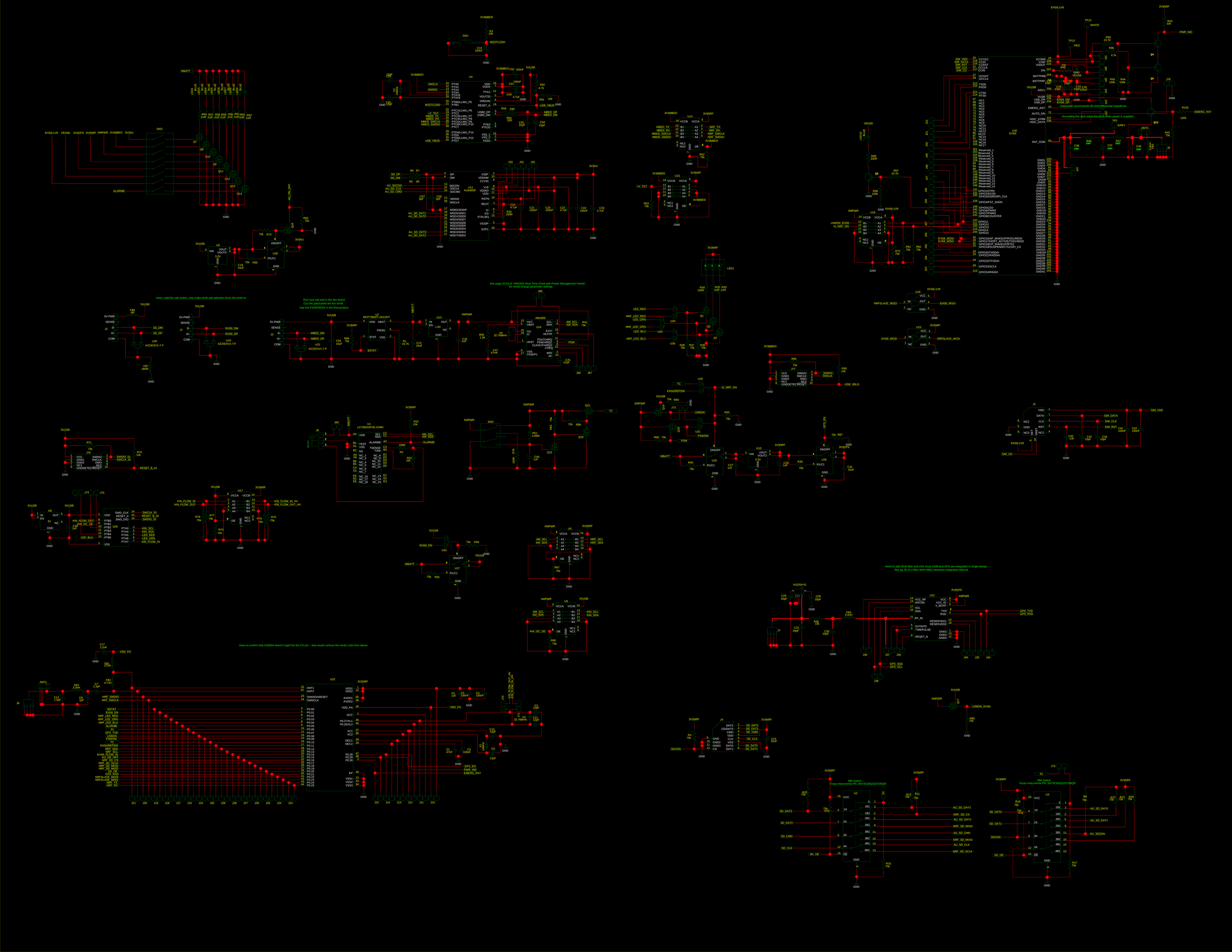
3V3MBED
SW1
R3 10k
BOOTLOAD
C14 100nF
GND
U4
SWCLK
SWDIO
BOOTLOAD
+V_TGT
MBED_TX
MBED_RX
MBED_SWCLK
MBED_SWDIO
USB_VBUS
PTA0
PTA2
PTA3
PTA4
PTA18
PTA19
PTB0/LLWU_P5
PTB1
PTC1/LLWU_P6
PTC2
PTC3/LLWU_P7
PTC4/LLWU_P8
PTD5/LLWU_P9
PTC5/LLWU/CP1O
PTC6
PTD4/LLWU_P14
PTD6
PTD6/LLWU_P15
PTD7
VDD
VDDA
PTA1
VOUT33
VREGIN
RESET_b
USB0_DP
USB0_DM
PTE0
PTE20
VSS
VSS_2
VSSA
5VUSB
C52 100nF
C51 100nF
R92 4.7k
R91 10k
C49 4.7uF
R93 33R
R94 33R
C55 22pF
C54 22pF
MBED_DP
MBED_DM
EHS6-1V8
VEHS6
3V3GPS
3V3NRF
AMPWR
3V3MBED
3V3AU
SW3
Q7
Q8
Q10
Q9
Q11
Q12
Q13
Q14
ALARMB
AU_ON_OFF
R84 75k
Q18
U9
VIN
VOUT
VOUT2
3.3V
C19 10uF
75k R72
75k R85
U28
ON/OFF
R1/C1
MBATT
LED22
LED23
LED24
LED25
LED26
LED27
LED28
LED29
LED30
LED31
LED32
R64 R57 R58 R59 R60 R61 R62 R63
51R 51R 51R 51R 51R 51R 51R 51R
SD_DP
SD_DM
AU_SD_CLK
AU_SD_CMD
AU_SD_DAT1
AU_SD_DAT0
AU_SD_DAT3
AU_SD_DAT2
0R R7
R5 0R
C57 5pF
C58 5pF
U11 AU6465R
DP
DM
SDCDN
SDCLK
SDCMD
MSINS
MSCLK
MSBS/SDWP
MSD5/SD01
MSD1/SDD0
MSD4/SD07
MSD0/SDD6
MSD3/SD05
MSD6/SDD4
MSD2/SD03
MSD7/SDD2
VO3P
VDDHM
C1V33
V18
VDDIO
VDD
RSTN
REXT
XI
XO
XTALSEL
VS3P
EXP1
C24 4.7uF
C21 100nF
C20 100nF
C22 4.7uF
C19 100nF
C23 4.7uF
R30 330R
J33 J31 J32
U14
VCCB
VCCA
NRF_TX
NRF_RX
NRF_SWCLK
NRF_SWDIO
R52 75k
U15
R53 75k
VEH56
LED18
R99 330R
Q6
R97 23.7k
R98 100k
EHS6-1V8
AMPWR
U16
USBON_EHS6
IS_NRF_ON
R73 75k
R81 75k
R82 75k
EHS6_MOSI
EHS6_MISO
GND
U30
EHS6
SIM_VDD
SIM_DATA
SIM_RST
SIM_CLK
SIM_CD
CCVCC
CCIO
CCRST
CCCLK
CCIN
I2CDAT
I2CCLK
TXD0
RXD0
CTS0
RTS0
NC1
NC2
NC3
NC4
NC5
NC6
NC7
NC8
NC9
NC10
NC11
NC12
NC13
NC14
NC15
NC16
NC17
Reserved_1
Reserved_2
Reserved_3
Reserved_4
Reserved_5
Reserved_6
Reserved_7
Reserved_8
Reserved_9
Reserved_10
Reserved_11
Reserved_12
Reserved_13
Reserved_14
GPIO/LDTR0
GPIO/SDX00
GPIO/3GSRG/SPI_CLK
GPIO4/FST_SHDN
GPIO5A EG
GPIO6/PWM2
GPIO7/PWM1
GPIO8/COUNTER
GPIO11
GPIO12
GPIO13
GPIO14
GPIO15
GPIO16/AP_WAKEUP/RXD1/MOSI
GPIO17/HOST_ACTIVE/TXD1/MISO
GPIO18/CP_WAKEUP/RTS1
GPIO19/SUSPEND/CTS1/SPI_CS
GPIO20/TXD0AU
GPIO21/RXD0AU
GPIO32/TFSDAI
GPIO23/SCLK
GPIO24/RING0
VCORE
VLDO
VDDLP
ON
BATTPBB
BATTPRF
5VUSB
ADC1
VUSB
USB_DN
USB_DP
EMERG_RST
AUTO_ON
HSIC_STRB
HSIC_DATA
ANT_GSM
EHS6_DM
EHS6_DP
Snapshot recommends 90 ohm differential impedence
Grounding this auto-starts the shield when power is supplied
TP13
WHITE
TP12
RED
R95 23.7k
R96 4.7k
R48 10k
R45 100k
R44 100k
C37 220pF
C38 220pF
R43 10k
PWR_IND
Q4
Q5
J78
R100 100k
EMERG_RST
TP2
GREY
ANT3
R42 75k
R46 DNP
R47 DNP
C40 DNP
4.8nH
J8
J41
when i add the usb switch, only make ehs5 usb selection force the ehs5 on
5V-PWR
SENSE
D-
D+
COM
SD_DM
SD_DP
U20
AZ23C5V1-7-F
FB7 005R
EHS6_DM
EHS6_DP
U19
Don't put usb-esd in the dev board
Cut the good parts are too small.
Use the ESDR5502N in the final product
U7
MCP73832T-2ACI/OT
VDD
VBAT
PROG
STAT
VSS
BSTAT
MBED_DM
MBED_DP
U21
R66 75k
C56 10uF
R1 23.7k
C13 10uF
U13
IN
EN
OUT
1.8V
NC
C16 1uF
AMPWR
See page 52-53 of "AM18XS Real-Time Clock with Power Management Family" for trickle charge parameter settings
J68
AM1805
VCC
VBAT
XO
XI
SCL
SDA
EXTI
HEXTRI
nRST
PSW/nIRQ
CLKOUT/nIRQ2
FOUT/nIRQ
nTIMIQ
VSS
VSSEP1
WDI
AF
AM_SCL
AM_SDA
R41 75k
X4 32.768kHz
C47 47nF
C25 47pF
PSW
J66 J67
LED_RED
NRF_LED_RED
LED_GRN
NRF_LED_GRN
LED_BLU
NRF_LED_BLU
U34
U35
U36
Q1
Q3
Q2
R38 75k
R37 75k
R39 75k
LED1
R34 100R
R35 R33
51R 51R
U18
NRFSLAVE_MISO
EHS6_MISO
U23
EHS6_MOSI
NRFSLAVE_MOSI
R89 75k
277
SWDIO
SWCLK
R90 10k
USB_VBUS
TC
U32
IS_NRF_ON
ENSUREPSW
SWPWR
R88 75k
Q19
J73
USBON
R50 75k
Q20
U31
PSWSW
R69 75k
MBATT
R40 75k
U25
R1/C1
C27 1uF
U10
VOUT
VOUT2
3.3V
C26 1uF
R39 75k
U26
C32 10uF
GPS_EN
R87 75k
J5
VDD
DATA
CLK
RST
NC1
NC2
NC3
DET
SIM_DATA
SIM_CLK
SIM_RST
C41 100nF
C43 100nF
C45 1nF
C47 10pF
C44 10pF
3V3VUSB
R71 75k
J76
R70 10k
SWDIO_02
SWCLK_02
RESET_B_02
J9
J69
U1
LC709203F-01-MH
A1
A2
A3
B1
B2
B3
VDD
SCL
SDA
ALARMB
TEST
VSS
TSENSE
TSW
NC
R32 10k
R31 10k
R2 100R
AM_SCL
AM_SDA
ALARMB
SW2
R51 4.99M
R83 75k
R86 75k
Q21
Q16
Q15
R79 100R
C46 1uF
J74
J75
U8
U29
SWD_CLK
RESET_B
SWD_DIO
PTB0
PTB1
PTB3
PTB4
PTB5
PTA3
PTA4
PTA5
PTA6
PTA7
VSS
KIN_FLOW_IN
KIN_FLOW_OUT
KIN_I2C_OE
LED_BLU
KIN_SCL
KIN_SDA
LED_RED
LED_GRN
KIN_FLOW_IN
SWCLK_02
RESET_B_02
SWDIO_02
U17
LCT00203F-01-MH
KIN_FLOW_IN_HV
KIN_FLOW_OUT_HV
R78 75k
R77 75k
R74 75k
R76 75k
R75 75k
EHS6_EN
U33
ON/OFF
R1/C1
R55 75k
R56 75k
VEHS6
U27
U5
NRF_SCL
NRF_SDA
R67 75k
U6
KIN_I2C_OE
R68 75k
C17 2.2nF
VDD_PA
FB1 27nH
ANT1
FB3 3.2nH
C7 2.2pF
FB2 4.7nH
C12 1.5pF
C8 10pF
J6
NRF_SWDIO
NRF_SWCLK
BSTAT
EHS6_EN
NRF_LED_REG
NRF_LED_GRN
NRF_LED_BLU
ALARMB
SI
GPS_TXD
USBON
PSWSW
TC
ENSUREPSW
NRF_SDA
NRF_SCL
EHS6_FLOW_IN
AU_ON_OFF
NRF_SD_CS
NRF_SD_SCLK
NRF_SD_MOSI
NRF_SD_MISO
NRF_SD_CMD
GPS_RXD
NRFSLAVE_MOSI
NRFSLAVE_MISO
NRF_TX
NRF_RX
U22
ANT1
ANT2
SWDIO/nRESET
SWDCLK
VDD1
VDD3
AVDD1
AVDD2
VDD_PA
DCC
P0.27/XL1
P0.26/XL2
XC1
XC2
DEC1
DEC2
P0.28
P0.29
P0.30
EP
VSS1
VSS2
VSS3
C5 1nF
C6 100nF
C4 100nF
C2 12pF
X3 32.768kHz
C10 12pF
C11 12pF
X1 16MHz
C1 47nF
C3 100nF
C9 12pF
GPS_EN
PWR_IND
EMERG_RST
J70
J71
J21 J20 J19 J18 J17 J16 J15 J30 J29 J28 J27 J26 J25 J24 J23
J22 J14 J13 J12 J11 J10
A102D4-01
C29 20pF
C28 20pF
C31 20pF
R40 10k
FB4 5.6nH
C30 20pF
J7
U12
VCC_RF
ANTON
SCL
SDA
RF_IN
EXTINT0
TIMEPULSE
RESET_N
VCC
VCC_IO
V_BCKP
TXD
RXD
RESERVED1
RESERVED2
GND1
GND2
GND3
AMPWR
GPS_TXD
GPS_RXD
GPS_SDA
GPS_SCL
J39 J37 J36 J38 J40 J35 J34
J4
DAT2
CD/DAT3
CMD
VDD
CLK
VSS
DAT0
DAT1
CD
SD_DAT2
SD_DAT3
SD_CMD
SD_CLK
SD_DAT0
SD_DAT1
SDCDN
R4 75k
C15 22pF
U2
U3
S1
J72
4Bit Switch
Texas Instruments P/N: SN74CB3Q3257DBQR
SD_DAT3
SD_DAT2
SD_CMD
SD_CLK
SD_OE
AU_SD_DAT3
NRF_SD_CS
AU_SD_DAT2
NRF_SD_MISO
AU_SD_CMD
NRF_SD_MOSI
AU_SD_CLK
NRF_SD_SCLK
SD_DAT0
SD_DAT1
AU_SD_DAT0
AU_SD_DAT1
AU_SD_SDCDN
R25 75k
R12 75k
R11 75k
R16 75k
R18 75k
R6 75k
R27 75k
R21 75k
R20 75k
R17 75k