
1K
JMP4
JMP5
U7A
U7B
U7C
U7D
AD8040
R10B
10R
R10A
10R
CN1
R11
10R
HSYNC
R12
10R
VSYNC
JP5
R14
22K
C5
100nF
R13
1K
NFBUS
SPIBUS
JP2
VHIGH
+5V
PWMG
SCLK1
MOSI1
XNF
SCLK0
MOSI0
GPIO2-1
TDI
TCK
DBG
TMS
TDO
DBGRQ
GPIO2-0
GPIO2-2
GPIO2-4:P2
GPIO2-3:P2
XCS1
MISO1
WR
XSPI
MISO0
RDY
U8
741G66DBV
J1
XSCPAR
J3
MVBLK
J5
J6
J7
J8
Sync generator default settings:
+ R10A, R10C
- no R10B
+ R19A, R19C
- no R19B
+ R21A, C21A
- no R21B, C21B
+ JMP4A 0 ohm
- no JMP4B
+ JMP5A 0 ohm
- no JMP5B
Q1
BC858ASMD
R2
169K
R1
470K
22K
R5
REGENA:P2
U8P
CU8
100nF
U5
TPS76333
C3
100nF
C4
10uF
U7P
CU7
10uF
JP3
JP4
A1
A2
A3
A4
A5
A6
PCB alignment marks
(fiducials)
V.1.1
-CLE used as xreset for LCD
-rotary encoder mounting holes updated
-VGA connector HS/VS pinout fixed
-R14->22K
V.1.2
-sync generator improved
- U8 added
V.1.2
- Q1 added, regena improved
VS1005 Dev. Board Extension 1
VS23S040 Video
TITLE: vs1005-dbext1-130
Document Number:
REV: 1.3
Date: 3.11.2017 16.06
Sheet: 1/2

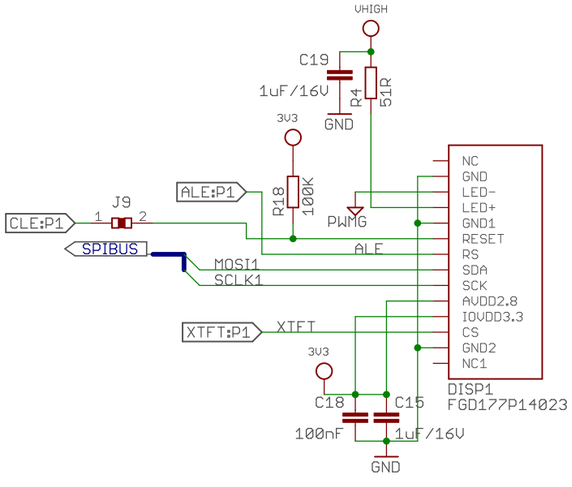






Use IOVDD for proper Developer board bootup.





V.1.1
-CLE used as xreset for LCD
-rotary encoder mounting holes updated

VS1005 Dev. Board Extension 1
Mem + Audio + UI

TITLE: vs1005-dbext1-130

Document Number:

REV: 1.3

Date: 3.11.2017 16.06

Sheet: 2/2