

ZZZ

PCB DAZ@  
DAZ10G00100  
LA-A401P/LS-A401P

ZZZ1

PCB DA1@  
DA8000WX010  
MB LA-A401P REV1

ZZZ2

PCB DA2@  
DA4001Q4010  
AUDIO16 LS-A401P REV1

S1

for WF

ZSJV\_V\_MB\_FRAME 1 PC A false  
EC10G000200  
@

S4

for GLONASS

ZSJV\_V\_GPS\_FRAME 1 PC A false  
EC10G000100  
@

# Compal Confidential

## Schematics Document

www.altech1.ru

ZSJV

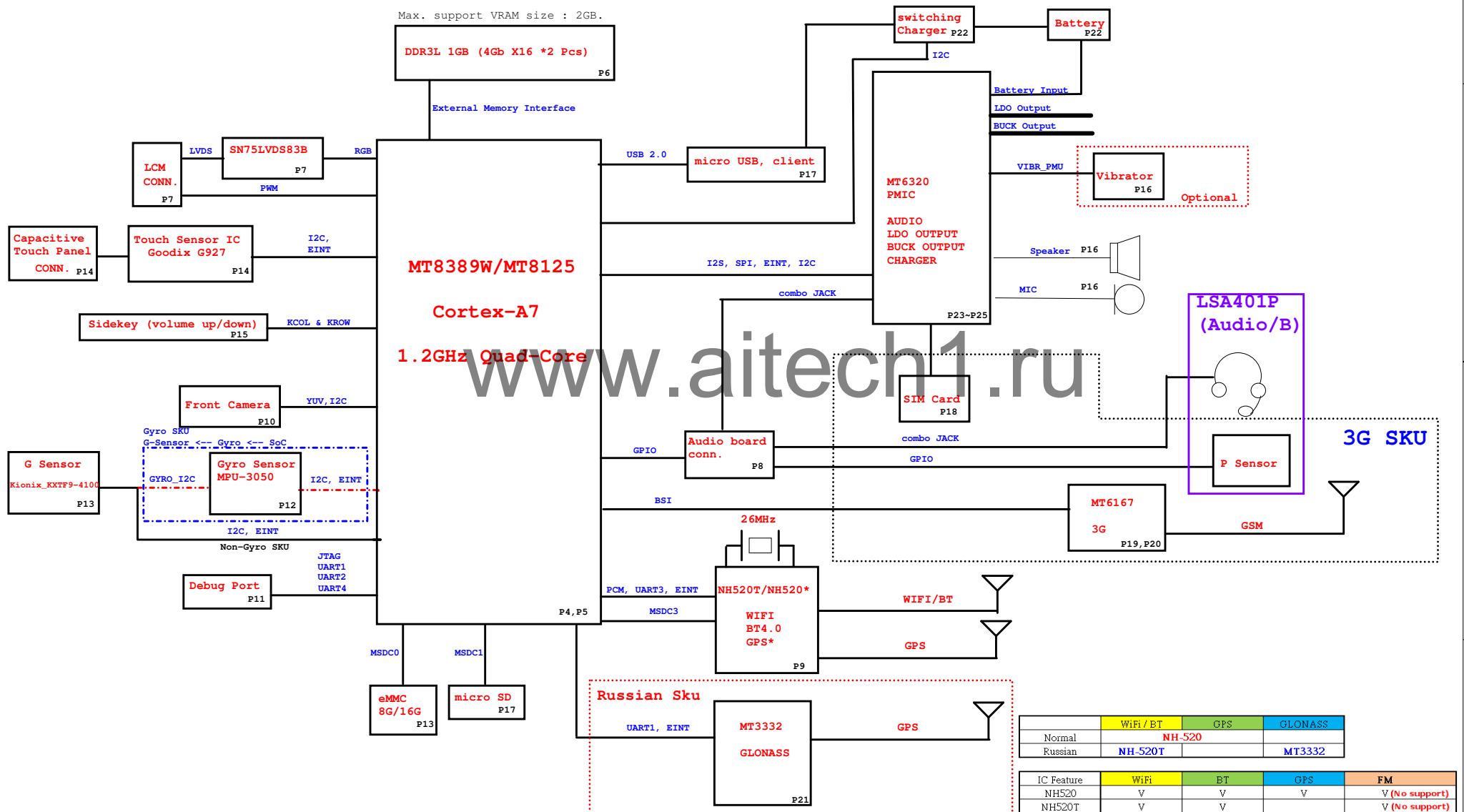
LA-A401P

2013-06-13

REV:1.0

Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2012/11/09	Deciphered Date	2014/11/09	Title Cover Page	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF THE CUSTOMER DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Document Number ZSJV -LA-A401P	Rev 0.1
				Date: Thursday, June 13, 2013	Sheet 1 of 28

# giordano2 block diagram



	WiFi / BT	GPS	GLONASS
Normal	NH-520		
Russian	NH-520T		MT3332

IC Feature	WiFi	BT	GPS	FM
NH520	V	V	V	V (No support)
NH520T	V	V	V	V (No support)

Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Block Diagram
Size	C	Document Number	ZSJVV-LA-A401P	Rev
Date	Wednesday, June 05, 2013	Sheet	2	of 28

Voltage Rails

MT6320 Power Plane	Function	Power Level	IDLE	Sleep mode
VCORE_PMU	VCORE switching output	0.75 ~ 1.3	ON	Low voltage
VPROC_PMU	VPROC switching output	0.75 ~ 1.3	ON	Low voltage
VTCXO_1_PMU	LDO output for TCXO	2.8V	ON	OFF
VCAMA_PMU	LDO output for camaera analog	2.8V	ON	Gating by SW
VSRAM_PMU	LDO output used for 1.2V SRAM	1.2V	ON	Low voltage
VDD28_6583	LDO output used for 2.8V IO	2.8V	ON	Gating by SW
VGP2_PMU	LDO output for camaera 1.8V	1.8V	ON	Gating by SW
VEMC_3V3_PMU	LDO output for eMMC&P-sensor	3.3V	ON	Gating by SW
VMCH_PMU	LDO output for SD card	3.3V	ON	Gating by SW
VGP5_PMU	LDO output for Touch panel	2.8V	ON	Gating by SW
DDR3VCCIO	LDO output for DDR3L	1.35V	ON	Gating by SW
VDD33_6583	LCD & Bridge power	3.3V	ON	Gating by SW
VDD18_6583	LDO output used for 1.8V IO	1.8V	ON	Gating by SW
VRF18_PMU	LDO output for RF_MT6167	1.8V	ON	Gating by SW

Main board ID

MB_ID0	MB_ID1	
0	0	EVT
0	1	DVT
1	0	PVT
1	1	MP

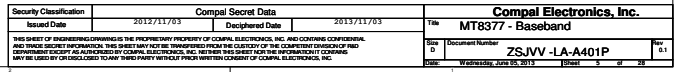
I2C address

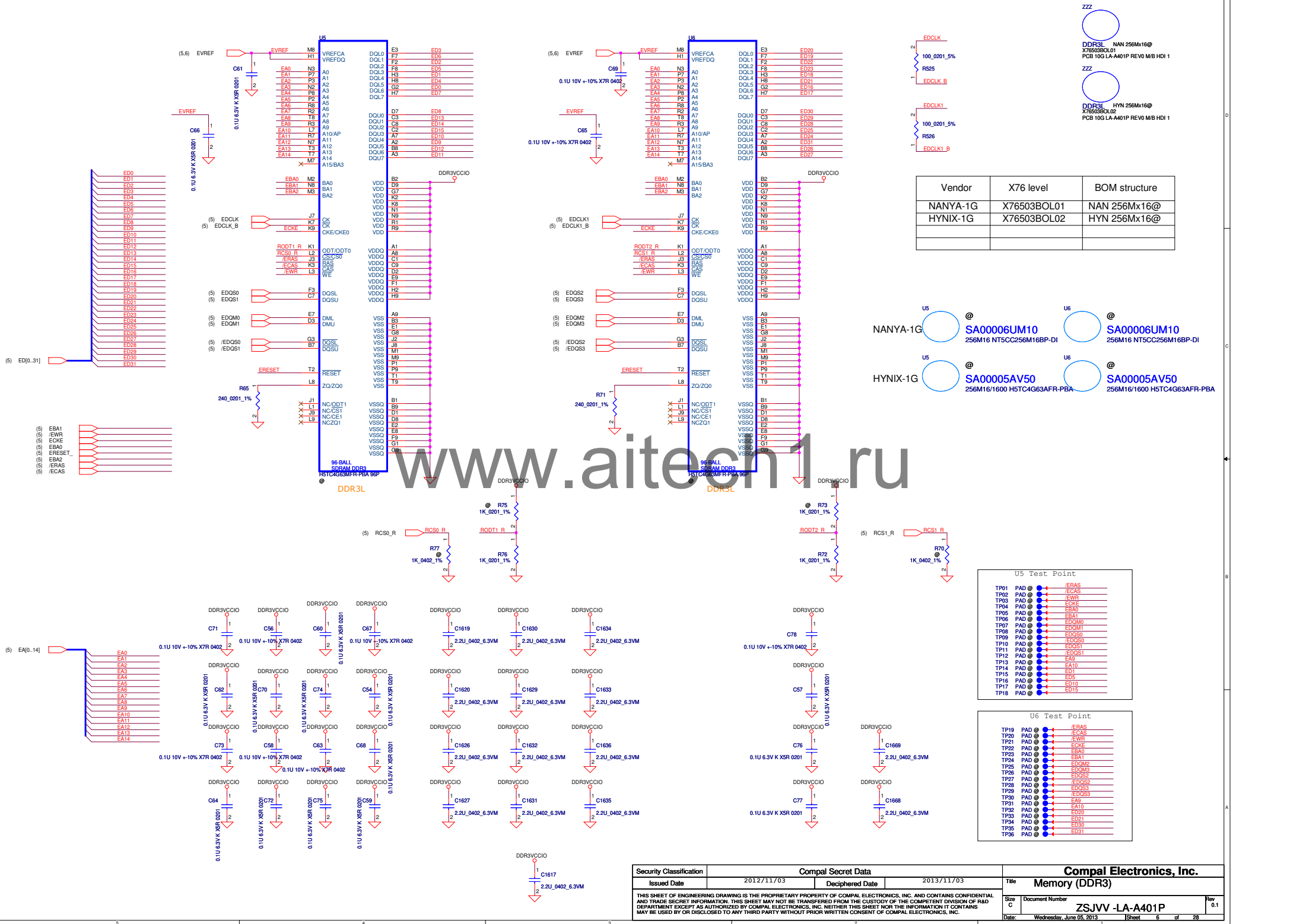
Device	Address(7 bit)	Address(8bit)	
		Write	Read
Gyro (MPU-3050)	0x68	0xD0	0xD1
G-sensor (KXTIK-1004)	0x0F	0x1E	0x1F
G-sensor(STK8313)	0x22	0x44	0x45
Camera (OV7675)	0x21	0x42	0x43
Charge (BQ24196 )	0x6B	0xD6	0xD7
Touch screen (GT927)	0x5D	0xBA	0xBB
PMU(MT6320)			

BOM structure

Name	Function	
3G@	3G only	
EMC@	for EMC/ESD/RF request	
G_SENSOR@	G_SENSOR	
KIONIX@	G-sensor for Kionix	
STK@	G-sensor for Sensortek	
GYRO@	GYRO	
NAN 256Mx16@	NANYA 256M(DDR3L)	
HYN 256Mx16@	HYNIX 256M(DDR3L)	
WIFI_ONLY@	WIFI ONLY	
LVDS_TI@	LVDS for TI	
LVDS_JTE@	LVDS for JTE	
NH520@	AW-NH520 for GPS	
NH520_EMC@	GPS(NH520) EMC	
GLONASS@	NH520T+GLONASS	
P_SENSOR@	P-sensor	
HYN 8GB@	HYNIX 8G(EMMC)	
HYN 16GB@	HYNIX 16G(EMMC)	
KIN 8GB@	Kinggston 8G(EMMC)	
KIN 16GB@	Kinggston 16G(EMMC)	
SAM 8GB@	Samsung 8G(EMMC)	
SAM 16GB@	Samsung 16G(EMMC)	
CONN@	Connector	
ME@	CLIP	
DAZ@	PCB	
VIB@	Vibrator	





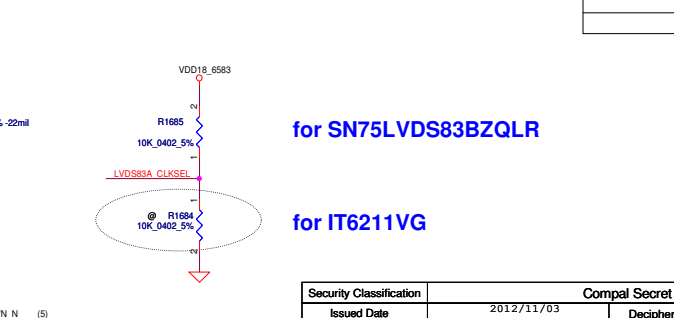
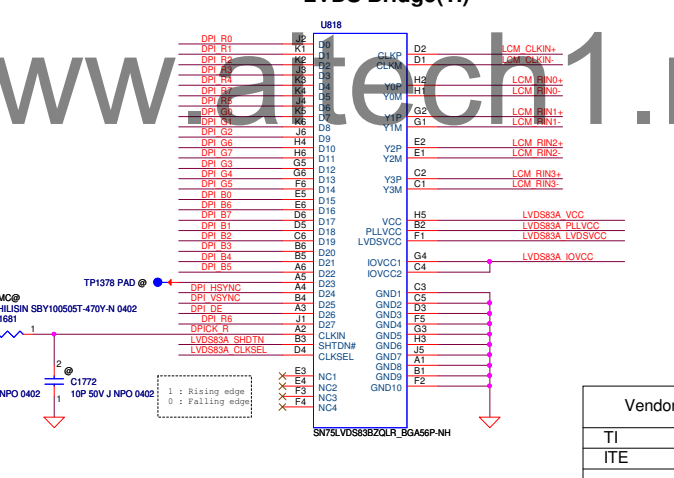
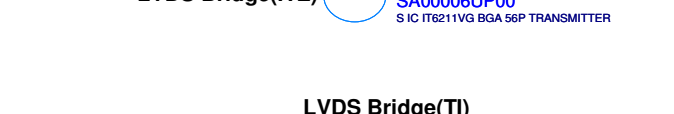
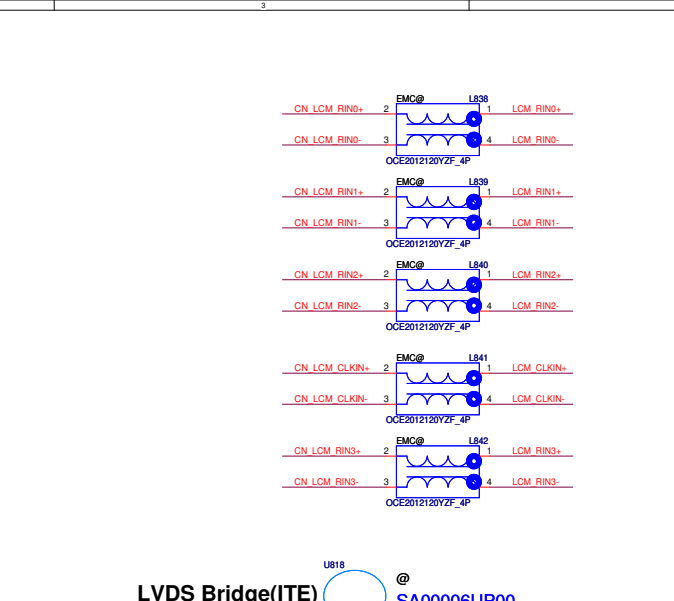


Vendor	X76 level	BOM structure
NANYA-1G	X76503BOL01	NAN 256Mx16@
HYNIX-1G	X76503BOL02	HYN 256Mx16@

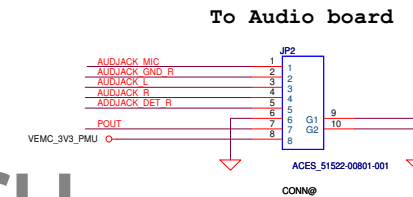
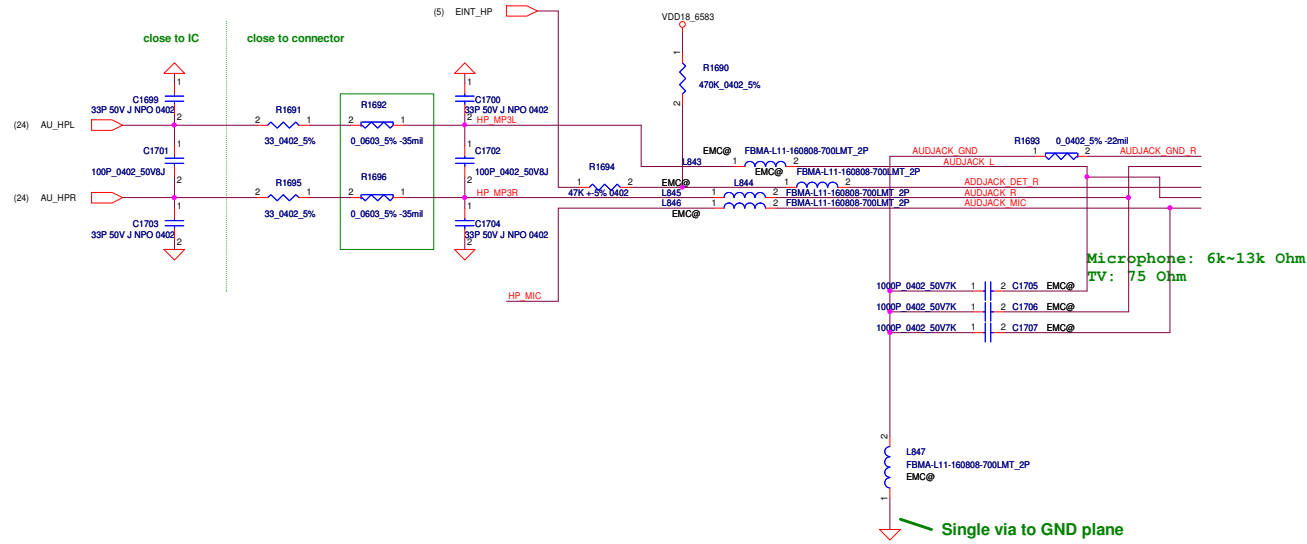
NANYA-1G	@ SA00006UM10 256M16 NT5CC256M16BP-DI	@ SA00006UM10 256M16 NT5CC256M16BP-DI
HYNIX-1G	@ SA00005AV50 256M16/1600 H5TC4G63AFR-PBA	@ SA00005AV50 256M16/1600 H5TC4G63AFR-PBA

U5 Test Point	
TP01 PAD @	ERAS
TP02 PAD @	ECAS
TP03 PAD @	EWWR
TP04 PAD @	ECAS
TP05 PAD @	EBA0
TP06 PAD @	EBA1
TP07 PAD @	EDQM0
TP08 PAD @	EDQM1
TP09 PAD @	EDQS0
TP10 PAD @	EDQS1
TP11 PAD @	EDQS2
TP12 PAD @	EDQS3
TP13 PAD @	EA0
TP14 PAD @	EA10
TP15 PAD @	ED1
TP16 PAD @	ED2
TP17 PAD @	ED3
TP18 PAD @	ED4

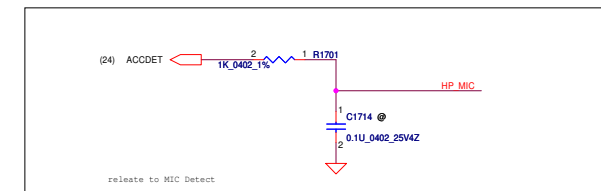
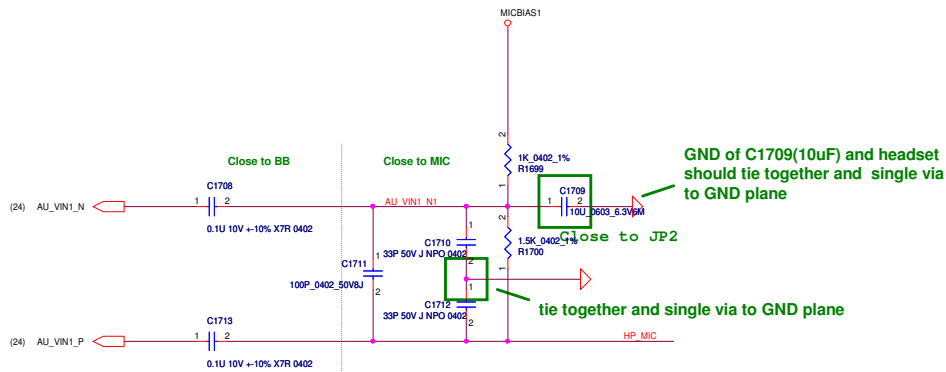
U6 Test Point	
TP19 PAD @	ERAS
TP20 PAD @	ECAS
TP21 PAD @	EWWR
TP22 PAD @	ECAS
TP23 PAD @	EBA0
TP24 PAD @	EBA1
TP25 PAD @	EDQM0
TP26 PAD @	EDQM1
TP27 PAD @	EDQS0
TP28 PAD @	EDQS1
TP29 PAD @	EDQS2
TP30 PAD @	EDQS3
TP31 PAD @	EA0
TP32 PAD @	EA10
TP33 PAD @	ED3
TP34 PAD @	ED4
TP35 PAD @	ED5
TP36 PAD @	ED6




# Earphone RECEIVER

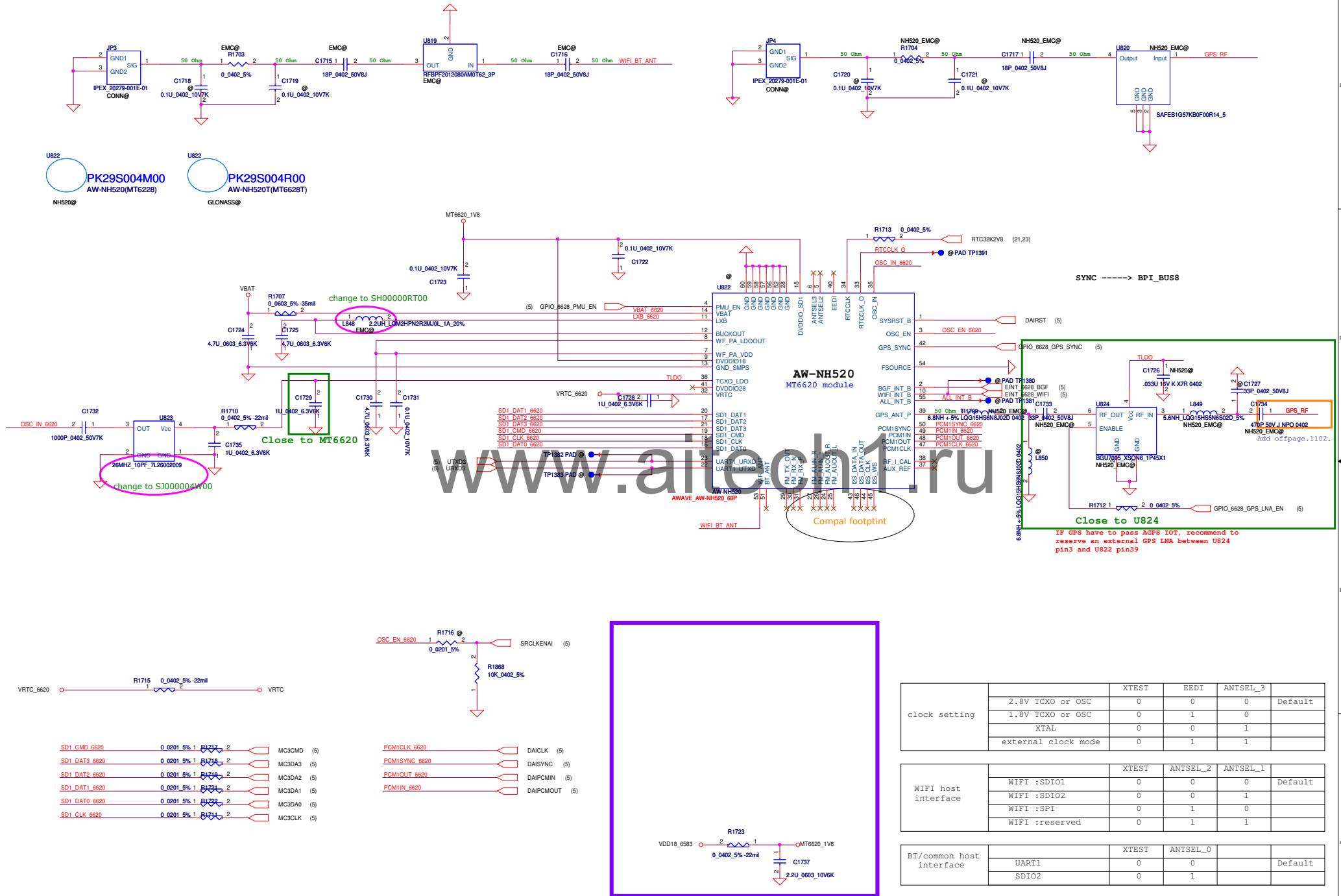


# Earphone MICPHONE



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Audio, I/O, Audio board Conn.
Size	C	Document Number	ZSJVV-LA-A401P	Rev
Date	Wednesday, June 05, 2013	Sheet	8	of 28

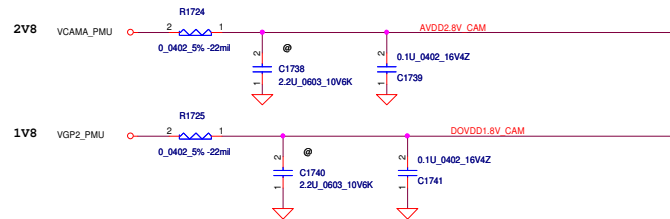




Security Classification		Compal Secret Data		Compal Electronics, Inc.			
Issued Date		2012/11/03		Deciphered Date		2013/11/03	
				Title		BT, FM, GPS, WIFI (MT6628)	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.							
Size		Document Number		ZSJVV-LA-A401P		Rev 0.1	
Date:		Friday, June 07, 2013		Sheet 9 of 28			

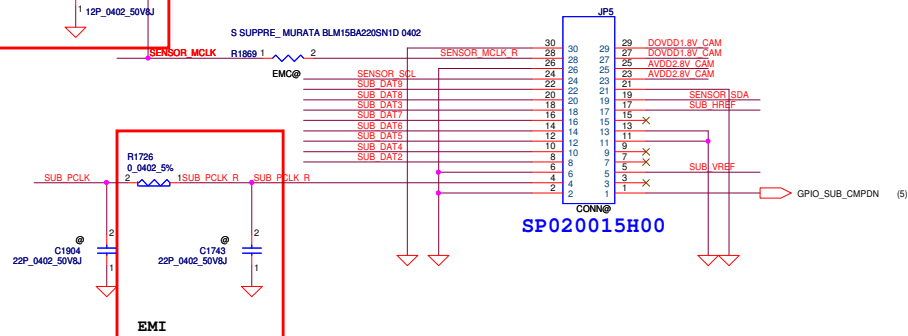
The diagram shows four pin connection configurations for the EMU modules:

- EMU1:**
  - Pin 1: CMPCLK
  - Pin 2: CMDAT8
  - Pin 3: CMDAT7
  - Pin 4: CMDAT6
  - Pin 5: CMDAT5
  - Pin 6: SUB\_DAT5
  - Pin 7: SUB\_DAT6
  - Pin 8: SUB\_PCLK
  - Pin 9: EMC#
- EMU2:**
  - Pin 1: SDA1
  - Pin 2: SCL1
  - Pin 3: CMVRFF
  - Pin 4: CMUREF
  - Pin 5: SUB\_VREF
  - Pin 6: SUB\_SDA
  - Pin 7: SUB\_SCL
  - Pin 8: SUB\_HREF
  - Pin 9: EMC#
- EMU3:**
  - Pin 1: CMDAT3
  - Pin 2: CMDAT4
  - Pin 3: SUB\_DAT3
  - Pin 4: SUB\_DAT4
  - Pin 5: SUB\_DAT5
  - Pin 6: SUB\_DAT6
  - Pin 7: SUB\_DAT7
  - Pin 8: SUB\_DAT8
  - Pin 9: EMC#
- EMU4:**
  - Pin 1: CMDAT9
  - Pin 2: CMCLK
  - Pin 3: CMDAT8
  - Pin 4: CMDAT7
  - Pin 5: SUB\_DAT9
  - Pin 6: SENSOR\_PCLK
  - Pin 7: SUB\_DAT6
  - Pin 8: SUB\_DAT7
  - Pin 9: EMC#



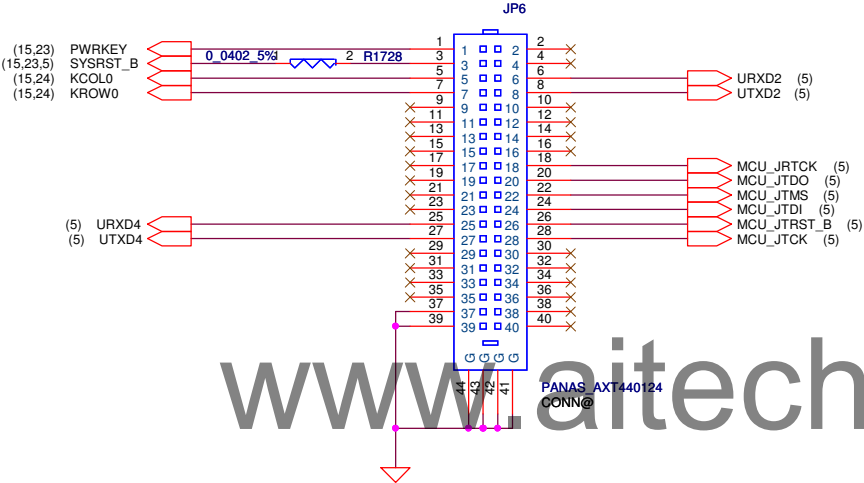
[www.aitech1.ru](http://www.aitech1.ru)

0.3M connector



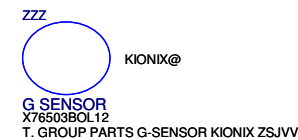
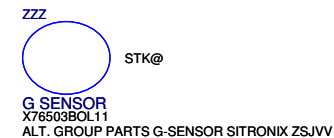
Security Classification		Compal Secret Data				Compal Electronics, Inc.							
Issued Date		2012/11/03		Deciphered Date		2013/11/03		Title		Camera			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.								Size C		Document Number		Rev 0.1	
										ZSJVV-LA-A401P			
								Date:		Friday, June 07, 2013		Sheet	

Common Debug



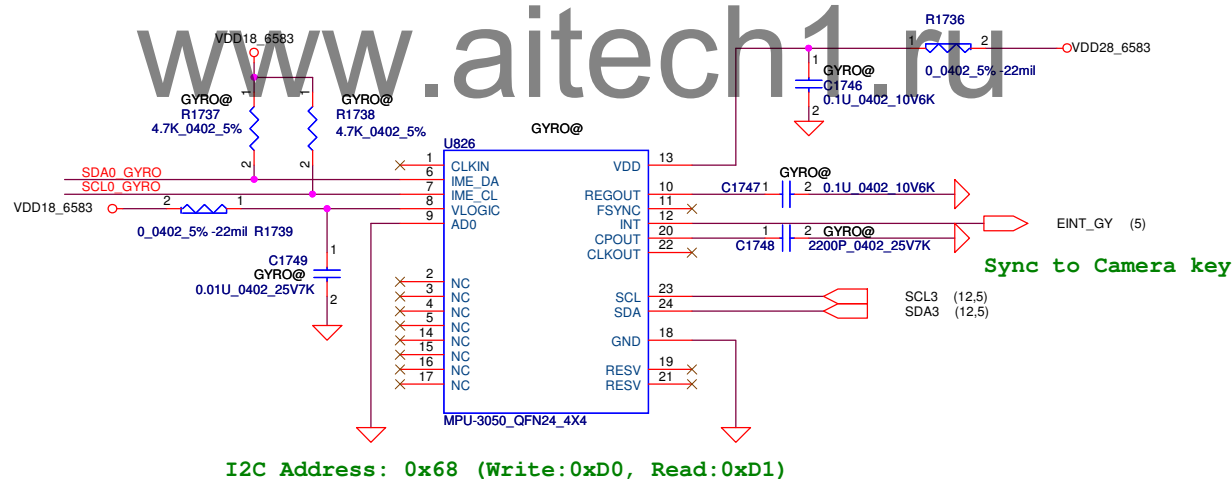
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title	SD Card,Debug,USB
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Document Number	Rev
				ZSJVV -LA-A401P	0.1
				Date: Wednesday, June 05, 2013	Sheet 11 of 28

# G-Sensor



Vendor	X76 level	BOM structure
SENORTEK	X76503BOL11	STK@
KIONIX	X76503BOL12	KIONIX@

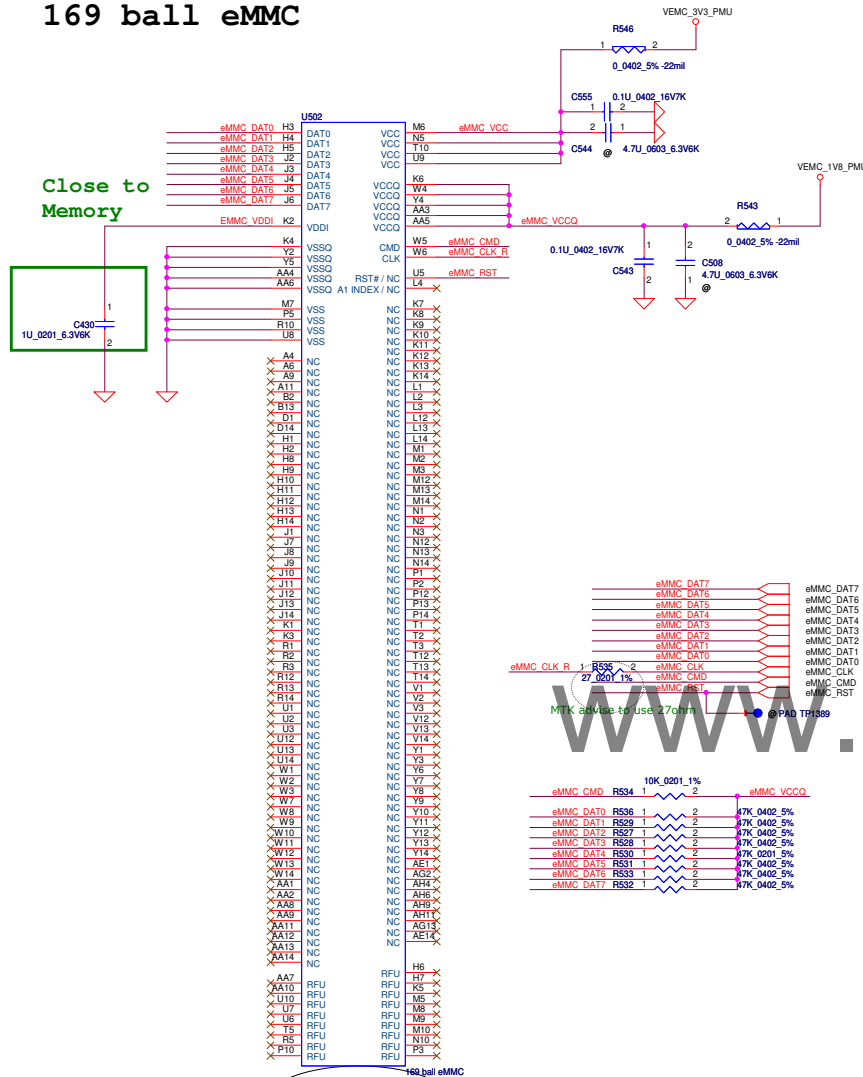
## Gyro Sensor



I2C Address: 0x68 (Write:0xD0, Read:0xD1)

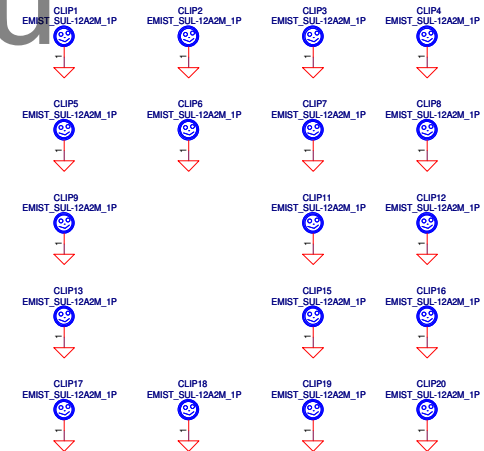
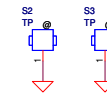
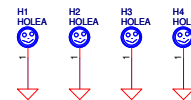
Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title Sensors		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size B	Document Number ZSJVV-LA-A401P	Rev 0.1
				Date: Wednesday, June 05, 2013	Sheet 12	of 28

# 169 ball eMMC

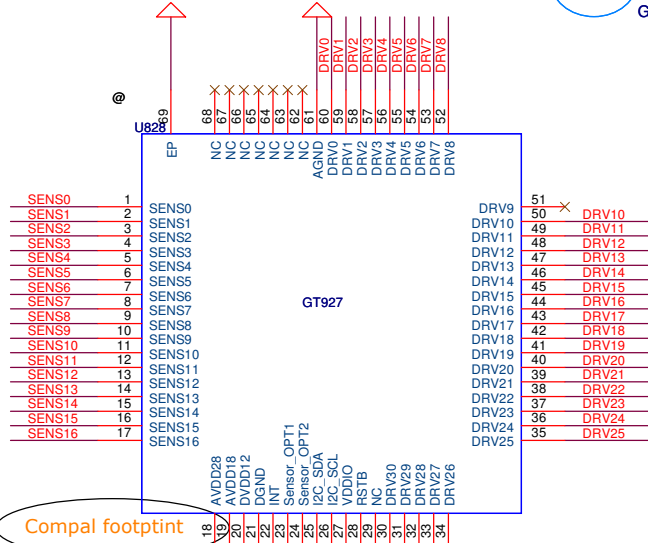
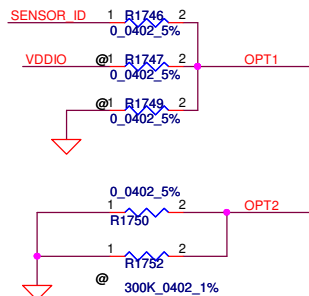
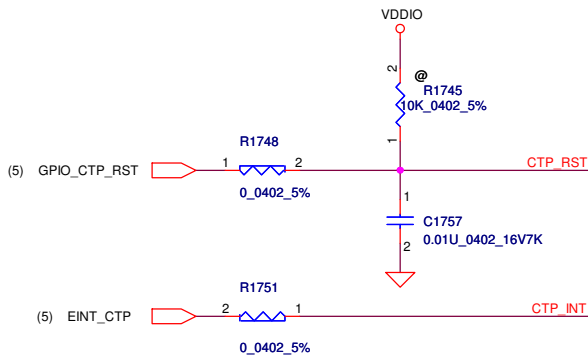
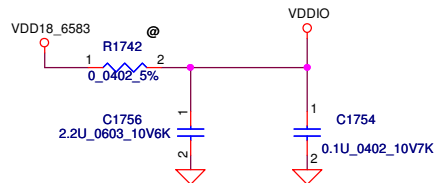
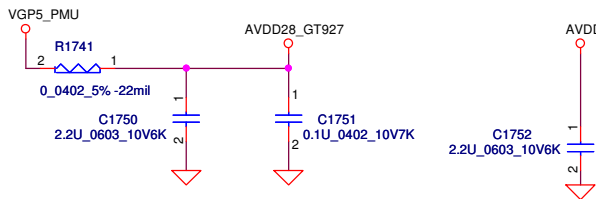


U502	KIN 8GB@ SA00006MF30 Kingston 8G KE4CN3K6A	U502	KIN 16GB@ SA00006MG30 Kingston 16G KE4CN4K6A
U502	HYN 8GB@ SA00006PW10 HYNIX 8G H26M42002GMR	U502	HYN 16GB@ SA00006VJ10 HYNIX 16G H26M52002EQR
U502	SAM 8GB@ SA00006VE10 Samsung KLM8G1WE4A-A001	U502	SAM 16GB@ SA00006Z610 Samsung KLMAG2WE4A-A001

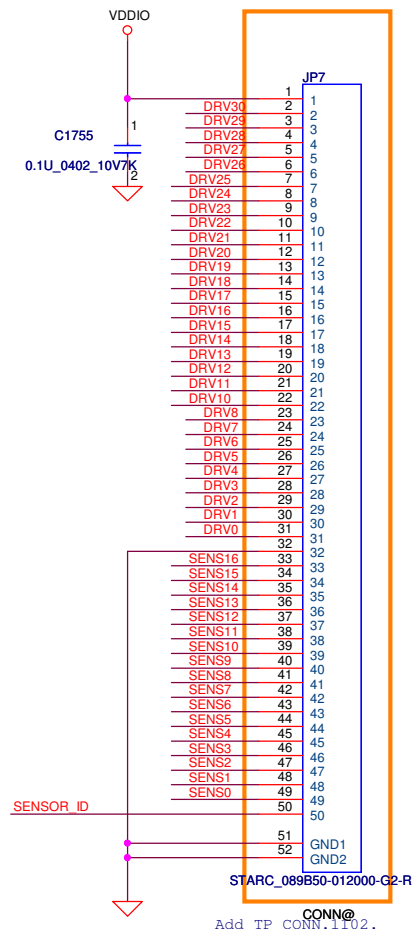
## SCREW HOLE



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				eMMC, SCREW HOLE
Size	C	Document Number	ZSJVV-LA-A401P	Rev
Date	Wednesday, June 05, 2013	Sheet	13	of 28



U828  
SA00006GS00  
GT927 QFN 68P TOUCH

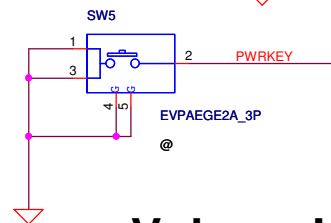
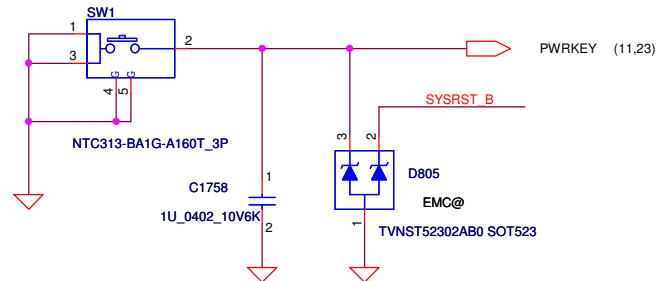


www.aitech1.ru

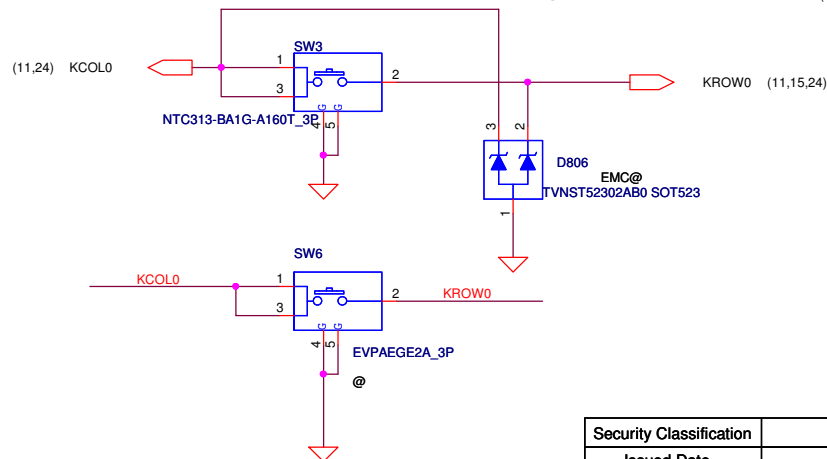
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title	Touch Panel
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Document Number	Rev
				ZSJVV -LA-A401P	0.1
Date: Wednesday, June 05, 2013		Sheet 14 of 28			

## Power-on Button

MTK comment don't pull up R on PWRKEY.1101.

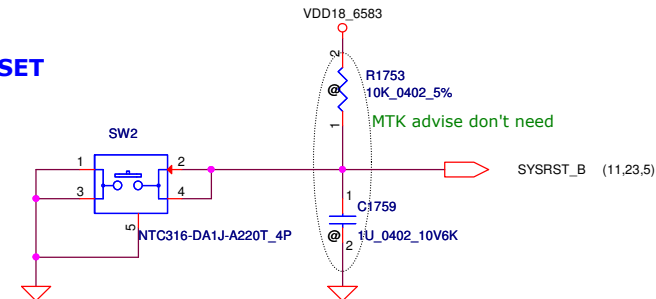


# Volume Up (Download Key)

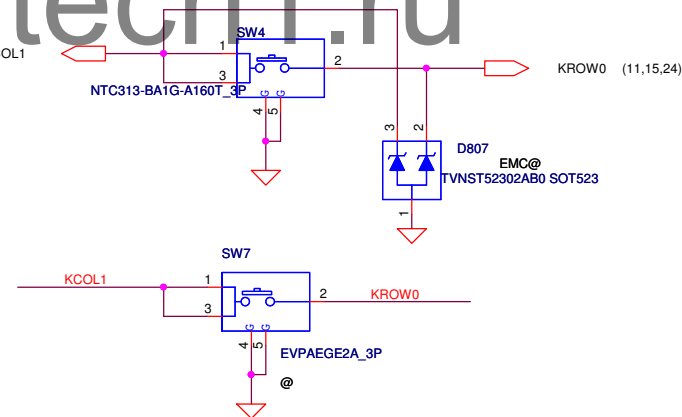


Compal GND      MTK GND

**RESET**

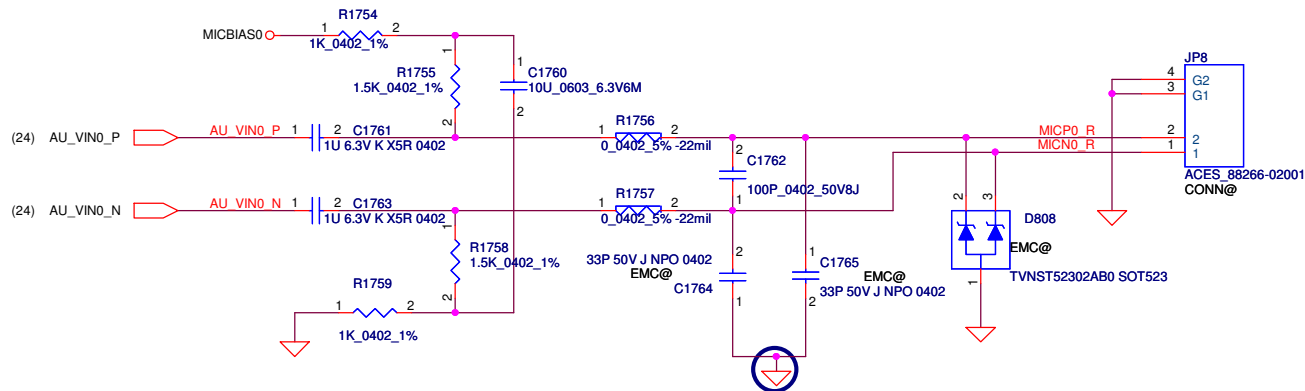


## Volume Down



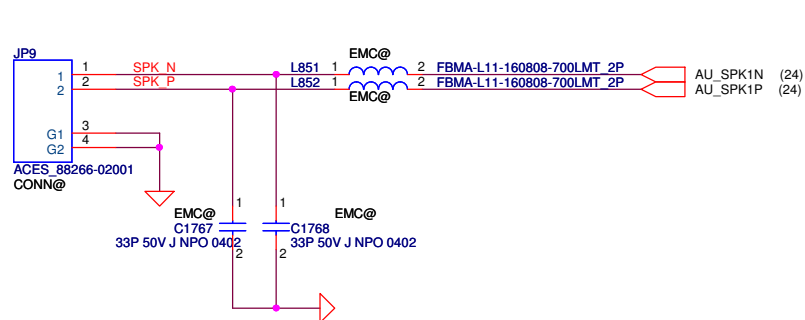
Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title	Button	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
				B	ZSJVV-LA-A401P	0.1
				Date:	Wednesday, June 05, 2013	Sheet 15 of 28

# MIC

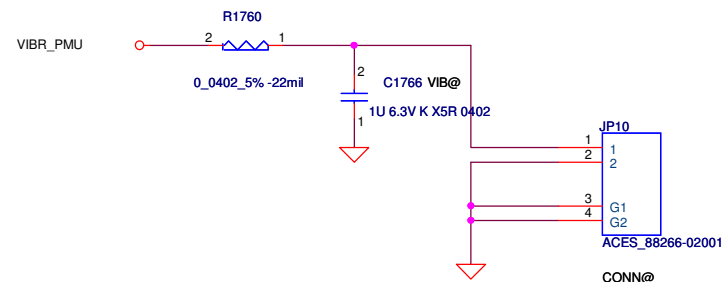


Compal GND MTK GND

# SPAKER



www.aitech1.ru



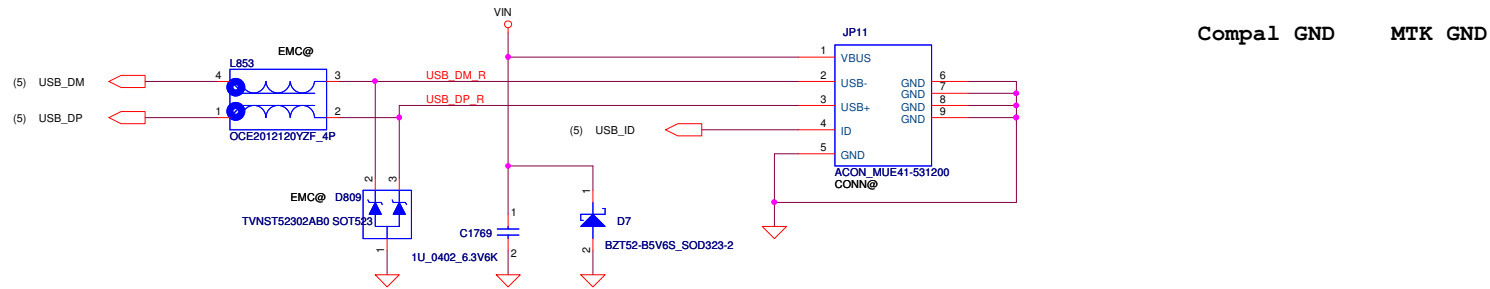
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title	Connector(MIC/SPK/HP)
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Document Number	Rev
				ZSJVV -LA-A401P	0.1
				Date: Friday, June 07, 2013	Sheet 16 of 28



## Micro-USB

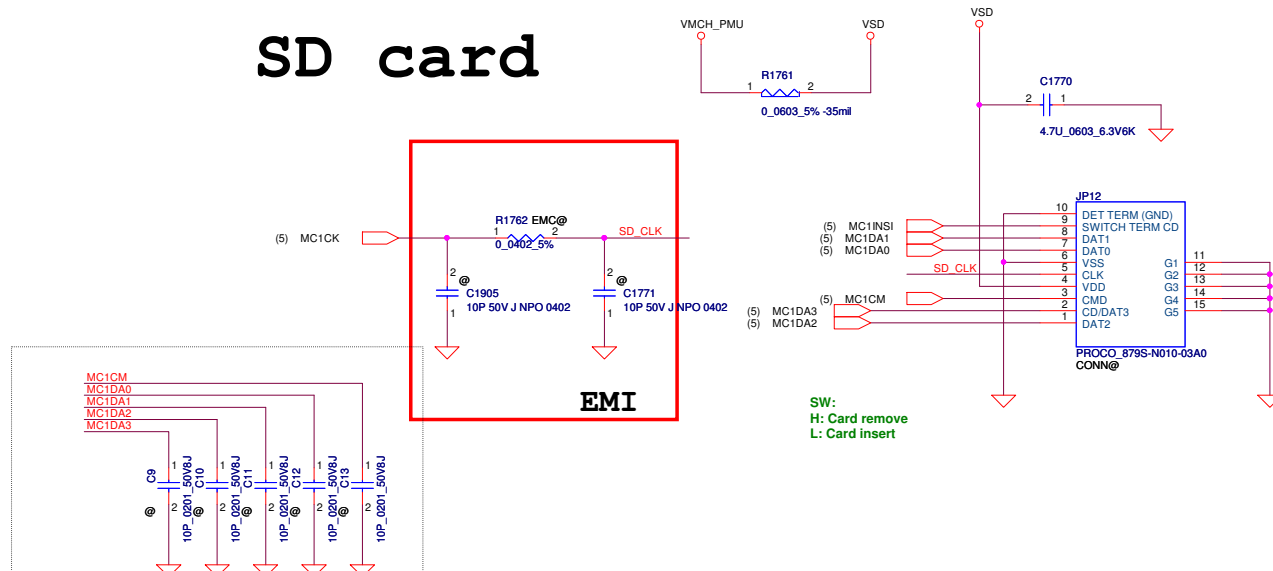
If mini-A connector insert => CID < 0V => Low  
If mini-B connector insert => CID > 1.2V => High  
IDPULLUP pin is replaced by 1.2V power source.

FOR RF request



www.aitech1.ru

## SD card

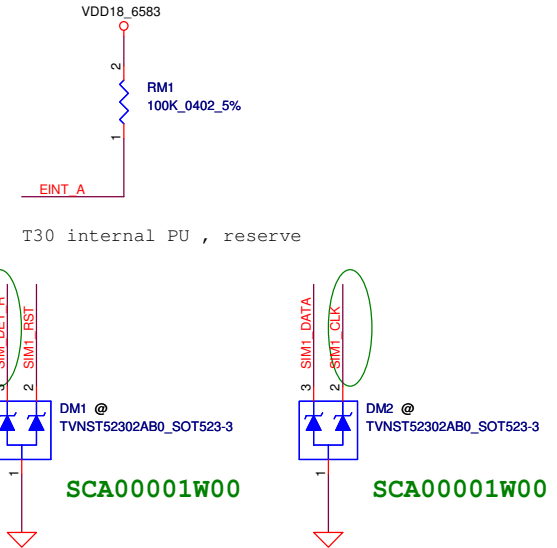
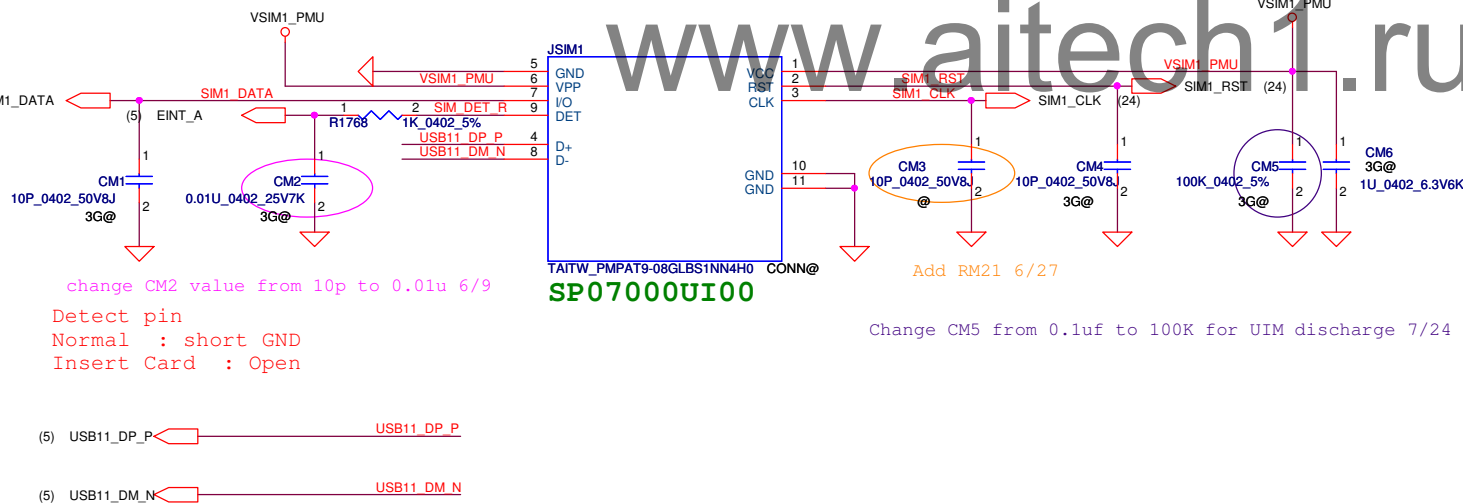


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title Connector-2(SD card/G-se)	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF FIRST DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Document Number ZSJVV-LA-A401P	Rev 0.1
				Date: Wednesday, June 05, 2013	Sheet 17 of 28

## SIM CARD

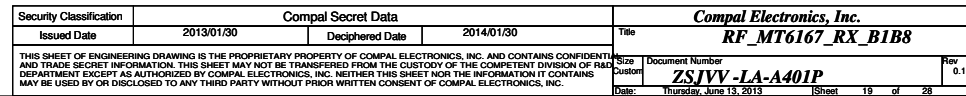
www.aitech1.ru

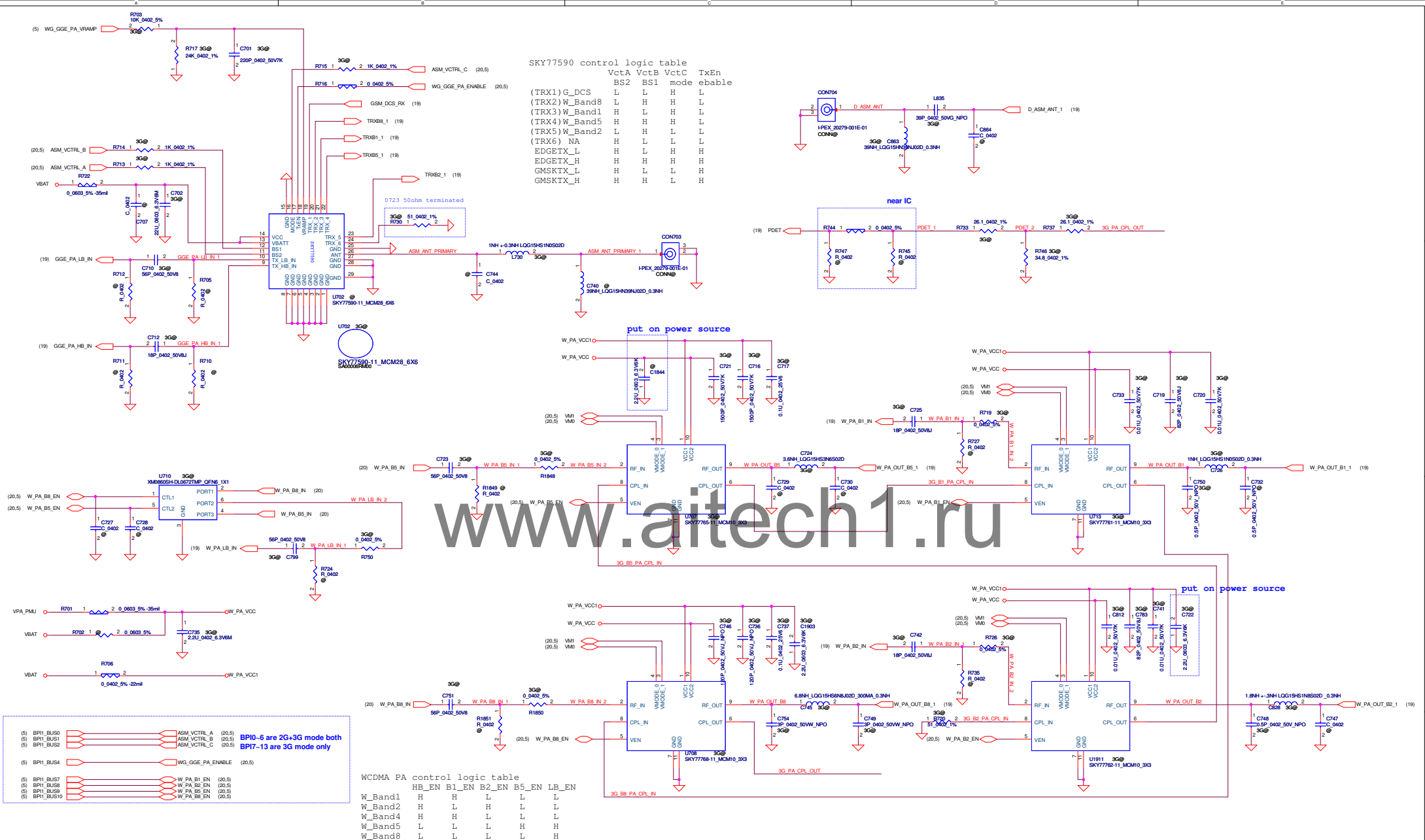
Compal GND MTK GND

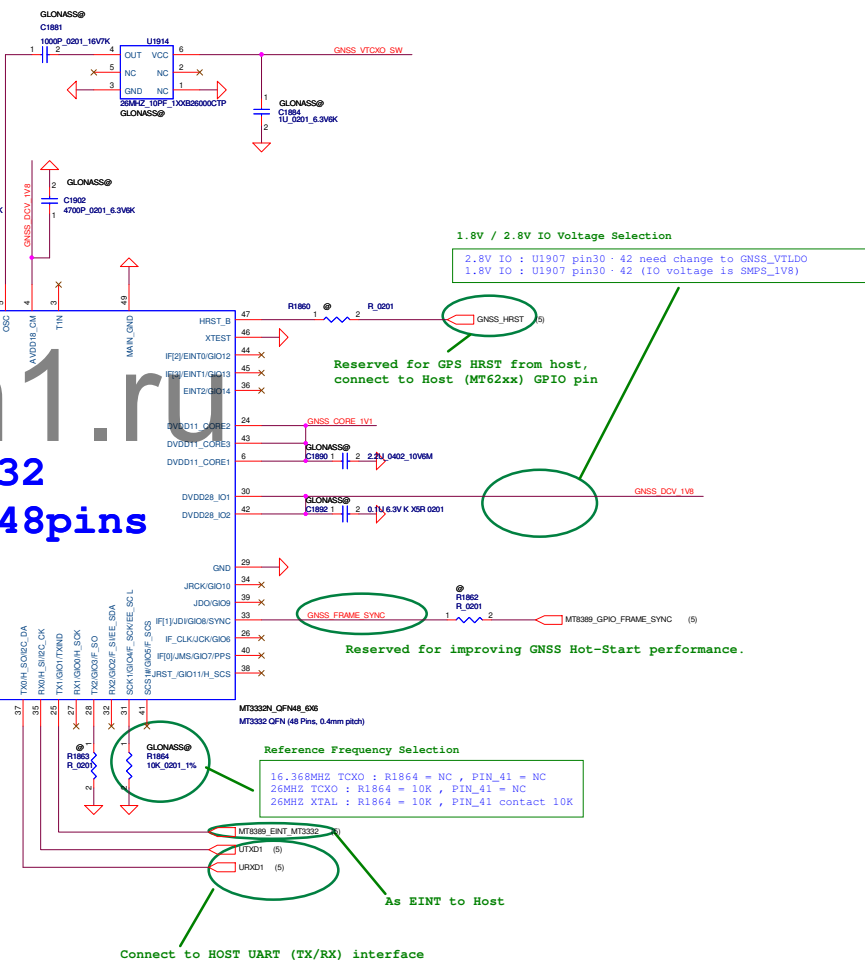
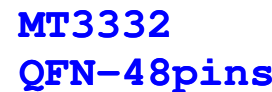
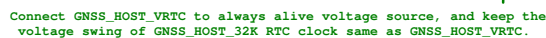
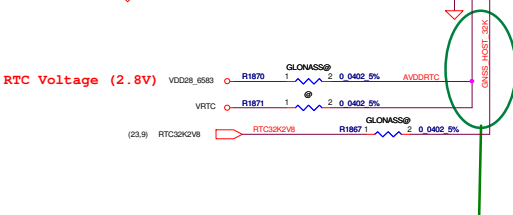
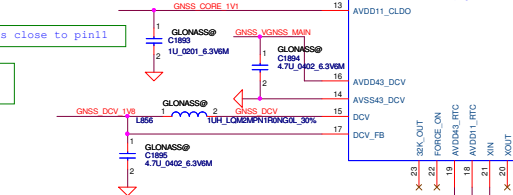
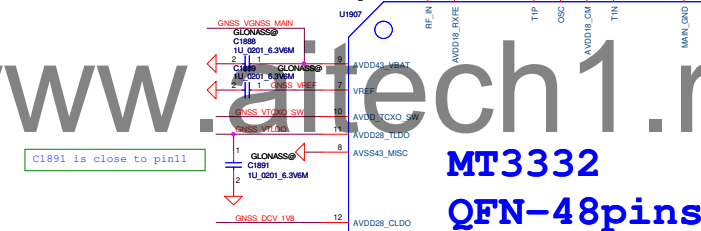
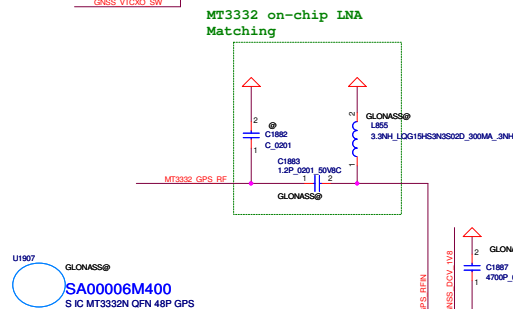
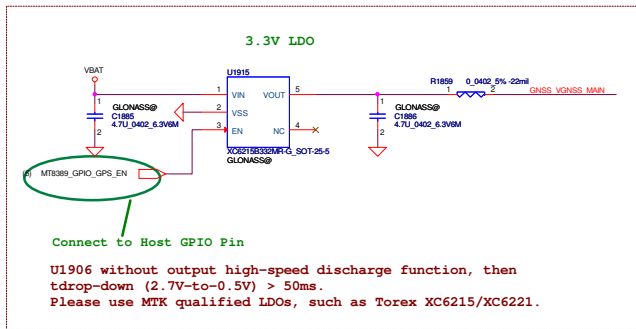


Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title	SIM	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size B	Document Number	Rev 0.1
				Date:	Wednesday, June 05, 2013	Sheet 18 of 28

SP4T Control Truth Table_SKY13380		
	Vct1	Vct2
RF1	L	L
RF2	L	H
RF3	H	L
RF4	H	H



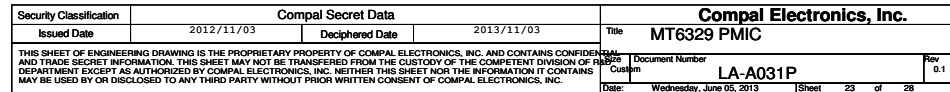




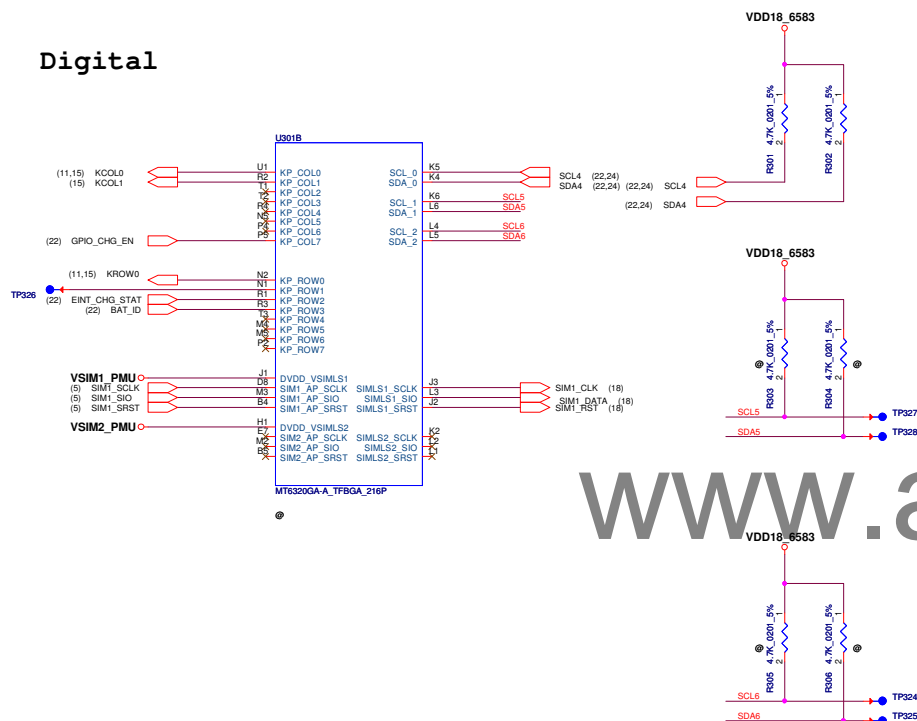
Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2012/11/09	Deciphered Date	2014/11/09	Title <b>MT3332</b>
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF COMPAL ELECTRONICS, INC. WITHOUT THE WRITTEN AUTHORIZATION BY COMPAL ELECTRONICS, INC. THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.			Docuement Number <b>ZSJYV-1A-A01P</b>	Rev 0.1
Date			Wednesday, June 26, 2013	Sheet 21 of 28



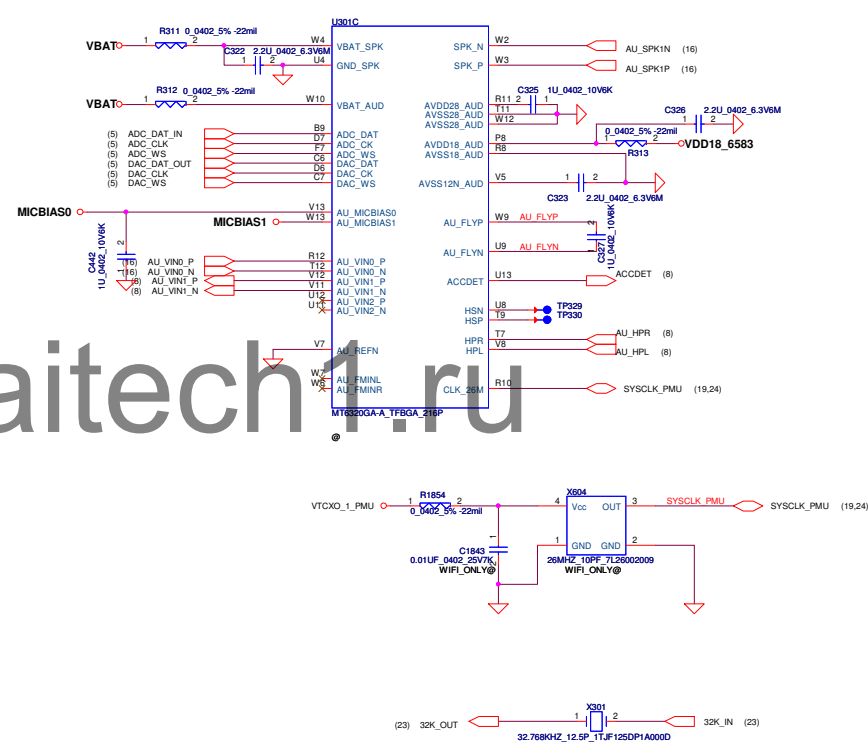
	LPDDR2/1.2V	DDR3U/1.25V	DDR3L/1.35V	DDR3/1.5V
VMSEL2	L	L	H	H
VMSEL1	L	H	L	H



## Digital

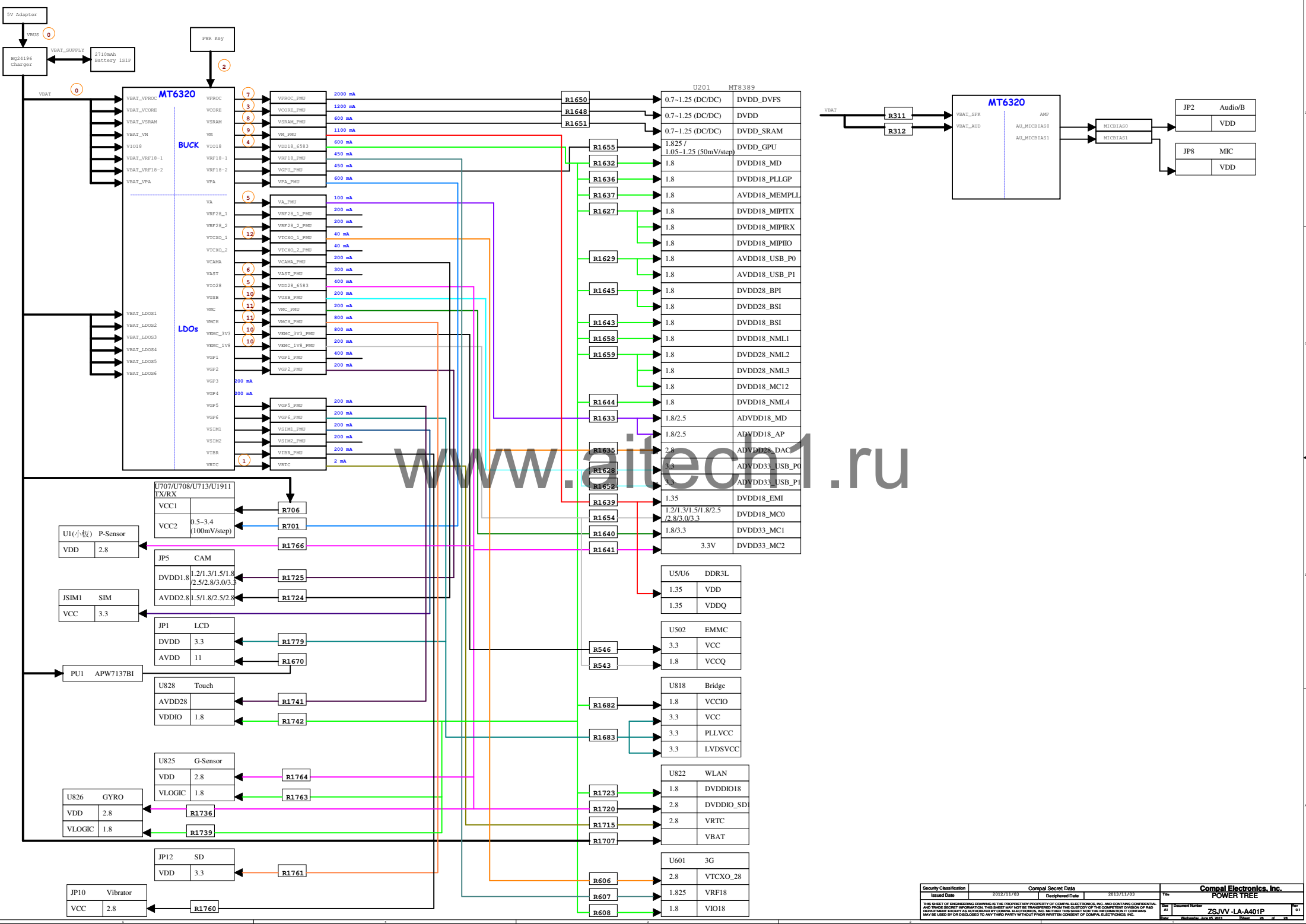


## Audio









2013/3/11  
Update PD11 , D308 , D309 , D310 , D311 , L301 ,  
L302 , L303 , L304 , L307 , C647 , C646 , C635 ,  
C638 compal P/N  
Change to un-pop : PR50 , R1838 , R314 ,R315  
Change to pop : R1855

2013/3/13  
Add C318

2013/3/14  
Del R332,R348

2013/4/1  
add R1847  
reserve 0-ohm for panel design

2013/4/10  
reserve C346 for VGP6 PMU  
PR51 change to 15K\_0402\_1%  
PH1 change to 10K\_0402\_1%

2013/4/15  
Add PL5 , PC143 ,PC144 for EMI request  
Add PC21 , PC22 ,PC23 for RF request

2013/4/22  
Change L307 and C342 to reserve

2013/5/6  
Change L306 and C338 BOM structure to 3G@

2013/5/6  
Change PC21,PC22 and PC23 BOM structure to 3G@  
PC21 change from 22P to 10P  
PC22 and PC23 change 68P to 33P

2013/5/8  
Change L305 and C337 BOM structure to 3G@

2013/5/8  
Change D311 and C638 BOM structure to 3G@

2013/5/20  
Change PR30 , PR31 ,R339 ,R321 , R322 , R323  
R324 , R325 , R326 , R327 , R328, R329 , R338 ,  
R1855 to R-SHORT

www.aitech1.ru

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title POWER PIR	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF FIRST DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Part Custom	Rev 0.1
				Document Number ZSJVV-LA-A401P	Date Wednesday, June 05, 2013
				Sheet 27 of 28	

2013/2/25  
P04. NC parts change to 0.luF\_0402\_NC  
R1648-R1651 to 0\_0603  
R1639 to 0\_0805  
P05. R634 from P19 to P05  
update X602 symbol  
del no functin net :  
U201C\_AF10, U201D\_C29-J25, U201E\_G2  
P06. DEL TP1392PAD-TP1395PAD  
P07. DEL R1672,R1673,net cabc\_enable1/0  
C1687~C1689 change to 1U\_16V  
C1691~C1698 change to 0.1U\_10V&0.01U\_16V  
C1692,C1695 to @  
P08. DEL R1702,net ADC1\_ACCESSORY  
JP2\_PIN.8 change to VEMC\_3V3\_PMU  
JP2\_PIN.6 change to GND  
P09. R1711,R1716-R1719,R1721,R1722 to 0.0201  
P11. DEL R1731,R1732, net UTXD1/URXD1\_DEBUG  
R1729,R1730 to short  
R1728,R1727 del @  
P12. R1764 to short  
U825 VDD28\_6583 change to VDD18\_6583  
P13. DEL R1740, net VDD28\_6583  
H7 change to H\_1P5X2P0N  
P14. R1743,R1744 to short  
P15. SW3 PIN.3 to KCOL0  
SW4 PIN.3 to KCOL1  
P16. JP10 PIN.2 to GND  
P17. ADD D7  
ADD C9~C12 for RF request  
P18. DEL RM2  
R1765,R1766 move to U201 side  
Update 3G schematic:  
1.change size from 0402 to 0201 of R633,C631,R612,R1771  
2.add shunt cap in RX matching circuit.  
3.Remove R645,U614,C644,R643  
Change C656,C643 bom structure to @  
4.remove R613  
5.change C610,C609,C614,C613 footprint from 0402 to 0201  
6. change C601,C604 footprint from 0402 to 0201  
(need update P/N)  
7 .Del R634 ( change to P5)

2013/2/26  
Update Block diagram,Notes list  
P05. DEL net URXD2,UTXD2,BP11\_BUS5/6,VBIAS  
R1765 pin2 contact USB11\_DP\_P  
R1766 pin2 contact USB11\_DM\_N  
P06. C64 , C70 , C 68 change to 0201  
P08. JP2\_PIN2. del GND  
P09. Del net MT6620\_EEDI,MT6620\_SDI01  
RTCCLK\_6620,SYSRST\_B\_6620,PMU\_EN\_6620  
GPS\_SYNC\_6620  
P12. ADD R1764 for co-lay STK8313  
Update 3G schematic:  
1.Update C601,C604 P/N to SE000010K00  
2.C754,C749,C748,C750: @ to 3G@  
3.Change C733 to 0.01u  
4.add remind as below in C1844 and C722

2013/2/27  
P04. R1639 to 0805 short pad  
P05. R1765,R1766 change to 3G@  
P10. JP5 mirror horizontally  
P13. PAD1~3 change to S2~4  
P17. ADD C13  
C9~C12 change to @

2013/3/1  
P04. change R1639 footprint from 0805-s to 0805  
R1648,R1650 change to 0603 short pad  
update PWR schematic  
update 3G schematic  
Due to RX trace "交錯線"  
Change W\_RX\_HB1\_SE\_M\_1 to U616.8  
W\_RX\_HB1\_SE\_P\_1 to U616.1

2013/3/1\_A  
P05. U201\_AH4,AF6 change to MB\_ID0/1  
U201\_AJ3,AH5,AG5 change to GPIO\_0~3  
ADD R1520-R1529,net CHG\_TEMP  
P11. DEL R1727  
update PWR schematic

2013/3/1\_B  
P04. R1648,R1650 change to 0805 short pad  
P21. update PU3 footprint  
P24. DEL PR3

2013/3/2  
update 3G schematic  
P19. U613.7 contact to D\_W\_RX\_HB5\_P\_3  
U613.8 contact to D\_W\_RX\_HB5\_M\_3  
update PWR schematic  
P22. GND\_DCDC contact to GND

2013/3/3  
update PWR schematic

2013/3/4  
P03. update MB\_ID table  
fix DRC error

2013/3/5  
update 3G schematic.  
Del TP1396,TP1397  
update PWR schemaitc  
fix DRC error

2013/3/6  
P05. net MB\_ID1 change to U201\_AA28  
net GPIO\_0 change to U201\_AA29

2013/3/7  
P07. ADD R1684 for IT6211VG  
ADD R1675,R1678, net CABE\_ENABLE0/1  
P09. U822\_PIN15 change to net MT6620\_1V8  
remove R1720, C1736  
Add P21. for GPS MT3332 circuit  
update 3G schematic  
P19. Add C1896~C1901  
del R633,R619,R620,R611

2013/3/8  
P13. DEL CLIP10,14, S4  
Update 3G schematic  
U601.A11 ----> NC

2013/3/8A  
P09. ADD R1713  
Update MT3332 schematic  
remove R1858,R1861,R1863,R1865  
R1866,R1868

2013/3/9a  
Update 3G schematic  
modify C1898,C1899 net name

2013/3/11  
Add P26 POWER PIR  
P21. Update L856 LIB & P/N  
update PWR schematic

2013/3/12  
update block diagram  
add power tree page

2013/3/13  
ADD NH520@,NH520\_EMC@  
modify RAM BOM structure  
P01 Add S4 for GLONASS frame  
P05. Del TP1373  
P07 R1675,R1678 to @  
ADD C1772,C1773 for RF request  
P09. update U823 symbol  
P13. R535 to 27ohm(MTK advice)  
P15. R1753,C1759 to @ (MTK advice)  
P17. ADD TP1364,TP1365 for RF request  
update 3G schematic  
delete C643,C656,TP601,TP602

2013/3/14  
P05. ADD TP1366,TP1369  
P21. C1887,C1902-->SE00000WN00  
C1888,C1889,C1891,C1893-->SE00000UC00  
C1890-->SE00000V600  
update 3G schematic  
Add C1903 for U708.

2013/3/18  
L838,L839,L840,L841,L842,L853  
change to SM070001R00

Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2012/11/03	Deciphered Date	2013/11/03	Title HW PIR		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF PRODUCT CUSTOMER SERVICE TO ANY OTHER DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				File Number Custom	Document Number <b>ZSJVV-LA-A401P</b>	Rev 0.1
				Date	Wednesday, June 05, 2013	Sheet 28 of 28