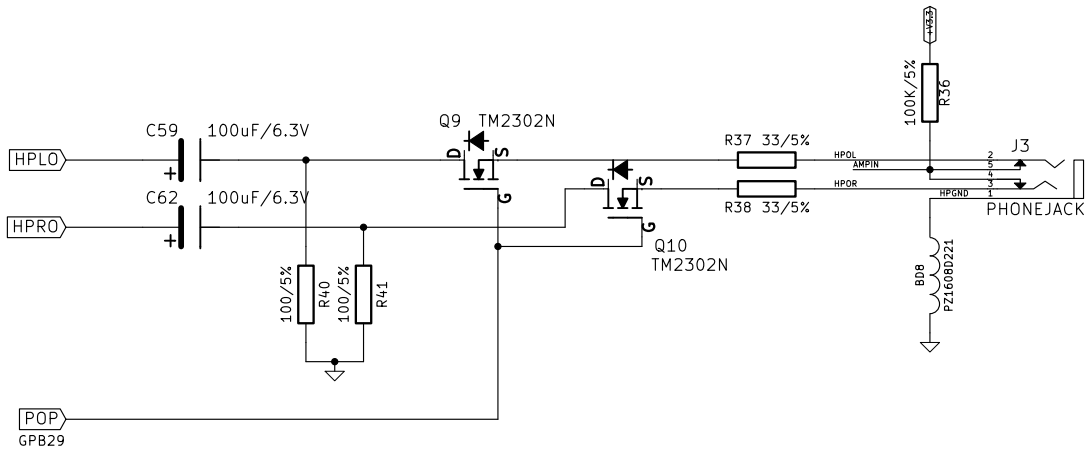
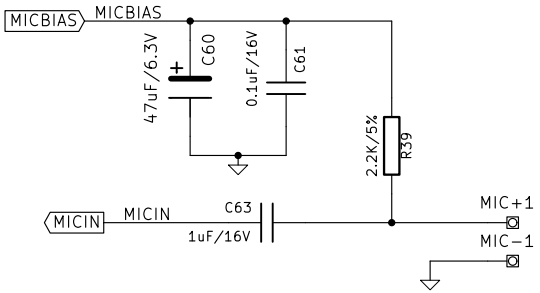
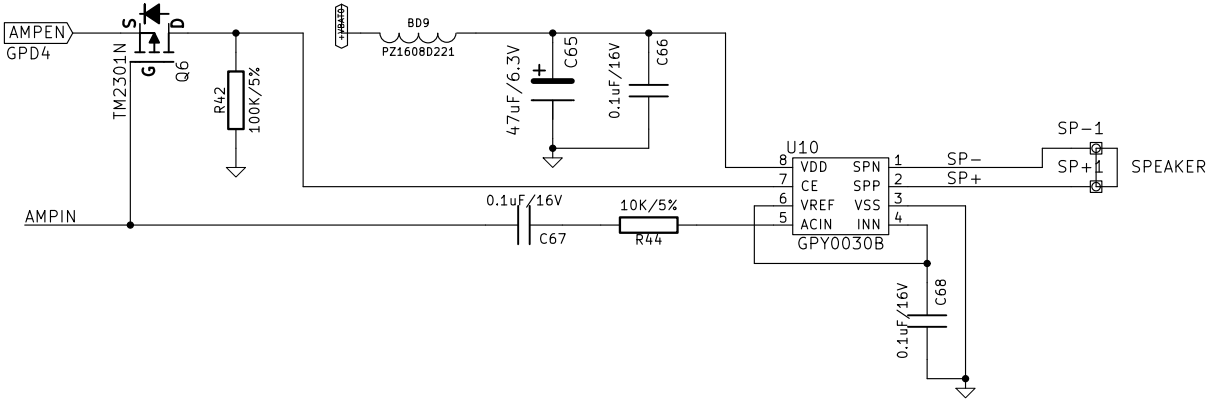
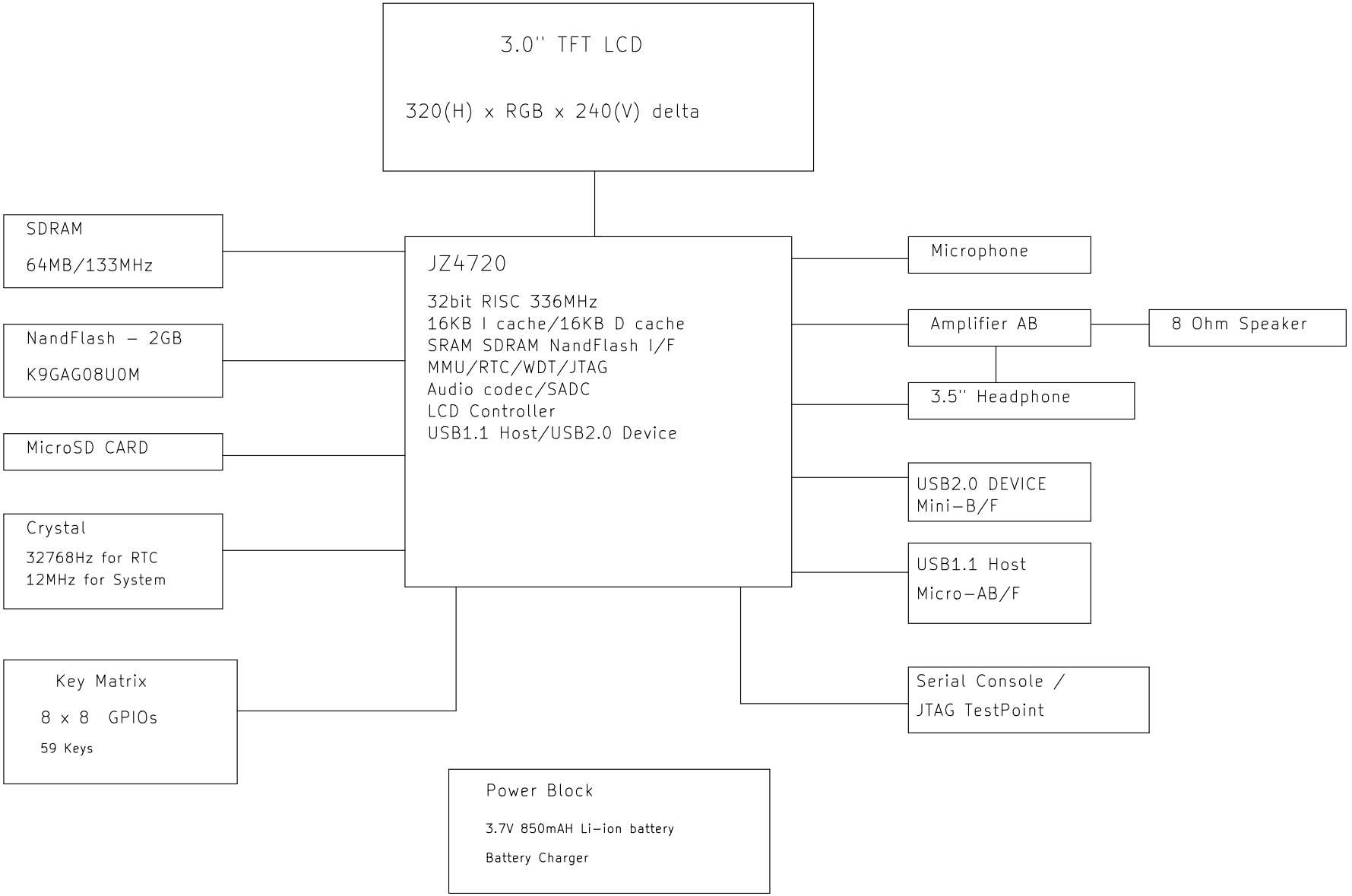
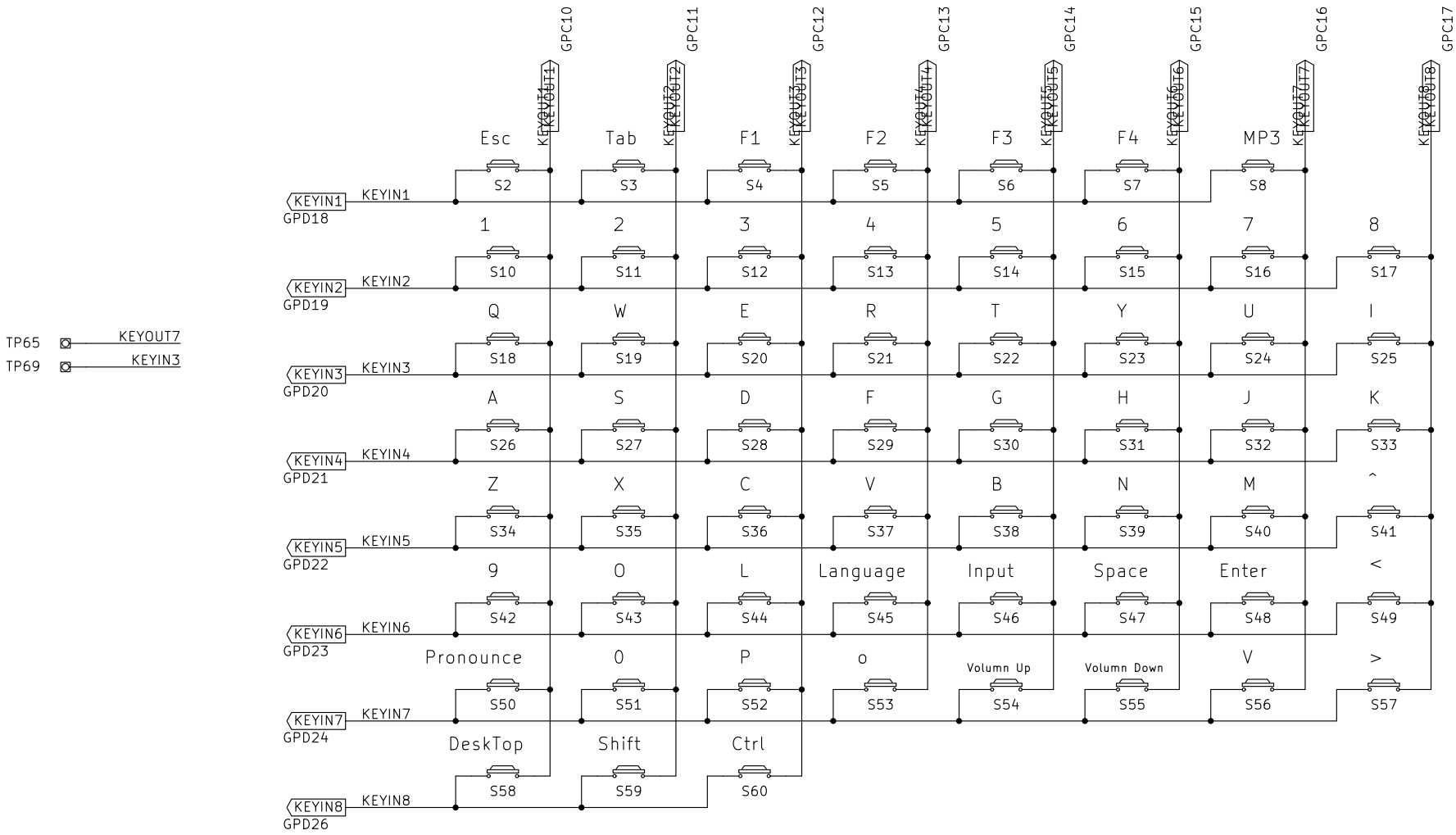
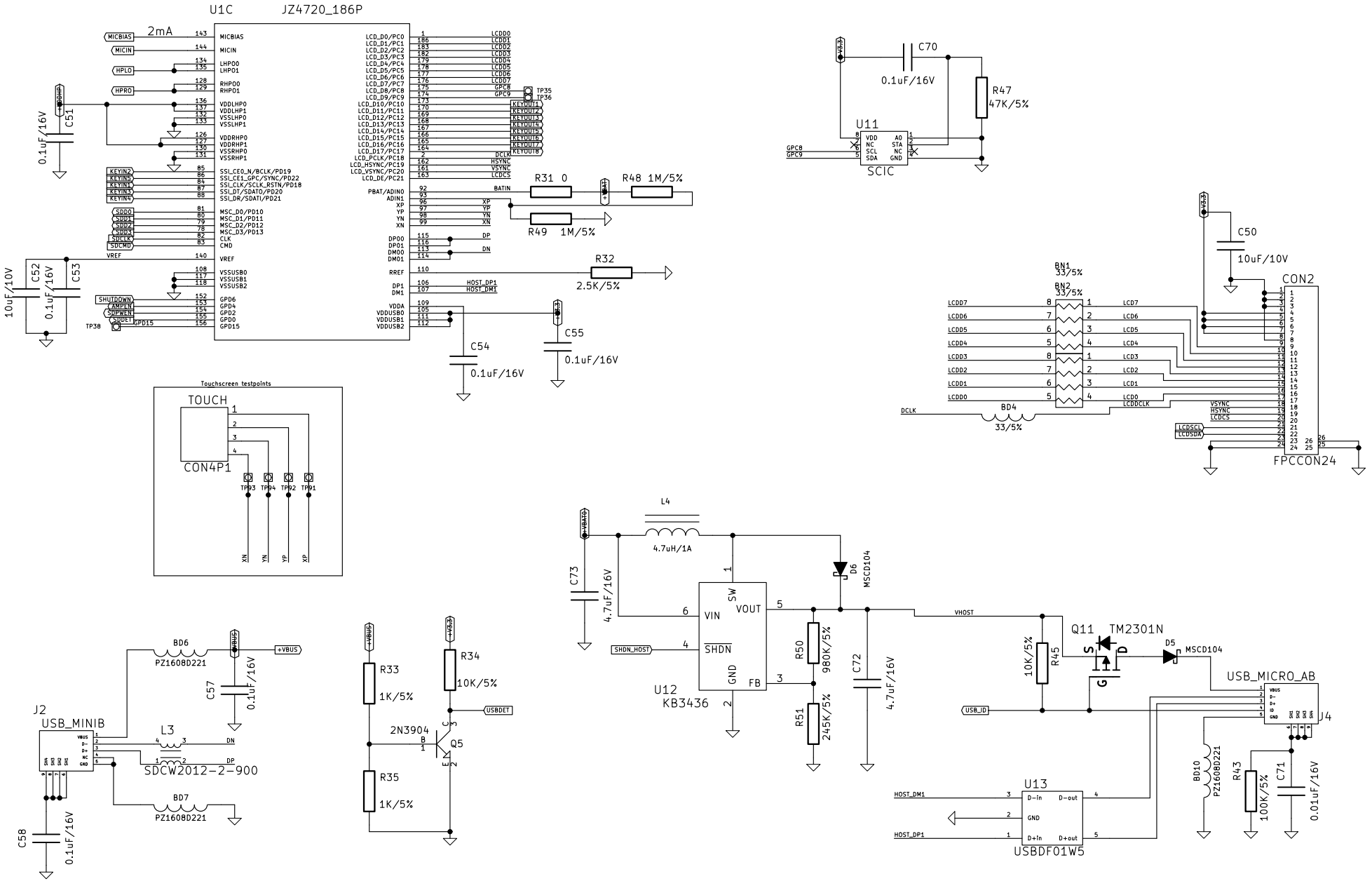

HPLO
HPRO
C59
100uF/6.3V
C62
100uF/6.3V
Q9 TM2302N
Q10
TM2302N
R37 33/5%
R38 33/5%
100K/5%
R36
J3
PHONEJACK
HPOL
AMPIN
HPOR
HPGND
BD8
PZ1608D221
100/5%
R40
100/5%
R41
POP
GPB29

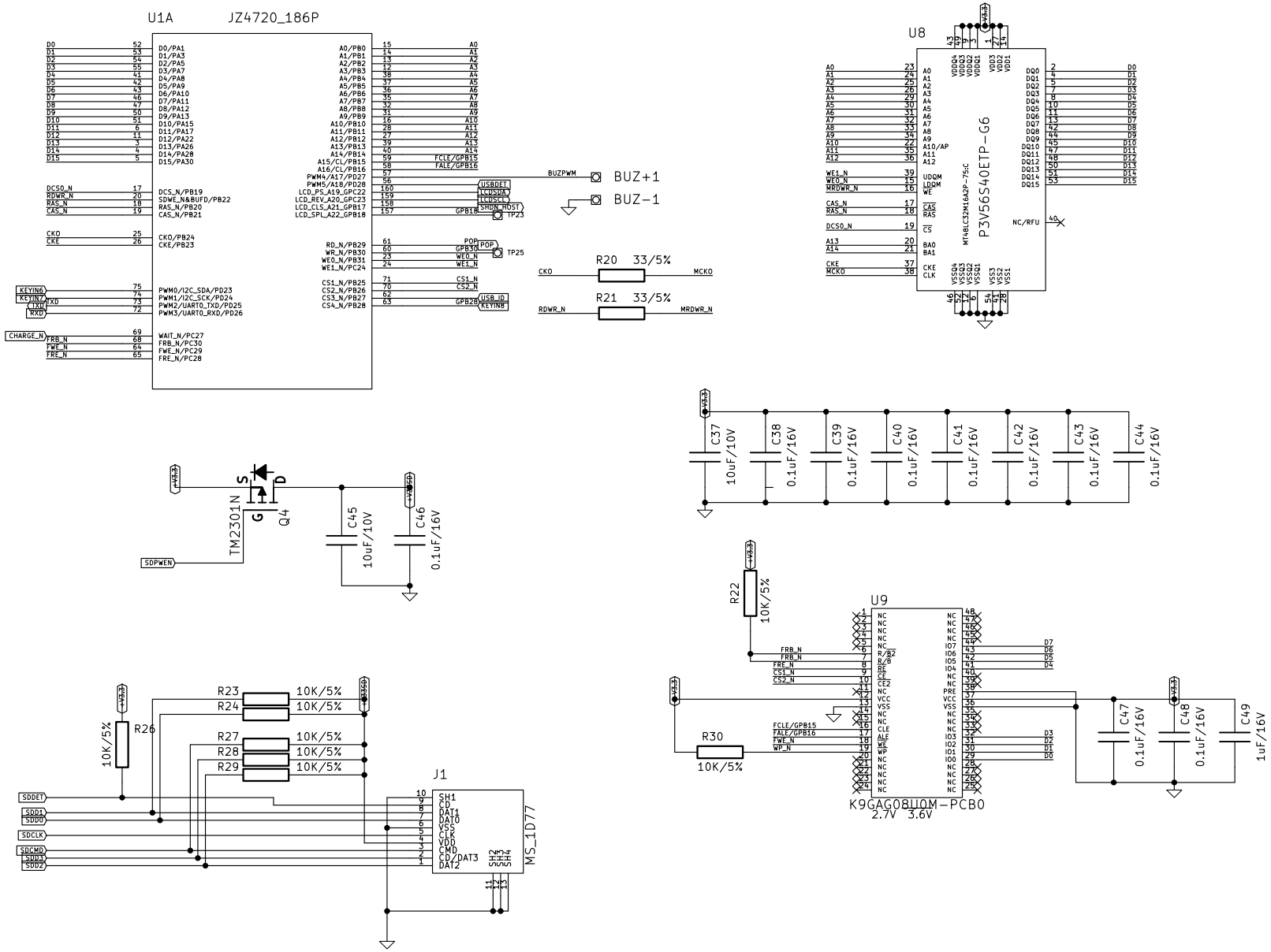

MICBIAS
MICBIAS
47uF/6.3V
C60
0.1uF/16V
C61
2.2K/5%
R39
MICIN
MICIN
C63
1uF/16V
MIC+1
MIC-1

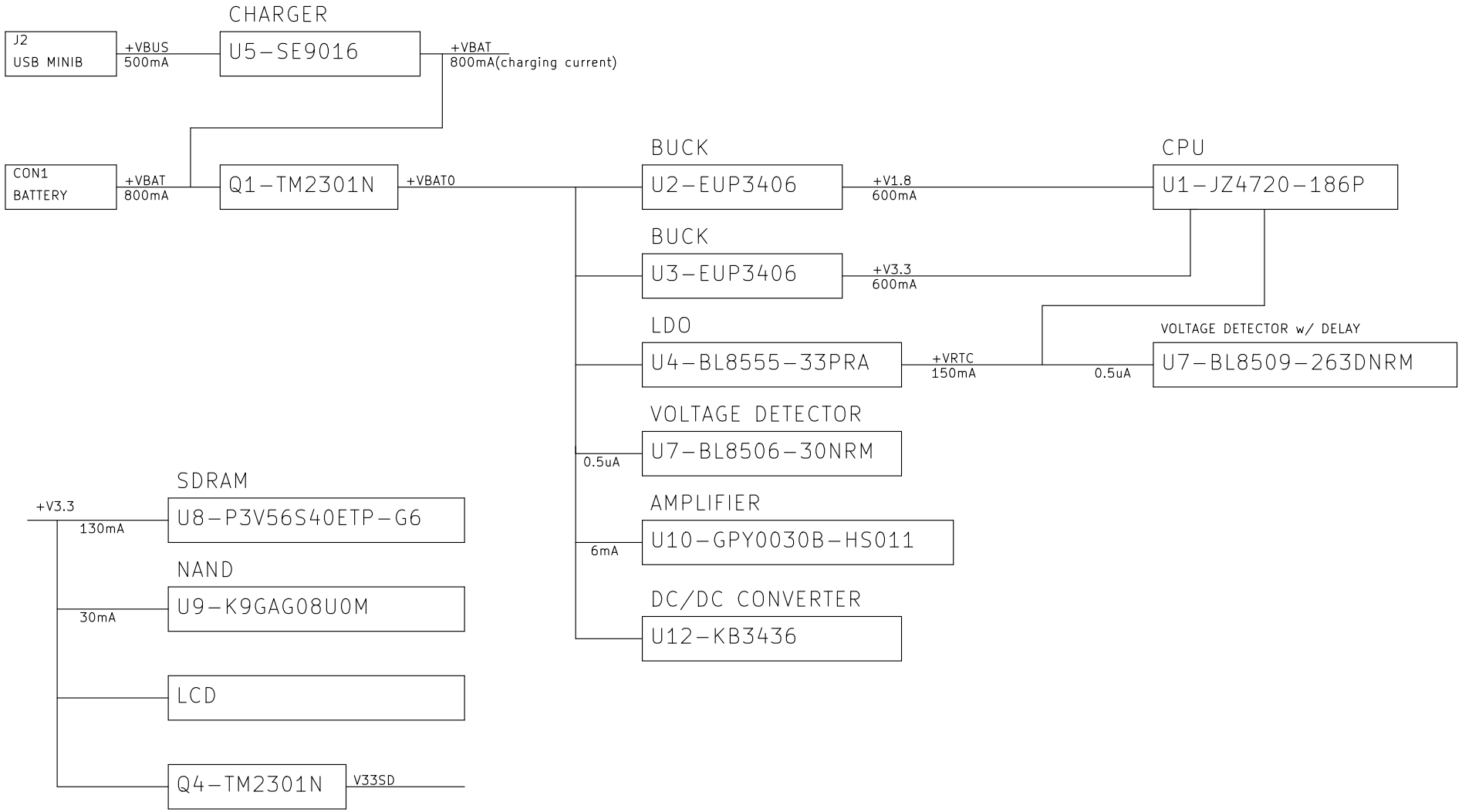

AMPEN
GPD4
TM2301N
Q6
R42
100K/5%
BD9
PZ1608D221
47uF/6.3V
C65
0.1uF/16V
C66
U10
VDD
CE
VREF
ACIN
SPN
SPP
VSS
INN
GPY0030B
SP-
SP+
SP-1
SP+1
SPEAKER
AMPIN
0.1uF/16V
C67
10K/5%
R44
0.1uF/16V
C68

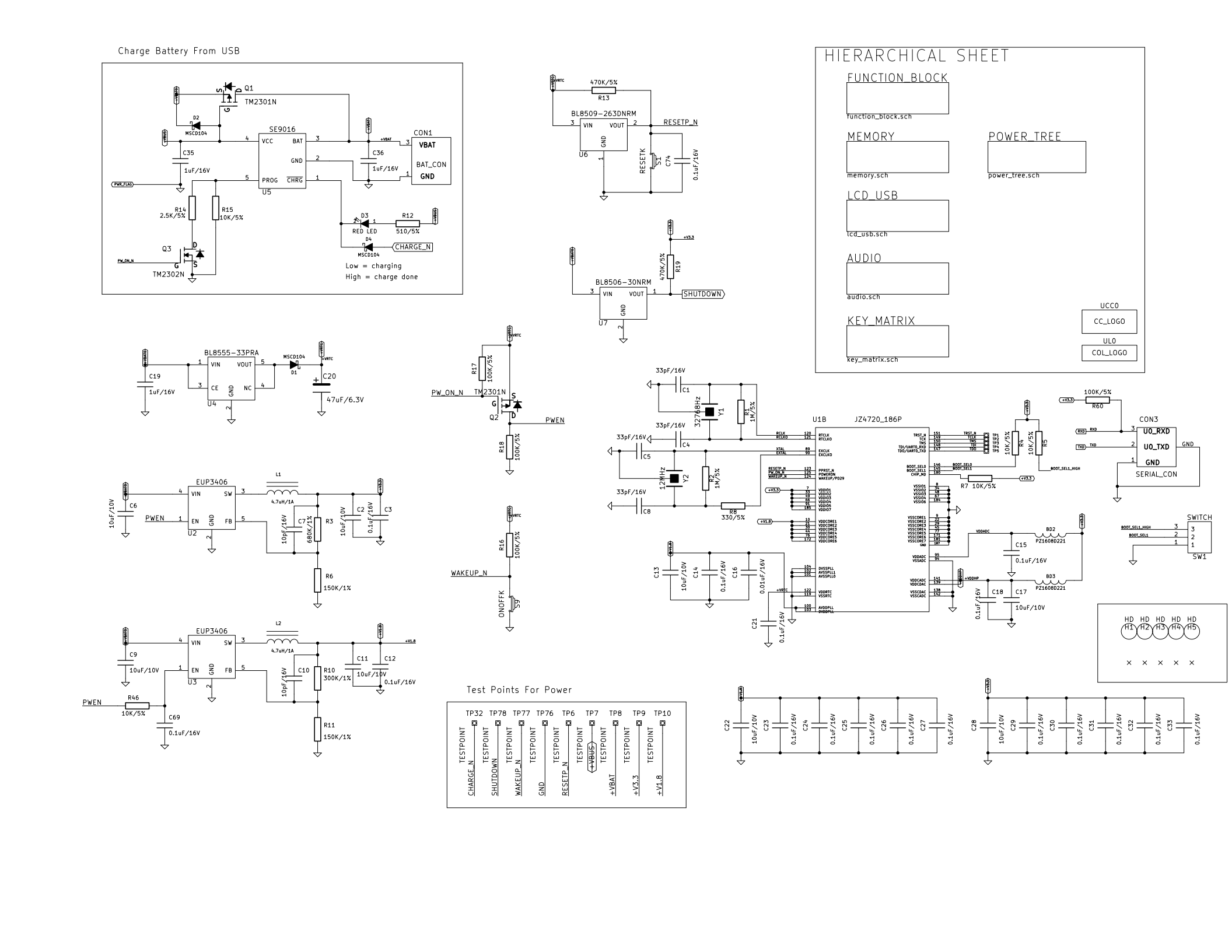

3.0'' TFT LCD
320(H) x RGB x 240(V) delta
SDRAM
64MB/133MHz
NandFlash – 2GB
K9GAG08U0M
MicroSD CARD
Crystal
32768Hz for RTC
12MHz for System
Key Matrix
8 x 8 GPIOs
59 Keys
JZ4720
32bit RISC 336MHz
16KB I cache/16KB D cache
SRAM SDRAM NandFlash I/F
MMU/RTC/WDT/JTAG
Audio codec/SADC
LCD Controller
USB1.1 Host/USB2.0 Device
Microphone
Amplifier AB
8 Ohm Speaker
3.5'' Headphone
USB2.0 DEVICE
Mini-B/F
USB1.1 Host
Micro-AB/F
Serial Console /
JTAG TestPoint
Power Block
3.7V 850mAH Li-ion battery
Battery Charger


TP65
KEYOUT7
TP69
KEYIN3
KEYOUT1
KEYOUT2
KEYOUT3
KEYOUT4
KEYOUT5
KEYOUT6
KEYOUT7
KEYOUT8
GPC10
GPC11
GPC12
GPC13
GPC14
GPC15
GPC16
GPC17
KEYIN1
GPD18
KEYIN2
GPD19
KEYIN3
GPD20
KEYIN4
GPD21
KEYIN5
GPD22
KEYIN6
GPD23
KEYIN7
GPD24
KEYIN8
GPD26
Esc
Tab
F1
F2
F3
F4
MP3
S2
S3
S4
S5
S6
S7
S8
1
2
3
4
5
6
7
8
S10
S11
S12
S13
S14
S15
S16
S17
Q
W
E
R
T
Y
U
I
S18
S19
S20
S21
S22
S23
S24
S25
A
S
D
F
G
H
J
K
S26
S27
S28
S29
S30
S31
S32
S33
Z
X
C
V
B
N
M
^
S34
S35
S36
S37
S38
S39
S40
S41
9
O
L
Language
Input
Space
Enter
<
S42
S43
S44
S45
S46
S47
S48
S49
Pronounce
0
P
o
Volumn Up
Volumn Down
V
>
S50
S51
S52
S53
S54
S55
S56
S57
DeskTop
Shift
Ctrl
S58
S59
S60


U1C JZ4720_186P
2mA
MICBIAS
MICIN
HPLO
HPRO
VDDLHP0
VDDLHP1
VSSLHP0
VSSLHP1
VDDRHP0
VDDRHP1
VSSRHP0
VSSRHP1
SSI_CE0_N/BCLK/PD19
SSI_CE1_GPC/SYNC/PD22
SSI_CLK/SCLK_RSTN/PD18
SSI_DT/SDATO/PD20
SSI_DR/SDATI/PD21
MSC_D0/PD10
MSC_D1/PD11
MSC_D2/PD12
MSC_D3/PD13
CLK
CMD
VREF
VSSUSB0
VSSUSB1
VSSUSB2
GPD6
GPD4
GPD2
GPD0
GPD15
SHUTDOWN
CAMPEN
SUPWEN
SUDET
LCD_D0/PC0
LCD_D1/PC1
LCD_D2/PC2
LCD_D3/PC3
LCD_D4/PC4
LCD_D5/PC5
LCD_D6/PC6
LCD_D7/PC7
LCD_D8/PC8
LCD_D9/PC9
LCD_D10/PC10
LCD_D11/PC11
LCD_D12/PC12
LCD_D13/PC13
LCD_D14/PC14
LCD_D15/PC15
LCD_D16/PC16
LCD_D17/PC17
LCD_PCLK/PC18
LCD_HSYNC/PC19
LCD_VSYNC/PC20
LCD_DE/PC21
PBAT/ADIN0
ADIN1
XP
YP
YN
XN
DP0
DP1
DM0
DM1
RREF
DP1
DM1
VDDA
VDDUSB0
VDDUSB1
VDDUSB2
LCDD0
LCDD1
LCDD2
LCDD3
LCDD4
LCDD5
LCDD6
LCDD7
KEYOUT1
KEYOUT2
KEYOUT3
KEYOUT4
KEYOUT5
KEYOUT6
KEYOUT7
KEYOUT8
DCLK
HSYNC
VSYNC
LCDCS
BATIN
HOST_DP1
HOST_DM1
C51 0.1uF/16V
C52 10uF/10V
C53 0.1uF/16V
C54 0.1uF/16V
C55 0.1uF/16V
R31 0
R48 1M/5%
R49 1M/5%
R32 2.5K/5%
TP35
TP36
TP38
C70 0.1uF/16V
R47 47K/5%
U11
SCIC
GPC8
GPC9
C50 10uF/10V
CON2
FPCCON24
BN1 33/5%
BN2 33/5%
BD4 33/5%
Touchscreen testpoints
TOUCH
CON4P1
TP93
TP94
TP92
TP91
L4 4.7uH/1A
C73 4.7uF/16V
D6 MSCD104
U12 KB3436
VIN
SW
VOUT
SHDN
GND
FB
SHDN_HOST
R50 980K/5%
R51 245K/5%
C72 4.7uF/16V
VHOST
R45 10K/5%
Q11 TM2301N
D5 MSCD104
USB_JD
USB_MICRO_AB
J4
BD10 PZ1608D221
R43 100K/5%
C71 0.01uF/16V
U13 USBDF01W5
D-in
D-out
GND
D+In
D+out
J2 USB_MINIB
BD6 PZ1608D221
C57 0.1uF/16V
L3 SDCW2012-2-900
BD7 PZ1608D221
C58 0.1uF/16V
R33 1K/5%
R34 10K/5%
R35 1K/5%
2N3904
Q5
USBDET
+VBUS
+VBAT
+3.3


U1A JZ4720_186P
BUZ+1
BUZ-1
R20 33/5%
R21 33/5%
U8
P3V56S40ETP-G6
C37 10uF/10V
C38 0.1uF/16V
C39 0.1uF/16V
C40 0.1uF/16V
C41 0.1uF/16V
C42 0.1uF/16V
C43 0.1uF/16V
C44 0.1uF/16V
TM2301N
Q4
C45 10uF/10V
C46 0.1uF/16V
R22 10K/5%
U9
R30 10K/5%
K9GAG08U0M-PCB0
2.7V 3.6V
C47 0.1uF/16V
C48 0.1uF/16V
C49 1uF/16V
R23 10K/5%
R24 10K/5%
R26 10K/5%
R27 10K/5%
R28 10K/5%
R29 10K/5%
J1
MS_1D77


CHARGER
J2
USB MINIB
+VBUS
500mA
U5-SE9016
+VBAT
800mA(charging current)
CON1
BATTERY
+VBAT
800mA
Q1-TM2301N
+VBAT0
BUCK
U2-EUP3406
+V1.8
600mA
CPU
U1-JZ4720-186P
BUCK
U3-EUP3406
+V3.3
600mA
LDO
U4-BL8555-33PRA
+VRTC
150mA
VOLTAGE DETECTOR w/ DELAY
0.5uA
U7-BL8509-263DNRM
VOLTAGE DETECTOR
U7-BL8506-30NRM
0.5uA
AMPLIFIER
U10-GPY0030B-HS011
6mA
DC/DC CONVERTER
U12-KB3436
SDRAM
+V3.3
130mA
U8-P3V56S40ETP-G6
NAND
U9-K9GAG08U0M
30mA
LCD
Q4-TM2301N
V33SD


Charge Battery From USB
Q1
TM2301N
D2
MSCD104
SE9016
VCC
BAT
GND
PROG
CHRG
U5
CON1
VBAT
BAT_CON
GND
C35
1uF/16V
C36
1uF/16V
PWR_FLAG
R14
2.5K/5%
R15
10K/5%
D3
RED LED
R12
510/5%
D4
MSCD104
CHARGE_N
Q3
TM2302N
PW_ON_N
Low = charging
High = charge done
BL8509-263DNRM
U6
VIN
VOUT
GND
470K/5%
R13
RESETP_N
RESETK
S1
C74
0.1uF/16V
BL8506-30NRM
U7
R19
SHUTDOWN
HIERARCHICAL SHEET
FUNCTION_BLOCK
function_block.sch
MEMORY
memory.sch
POWER_TREE
power_tree.sch
LCD_USB
lcd_usb.sch
AUDIO
audio.sch
KEY_MATRIX
key_matrix.sch
UCC0
CC_LOGO
UL0
COL_LOGO
BL8555-33PRA
U4
C19
1uF/16V
C20
47uF/6.3V
MSCD104
D1
R17
100K/5%
PW_ON_N
TM2301N
Q2
PWEN
R18
100K/5%
R16
100K/5%
WAKEUP_N
ONOFFK
S9
EUP3406
U2
C6
10uF/10V
PWEN
L1
4.7uH/1A
C7
10pF/16V
R3
680K/1%
C2
10uF/10V
C3
0.1uF/16V
R6
150K/1%
EUP3406
U3
C9
10uF/10V
L2
4.7uH/1A
C10
10pF/16V
R10
300K/1%
C11
10uF/10V
C12
0.1uF/16V
R11
150K/1%
R46
10K/5%
C69
0.1uF/16V
U1B
JZ4720_186P
33pF/16V
C1
32768Hz
Y1
R1
1M/5%
33pF/16V
C4
33pF/16V
C5
12MHz
Y2
R2
1M/5%
33pF/16V
C8
R8
330/5%
C13
10uF/10V
C14
0.1uF/16V
C16
0.01uF/16V
C21
0.1uF/16V
R4
10K/5%
R5
10K/5%
R7
10K/5%
100K/5%
R60
CON3
U0_RXD
U0_TXD
GND
SERIAL_CON
SWITCH
SW1
C15
0.1uF/16V
C17
10uF/10V
C18
0.1uF/16V
BD2
PZ1608D221
BD3
PZ1608D221
HD H1
HD H2
HD H3
HD H4
HD H5
Test Points For Power
TP32 CHARGE_N
TP78 SHUTDOWN
TP77 WAKEUP_N
TP76 GND
TP6 RESETP_N
TP7 +VBUS
TP8 +VBAT
TP9 +V3.3
TP10 +V1.8
TESTPOINT
C22
C23
C24
C25
C26
C27
C28
C29
C30
C31
C32
C33
10uF/10V
0.1uF/16V