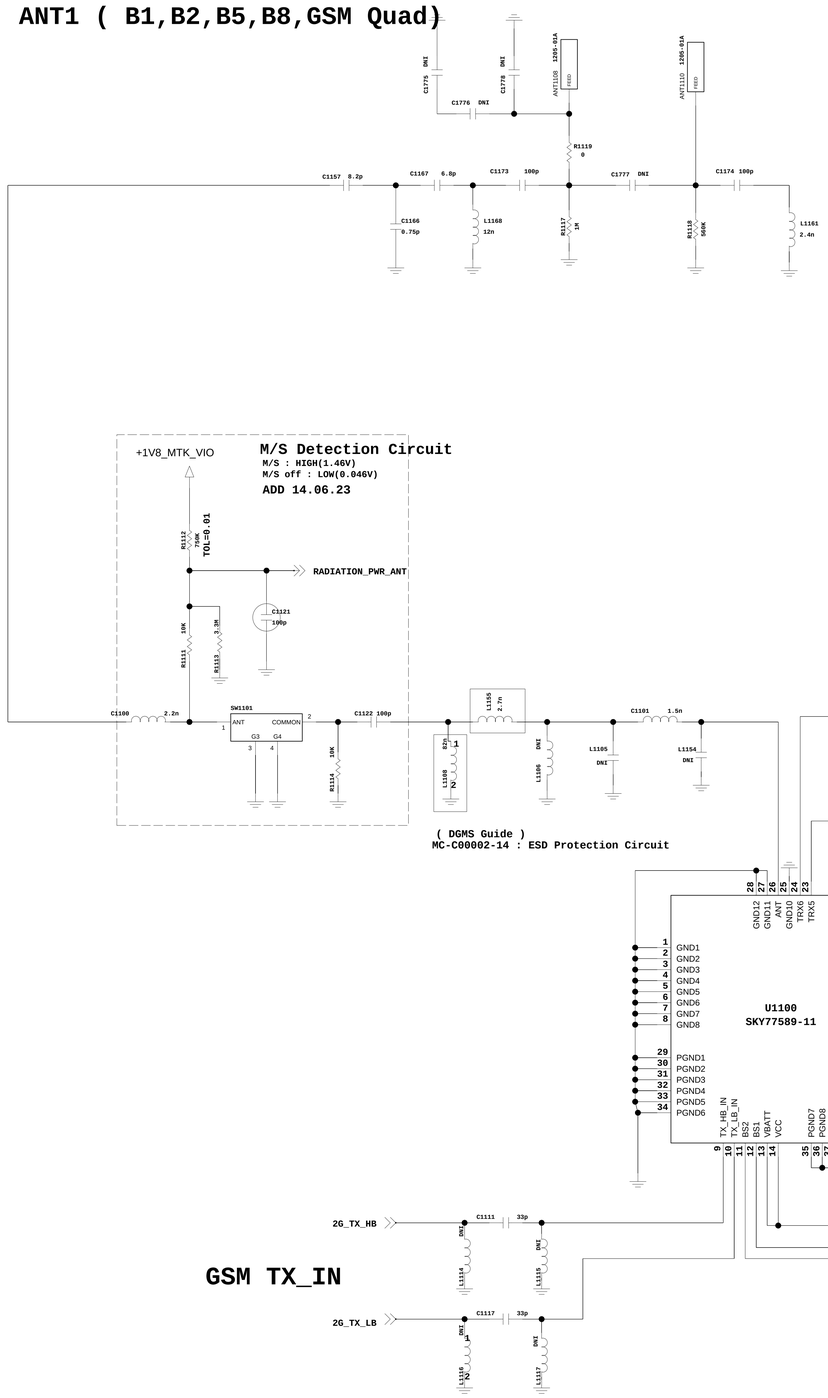
< 1-4-1-3_ANT_WCDMA_Quad>

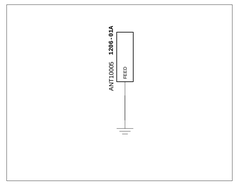
ANT1_PAD

Rev_0.3

ANT1 (B1,B2,B5,B8,GSM Quad)



Frame Contact C-Clip
(TOP side)



		TXEN	Mode	BS1	BS2
		GSM_PA_EN	ANT_SEL2	ANT_SEL1	ANT_SEL0
Stanby	Stanby	0	0	0	0
LB_TX	G_LB_TX	1	0	0	1
HB_TX	G_HB_TX	1	0	1	1
TRX1	B1	0	1	0	0
TRX2	B8	0	1	1	0
TRX3	B5	0	1	0	1
TRX4	B2	0	1	1	1
TRX5	G_LB_Rx	0	0	1	0
TRX6	G_HB_Rx	0	0	0	1

LGE Internal Use Only

LG Electronics

TITLE: LGH422

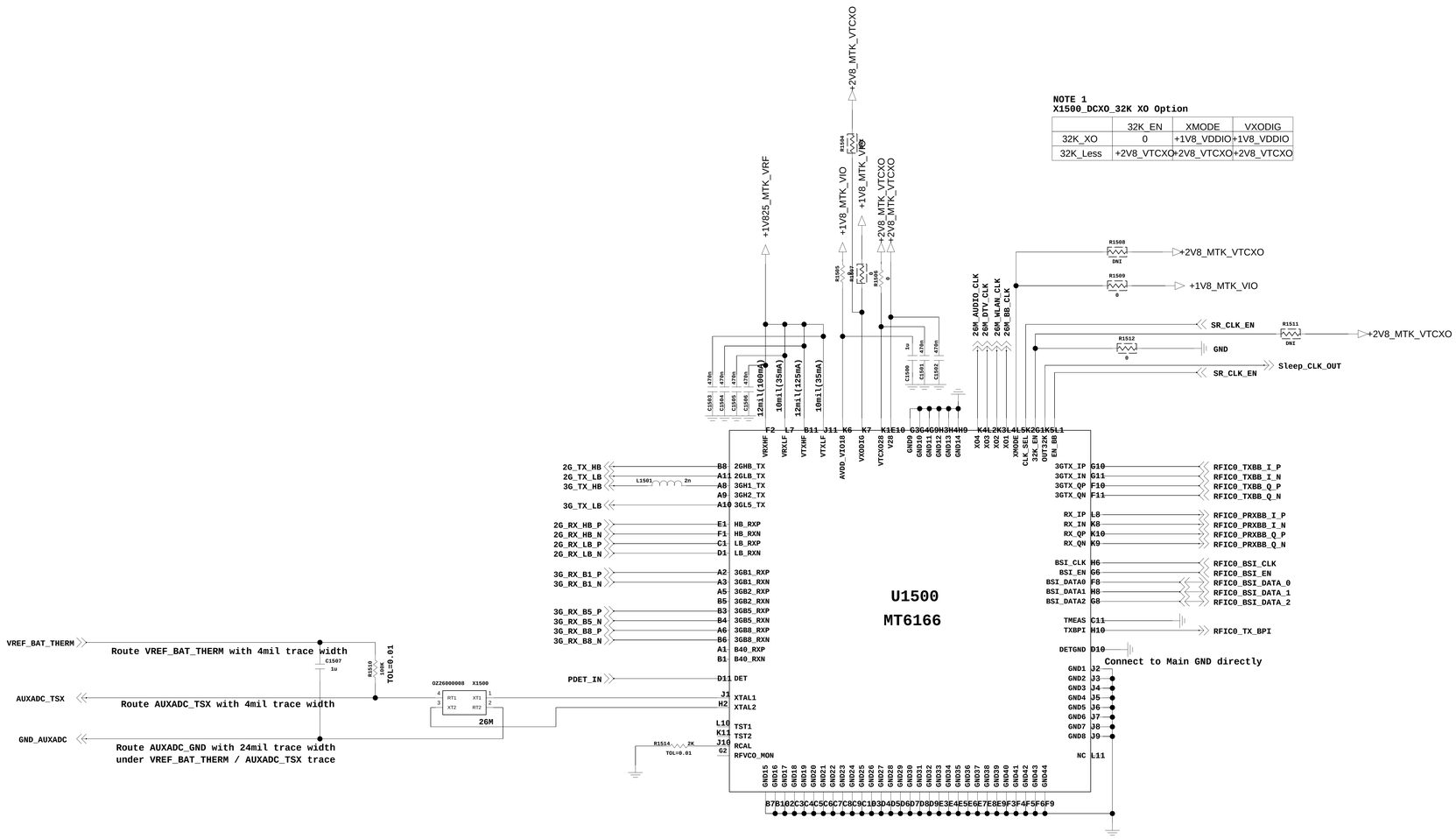
SIZE: A2 | DWG NO: PDM NUMBER | REV: Rev

DRAWN BY: User Name | SHEET: 1-4-1-3_ANT_WCDMA_Quad | DATE: Date

< 1-4-2-1_RFIC_MT6166 > Rev_0.3

NOTE 1
X1500_DCXO_32K XO Option

	32K_EN	XMODE	VXODIG
32K_XO	0	+1V8_VDDIO	+1V8_VDDIO
32K_Less	+2V8_VTCXO	+2V8_VTCXO	+2V8_VTCXO



LGE Internal Use Only

LG Electronics

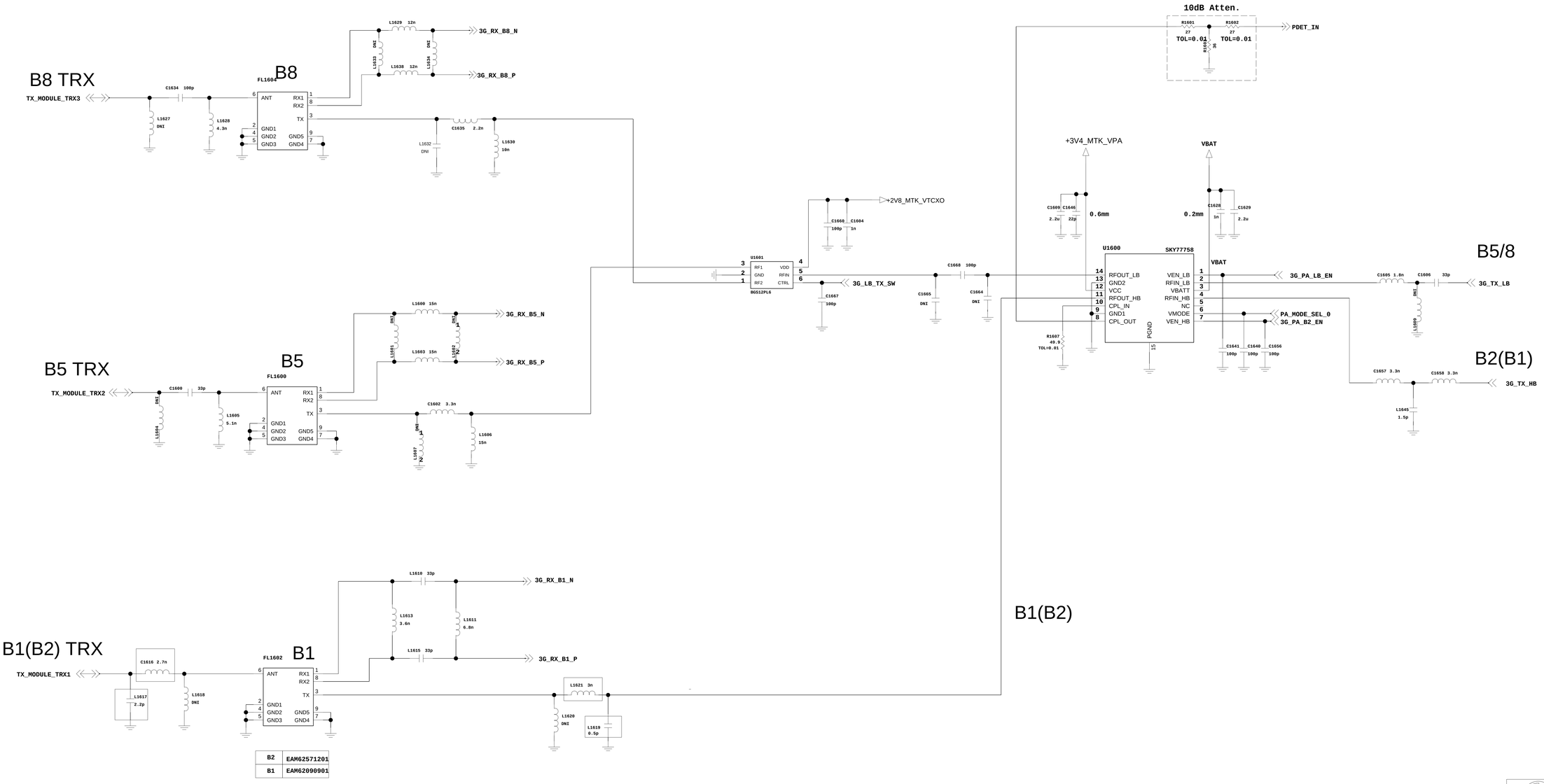
TITLE LGH422

SIZE A2 | DWG NO PDM NUMBER | REV Rev

DRAWN BY User Name | SHEET 1_4_2_1_RFIC_MT6166 | DATE User Name

< 1-4-3-4_TRX_B2(B1)_B5_B8_Triple band >

Triple Band Configuration Changed 14.08.04



B2	EAM62571201
B1	EAM62090901

LG Electronics

TITLE: LGH422

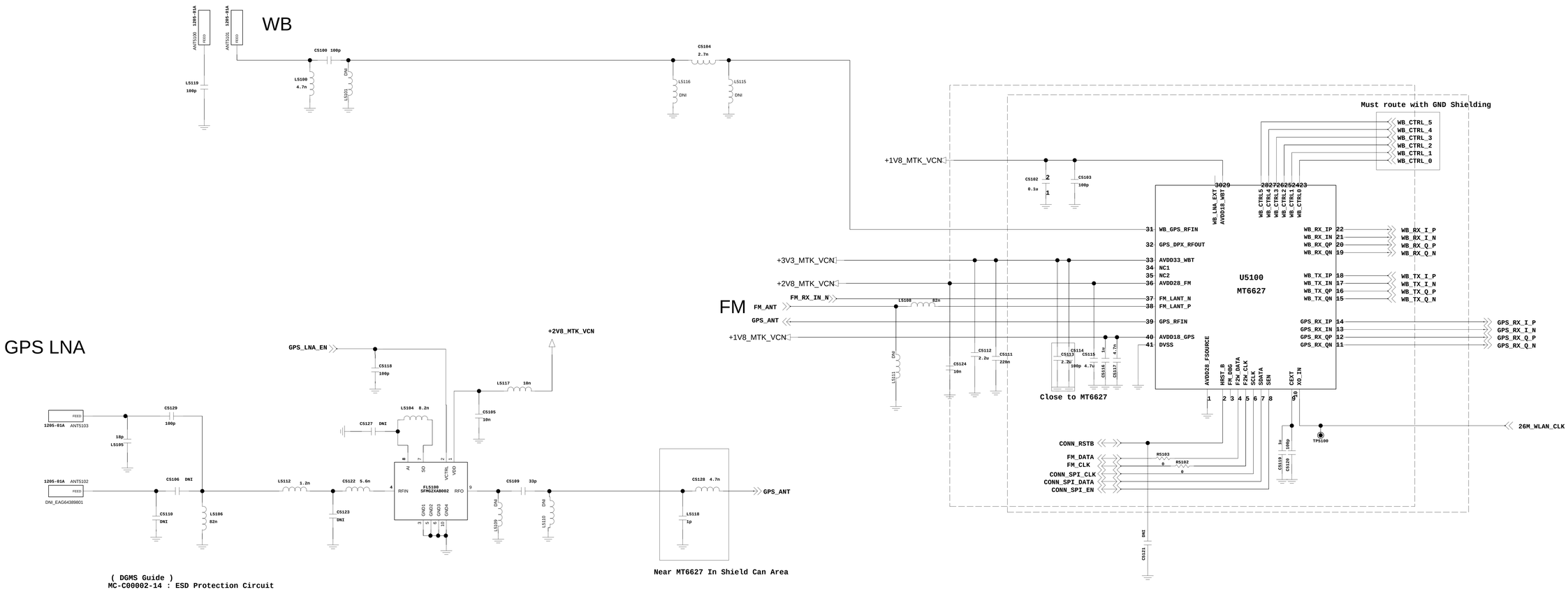
SIZE: A2 | DWG NO: PDM NUMBER | REV: Rev

DRAWN BY: User Name | SHEET: 1-4-3-4_TRX_B2_1_B5_B8_Triple band

LGE Internal Use Only

Optional_Using MT3332 version

<5-1-1-11_MT6627_WiFi_BT_GPS_FM> Rev_0.3



LGE Internal Use Only

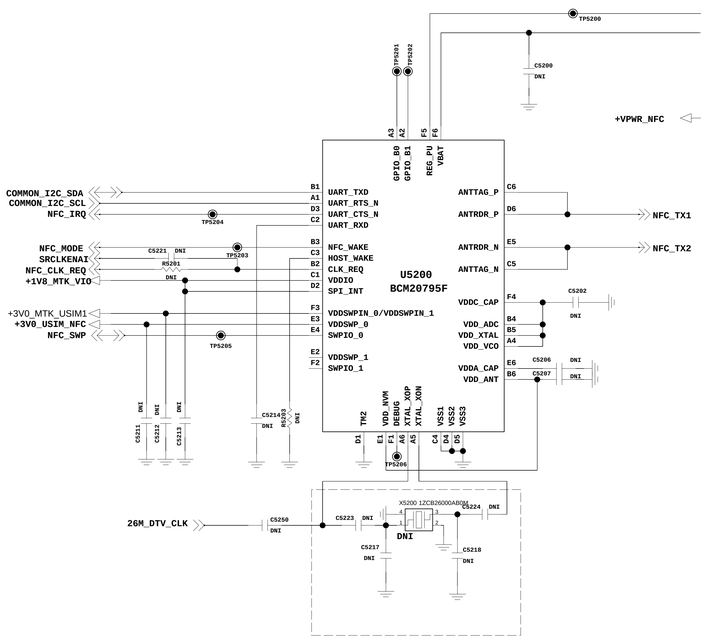
LG Electronics

TITLE LGH422

SIZE A2 | DWG NO PDM NUMBER | REV Rev

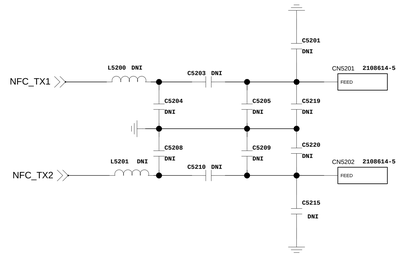
DRAWN BY User Name | SHEET 5_1_1_11_MT6627_V0_0.sch | Date

NFC _ BCM20795



To Be Deleted

NFC Antenna



LGE Internal Use Only

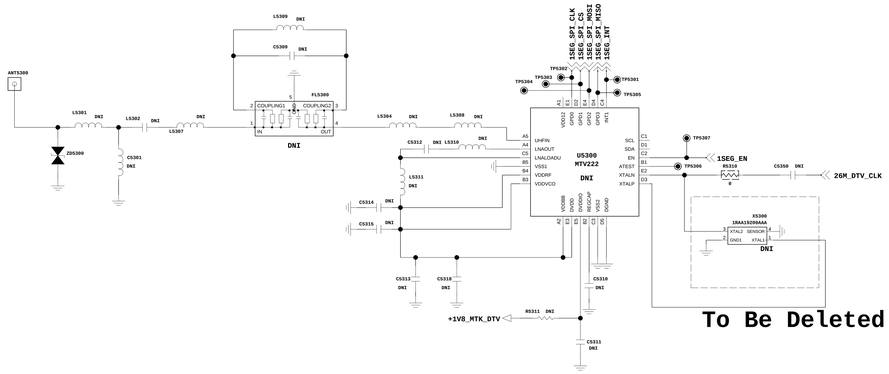
LG Electronics

TITLE: LGH422

SIZE: A2 | DWG NO: PDM NUMBER | REV: Rev

DRAWN BY: User Name | SHEET: 5-2_NFC_BCM20795 | Drawing Date

DTV Only <5-3-1-3_Broadcasting_ONE-SEG_MTV222>

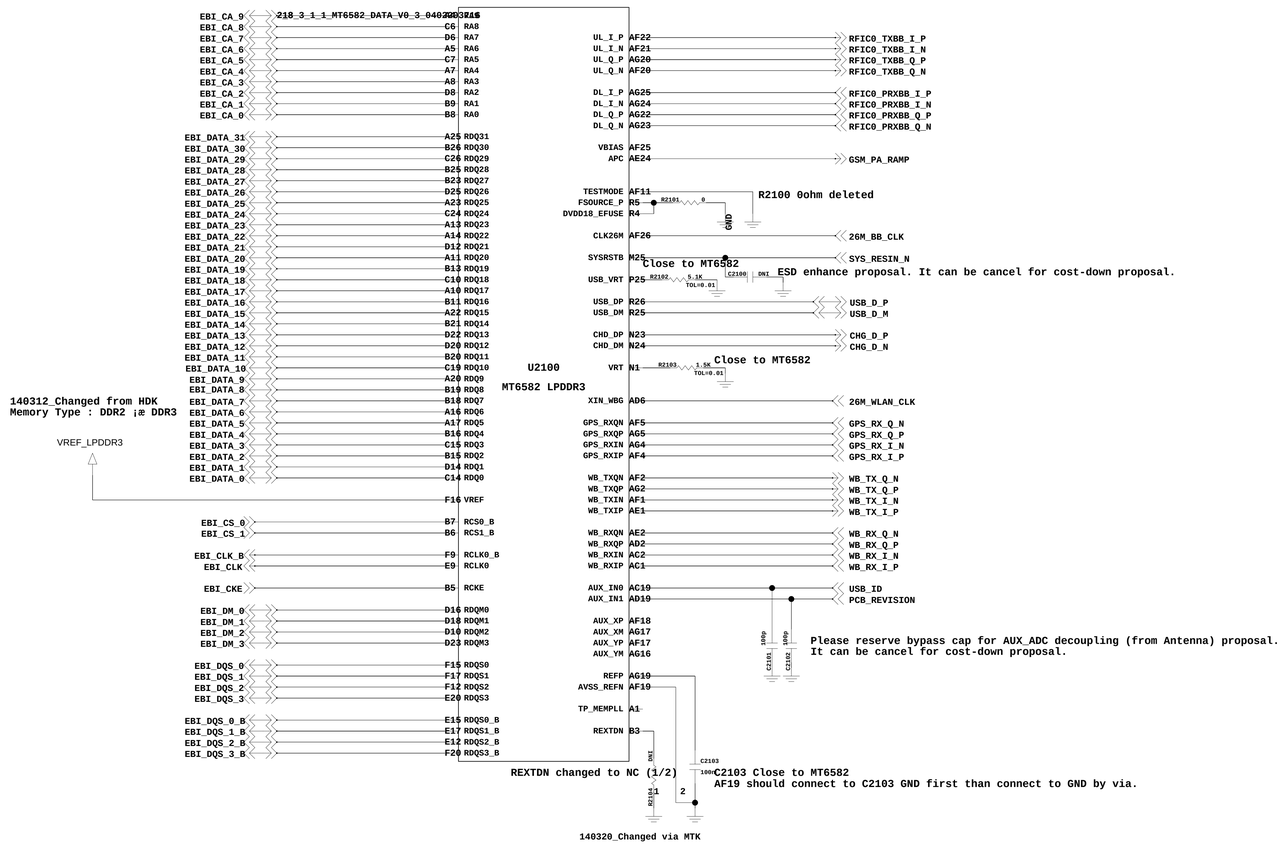


To Be Deleted

LGE Internal Use Only

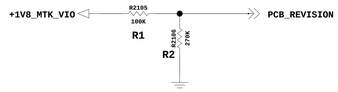
LG Electronics		
TITLE: LGH422		
SIZE: A2	DWG NO: PDM NUMBER	REV: Rev
DRAWN BY: User Name	SHEET: 5-3-1-3_ONE-SEG_MTV222	Orig Date

<2-3-3-1-1_MT6582_DATA> Rev.0.3



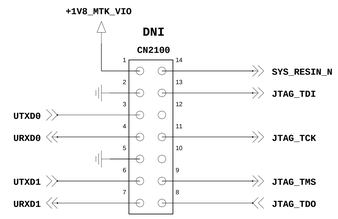
Rev_0.6

ADC



Revision	R1	R2	ADC Range(HEX.)
0.0	100K	9.1K	0.150
A	100K	30K	0.415
B	100K	51K	0.608
C	100K	82K	0.811
1.0	100K	270K	1.313
1.1	100K	130K	1.017

< 9-3-1_JTAG >
Rev_0.4



LGE Internal Use Only

LG Electronics

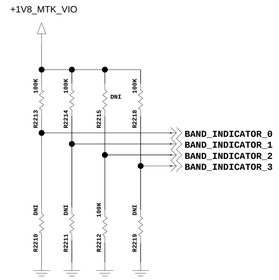
TITLE LGH422

SIZE A2 | DWG NO PDM NUMBER | REV Rev

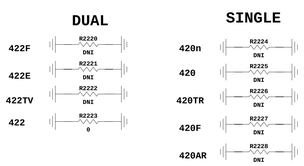
DRAWN BY User Name | SHEET 2-3-3-1-1_MT6582_DATA | Drawing Date

<2-3-3-1-2_MT6582_GPIO> Rev.0.3

Band_Indicator



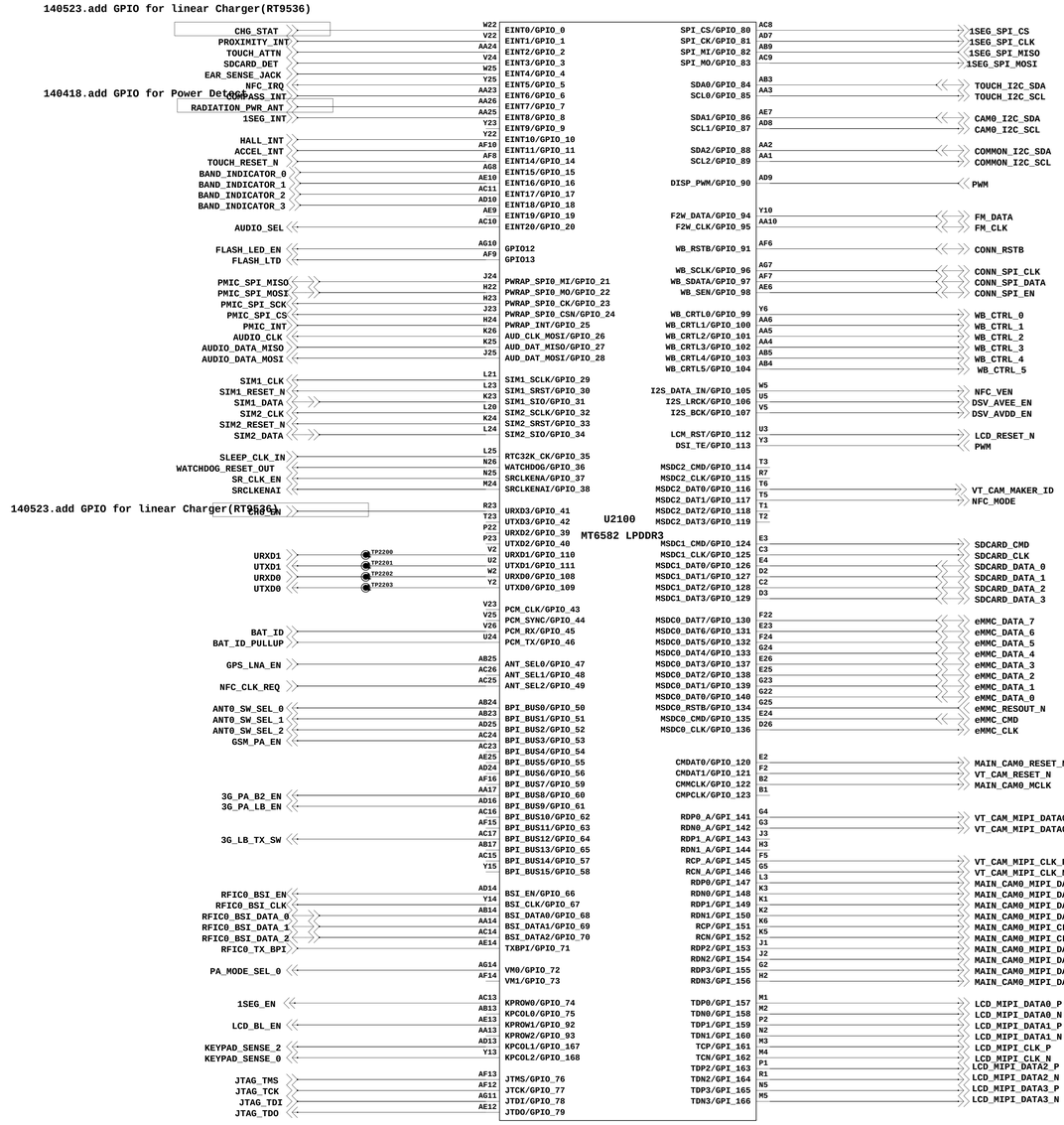
		BI_0	BI_1	BI_2	BI_3
		GPIO 15	GPIO 16	GPIO 17	GPIO 18
H420n	SINGLE SIM	0	0	0	0
H420	SINGLE SIM	0	0	0	0
H420TR	SINGLE SIM	1	1	0	0
H420F	SINGLE SIM	0	1	1	0
H420AR	SINGLE SIM	1	1	1	0
H422F	DUAL SIM	0	1	1	0
H422TV	DUAL SIM	1	1	1	1
H422	DUAL SIM	1	1	0	1



140523.add GPIO for linear Charger(RT9536)

140418.add GPIO for Power Detector

140523.add GPIO for linear Charger(RT9536)



I2C Pull-Up

I2C_0 : Touch

I2C_1 : Main CAM, VT CAM

I2C_2 : Proximity, ACCEL, NFC, Audio Sub System

LGE Internal Use Only

LG Electronics

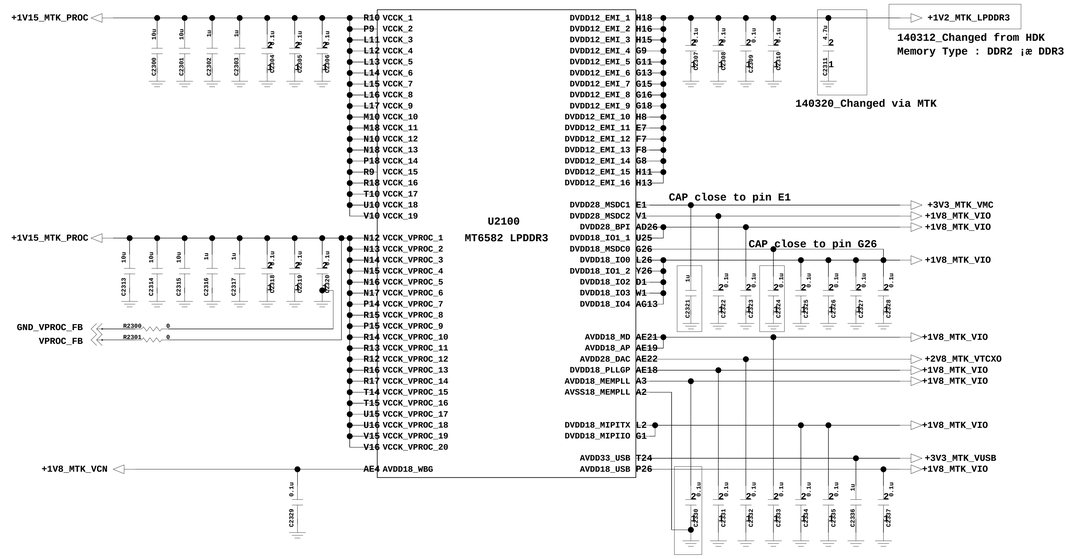
TITLE: LGH422

SIZE: A2 | DWG NO: PDM NUMBER | REV: Rev

DRAWN BY: User Name | SHEET: 2-3-3-1-2_MT6582_GPIO | Drawing Date

< MT6582_POWER >

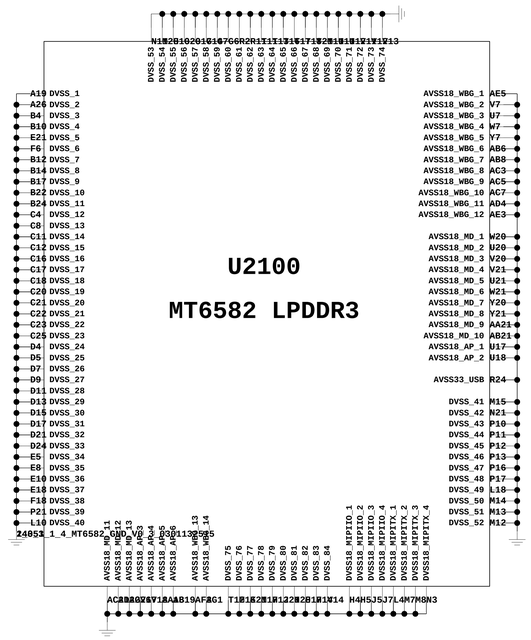
CCDS# : 2-3-3-1-3 Rev_0.3



LGE Internal Use Only

LG Electronics	
TITLE	LGH422
SIZE A2	DWG NO PDM NUMBER REV Rev
DRAWN BY User Name	SHEET MT6582_POWER Date Drawing Date

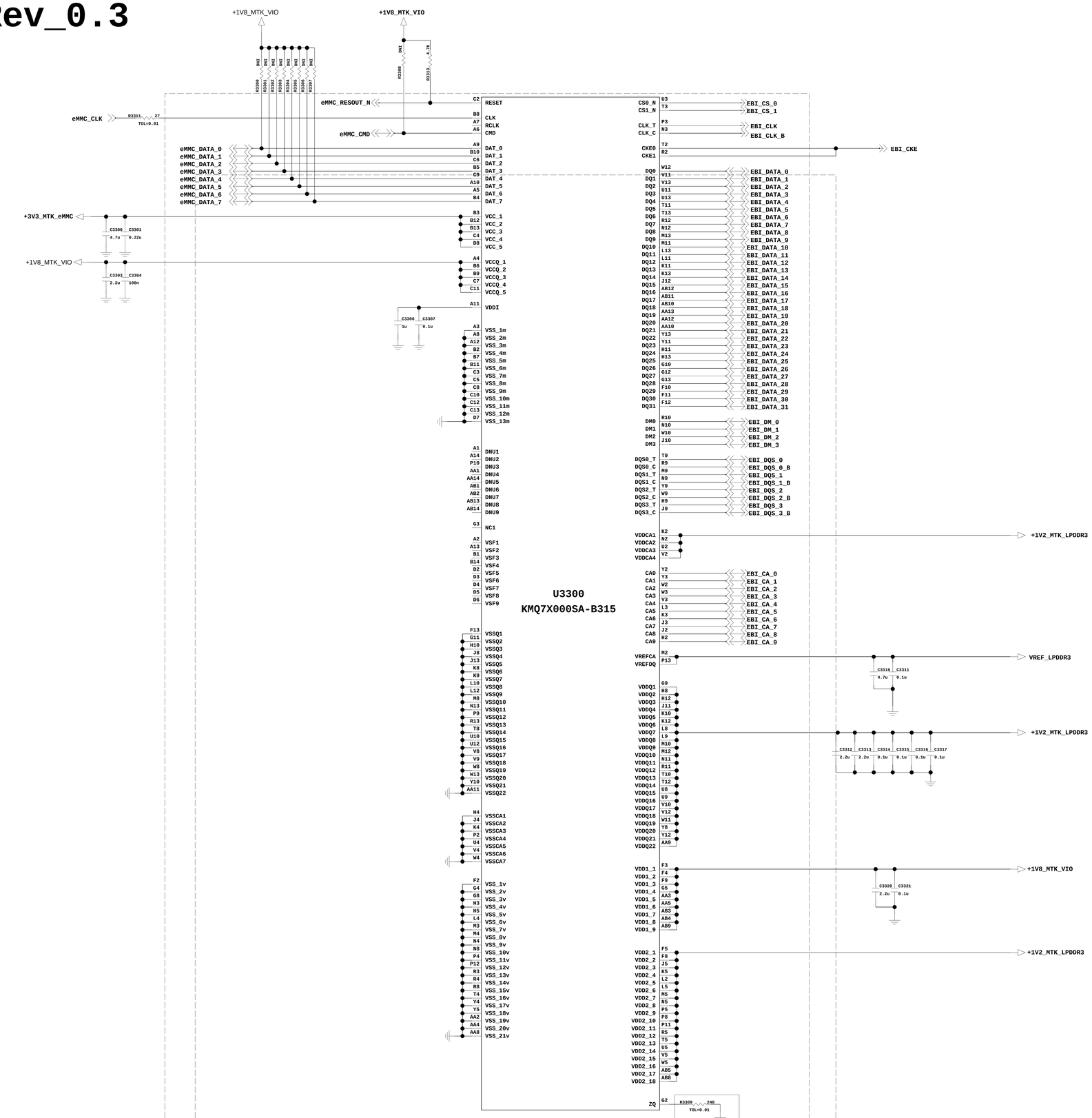
<2-3-3-1-4_MT6582_GND> Rev.0.3



LGE Internal Use Only

	LG Electronics
TITLE	LGH422
SIZE A2	DWG NO PDM NUMBER
	REV Rev
DRAWN BY User Name	SHEET MT6582_GND
	Date Drawing Date

< 3-3-3-2-1_MCP_eMMC_5_0_8G_DDR3_8G_Samsung >
Rev_0.3

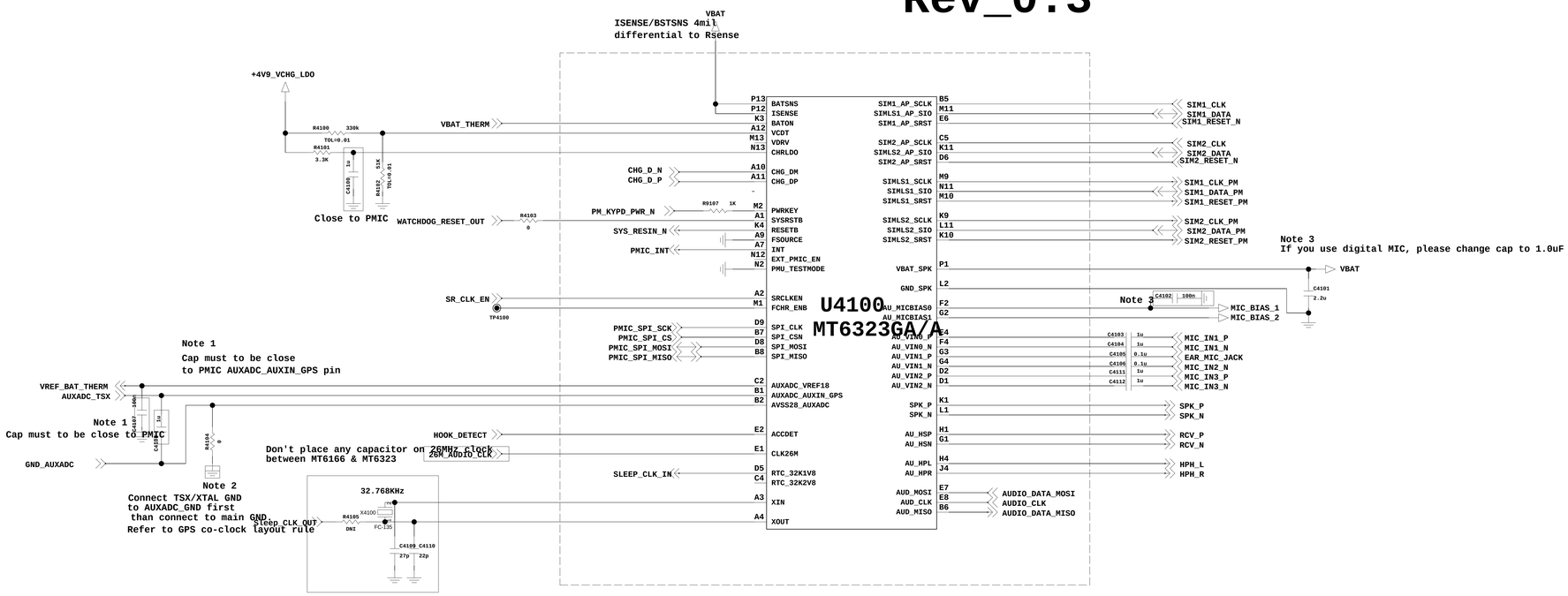


LGE Internal Use Only

LG Electronics

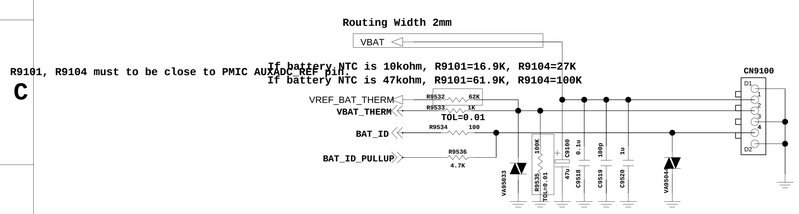
TITLE	LGH422
SIZE	A2
DWG NO	PDM NUMBER
REV	Rev
DRAWN BY	User Name
SHEET	3-3-3-2-1_MCP_eMMC_5_0_8G_DDR3_8G_Samsung

<4-1-7-1_MT6323_DATA>
Rev_0.3

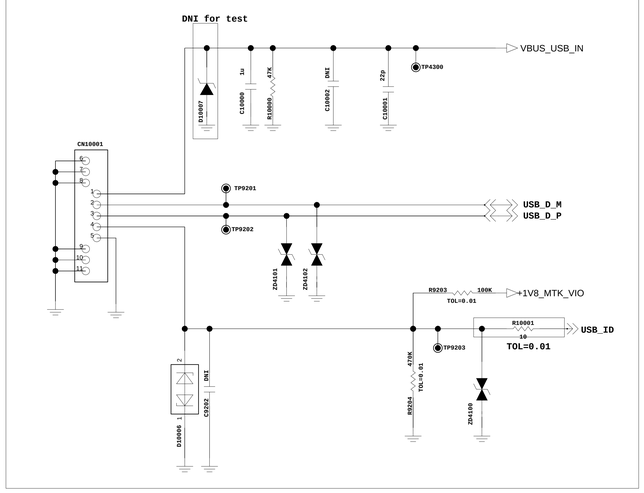


	X4100	R4104	C4109	C4110
RTC 32K	O	DNI	O	O
32K Less	DNI	0 ohm	0 ohm	DNI

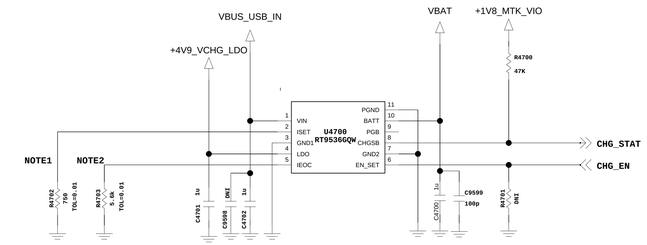
<9-1-2_Battery_CNT_4P>
REV.0.4



< 9-2-1_IO_USB2.0 Rev_0.5



<4-7-1-1_Linear Charger_RT95
Rev_0.3



NOTE1
646mA (Need to change 1%)
ISET Setting
560 ohm : 910mA
620 ohm : 850mA
750 ohm : 706mA
780 ohm : 680mA
820 ohm : 646mA

NOTE2
IEOC Setting
2K ohm 10% : 64mA
5.6K ohm 28% : 197mA

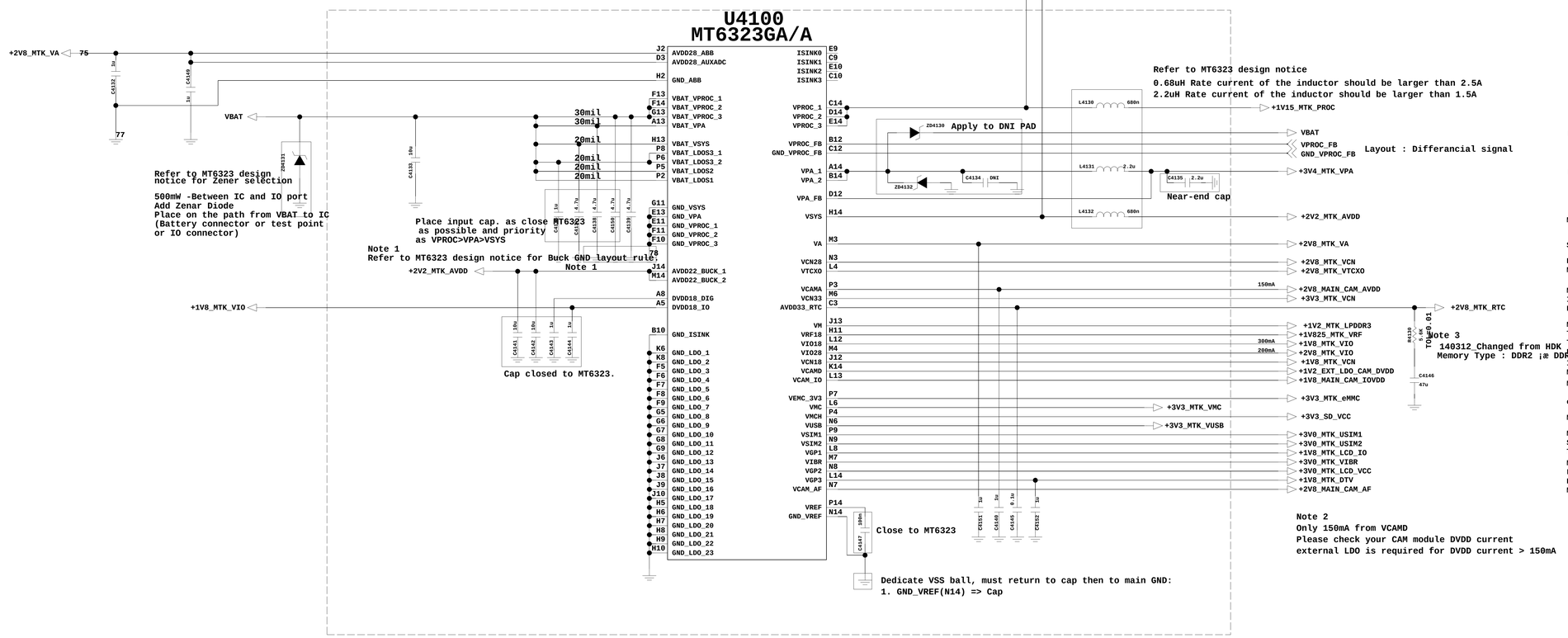
Change to Linear Charger 14.06.24

LG Electronics

TITLE	LGH422
SIZE	A2
DWG NO	PDM NUMBER
REV	Rev
DRAWN BY	User Name
SHEET	4-1-7-1_PMIC_MT6323_DATA
Date	

LGE Internal Use Only

<4-1-7-2_MT6323_POWER> Rev_0.4



Buck converter brief specifications

VSYS	0.7-1.3V/1.35V (optional) (6.25mV/step)	2,800	Processor / Digital Core
VSYS	2.2	1,400	System LDO input
VPA	0.5V - 3.4V (0.1V/step)	600	3G power amplifier

LDO types and brief specifications

Type	LDOname	Vout (Volt)	Imax (mA)	Application
ALDO	VCN28	2.8	30	RF chip
ALDO	VTCXO	2.8	40	13/26MHz reference clock
ALDO	VA	2.8	150	Analog baseband
ALDO	VCAMA	2.8	150	Analog power for camera module
DLDO	VCN_3V3	3.3/3.4/3.5/3.6	240	WIFI
DLDO	VIO28	2.8	200	Digital IO
DLDO	VSIM1	1.8/3.0	50	1st Sim card
DLDO	VSIM2	1.8/3.0	50	2st SIM card
DLDO	VSUB	3.3	20	USB
DLDO	VGP1	1.2/1.3/1.5/1.8 2.0/2.8/3.0/3.3	100	General purpose LDO
DLDO	VGP2	1.2/1.3/1.5/1.8 2.0/2.5/2.8/3.0	100	General purpose LDO
DLDO	VEMC_3V3	3.0/3.3	400	3.3V EMMC
DLDO	VCAM_AF	1.2/1.3/1.5/1.8 2.0/2.8/3.0/3.3	100	AF application
ALDO	VMC	1.8/3.3	100	SD 2.0/3.0 memory card
ALDO	VMCH	3.0/3.3	400	SD 3.0 memory card
DLDO	VIBR	1.2/1.3/1.5/1.8 2.0/2.8/3.0/3.3	100	Vibrator
PTCLDO	VRTC	2.8	2	Real-time clock
VSYS LDO	VM	1.24/1.39/1.54/1.84	700	Memory power
VSYS LDO	VRF18	1.825	200	RF application
VSYS LDO	VIO18	1.8	300	IO pad power
VSYS LDO	VCAMD	1.2/1.3/1.5/1.8	150	Camera application
VSYS LDO	VCAM_IO	1.8	100	Camera IO application
VSYS LDO	VGP3	1.2/1.3/1.5/1.8	200	General purpose LDO
VSYS LDO	VCN18	1.8	120	General purpose LDO

LG Electronics

TITLE: LGH422

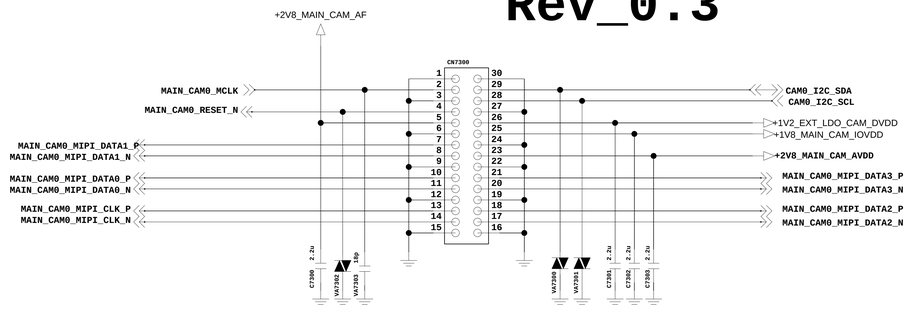
SIZE: A2 | DWG NO: PDM NUMBER | REV: Rev

DRAWN BY: User Name | SHEET: 4-1-7-2_MT6323_POWER | DATE: Date

LGE Internal Use Only

<7-3-5-1_30pin_5M_8M_13M_AF>
Rev_0.3

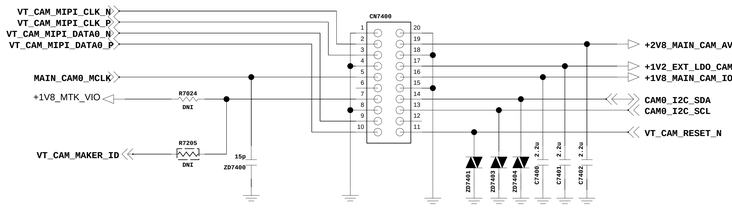
Check the pin map



< 7-4-1_VT_Camera_20pin_VGA_1.26M_1.3M_2.4M>
Rev_0.3

[DGMS Guide]

MC-C00081-17: 1. Add ESD Protection curcuit for Camera signal lines
2. Use under 100ohm/15pF ESD protection for over 2MP Camera



[DGMS Guide]
MC-C01845-13 : Separate Analog Power and Digital Power

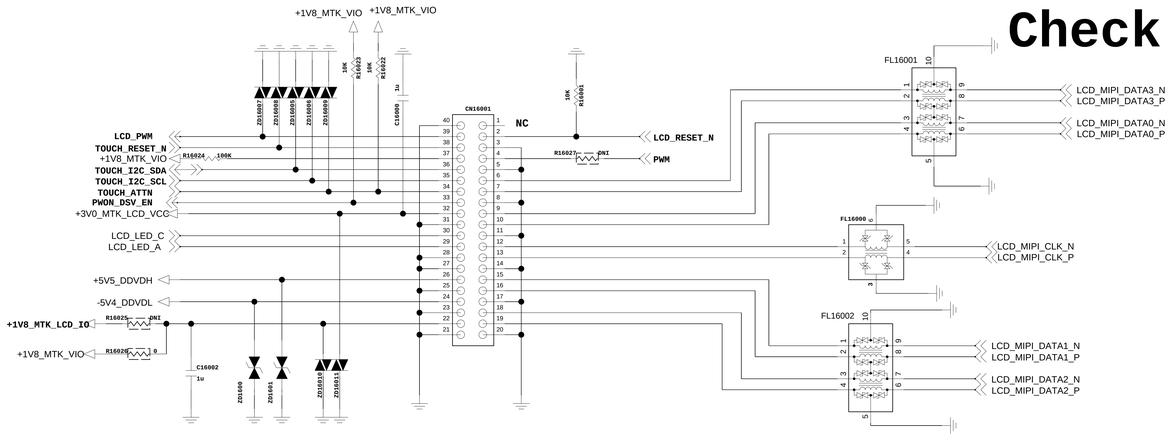
[DGMS Guide]
MC-C00060-13 : Check the pull-up resistor PAD for I2C line

LGE Internal Use Only

LG Electronics			
TITLE	LGH422		
SIZE A2	DWG NO PDM NUMBER		REV Rev
DRAWN BY User Name	SHEET Camera 19	Date Drawing Date	

LCD_Touch Connector_JDI Incell Touch

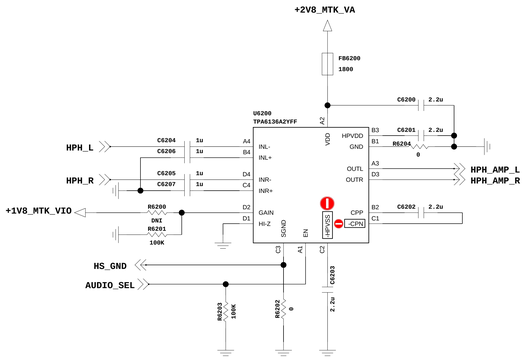
Check pin Map!



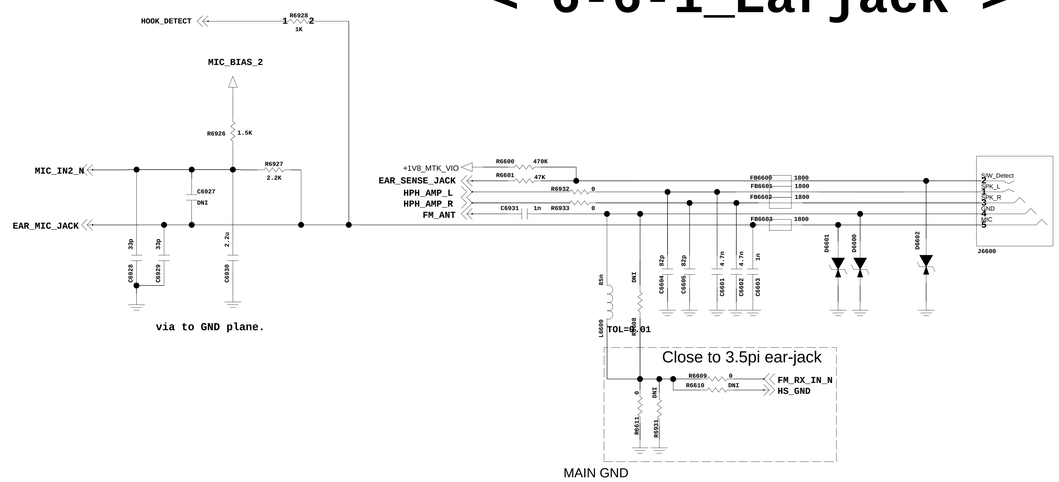
LGE Internal Use Only

	LG Electronics
TITLE	LGH422
SIZE A2	DWG NO PDM NUMBER REV Rev
DRAWN BY User Name	SHEET 7-x-x-x-10_Display_Touch Date

< Headset Amp TAP6136>

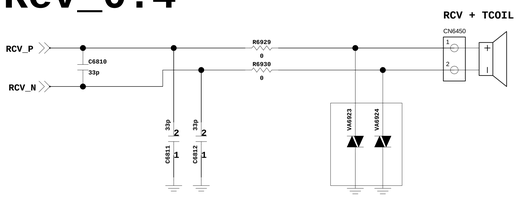


< 6-6-1_Earjack >



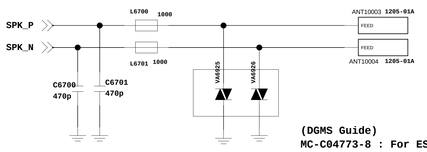
< 6-8-2_Receiver >

Rev_0.4



< 6-7-1_Speaker >

Rev_0.4



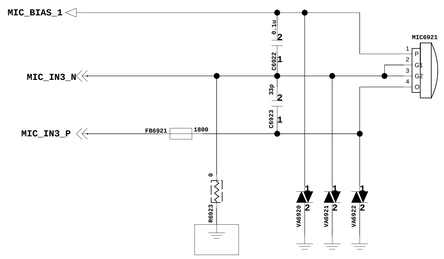
(DGMS Guide)
MC-C04773-8 : For ESD Protection / Tuning points

When USE) TVS devices's Working Voltage must be greater than the Path voltage
should apply capacitor under 50pF value for ESD protection with d-class amp

< 6-9-2_2MIC >

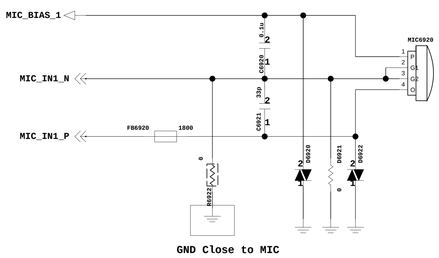
Rev_0.4

SUB_MIC



(DGMS Guide)
MC-C00074-11 : For ESD Protection / Tuning points
When USE) TVS devices's Working Voltage must be greater than the Path voltage

MAIN_MIC

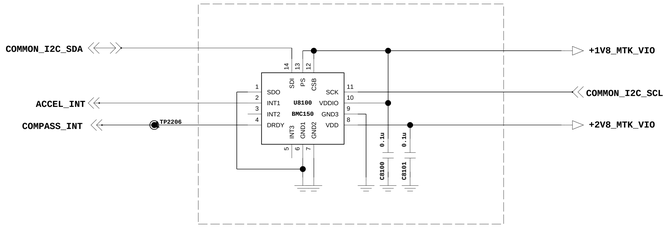


(DGMS Guide)
MC-C00074-11 : For ESD Protection / Tuning points
When USE) TVS devices's Working Voltage must be greater than the Path voltage

LGE Internal Use Only

	LG Electronics
TITLE	LGH422
SIZE A2	DWG NO PDM NUMBER REV Rev
DRAWN BY User Name	SHEET Audio 19 Date Drawing Date

<8-1-2-1_Accel_Compass_BMC150> Rev_1.0



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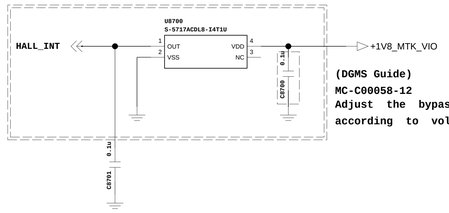
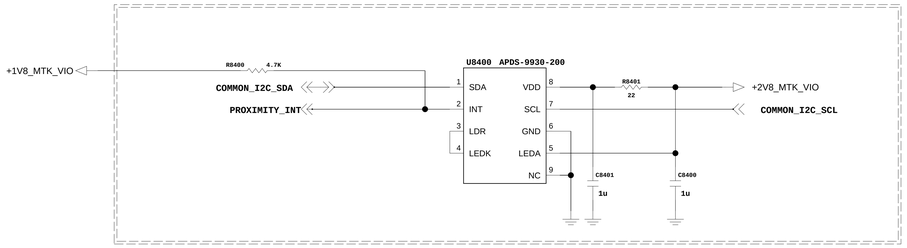
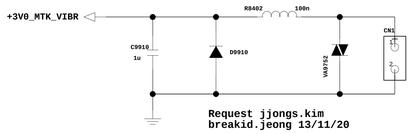


(DGMS Guide)
MC-C00058-12
Adjust the bypass capacitor value as necessary, according to voltage noise conditions

<8-4-1-1_Proximity_APDS-9930> Rev_1.0



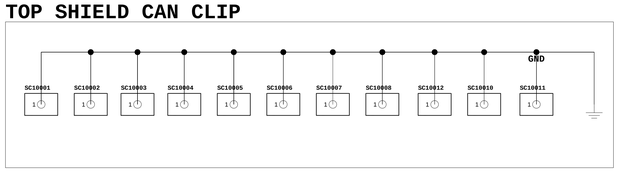
< 9-9-1-1_Motor > Rev_0.3



Request jjongs.kim
breakid.jeong 13/11/20

1203_jjongs.kim

TOP SHIELD CAN CLIP



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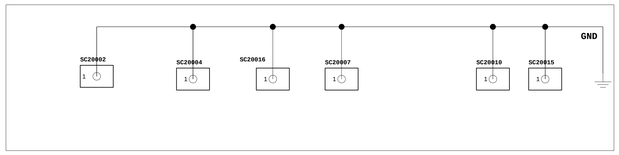


LGE Internal Use Only

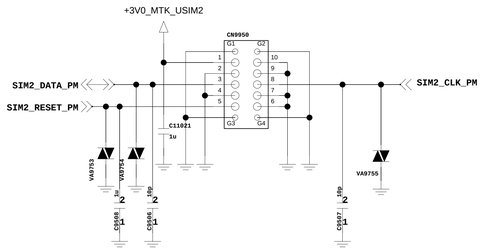
LG Electronics

TITLE: LGH422

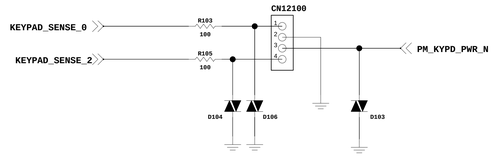
SIZE	DWG NO	REV
A2	PDM NUMBER	Rev

DRAWN BY: User Name | SHEET: Sensor_Motor | Date: Drawing Date

Sub SIM Connector



Back Volume Key



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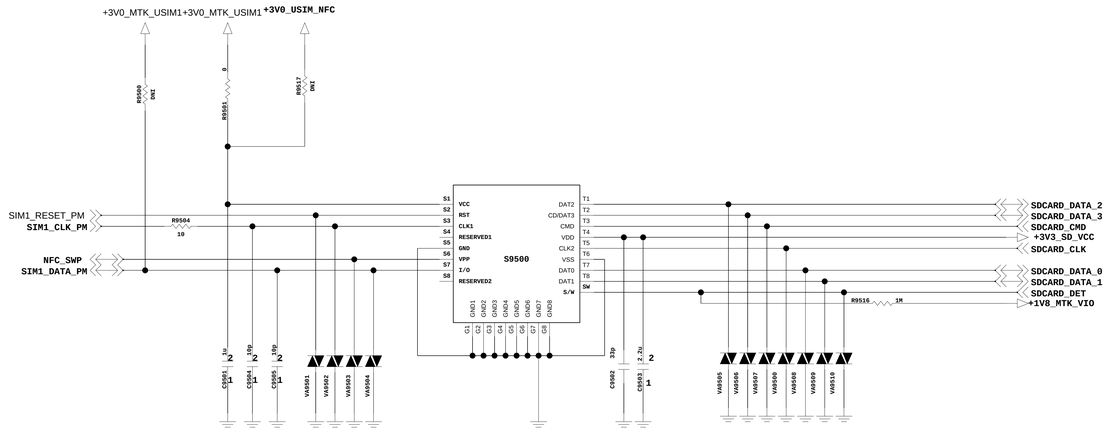

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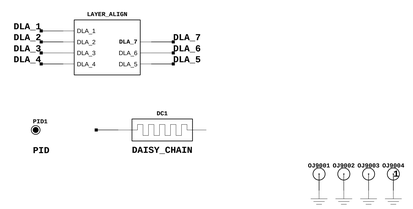
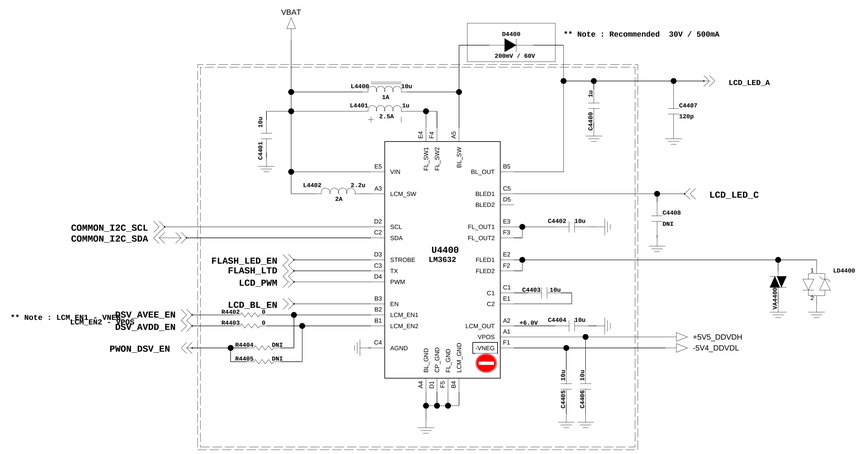
Item for Manufacturing



LGE Internal Use Only

	LG Electronics
TITLE	LGH422
SIZE A2	DWG NO PDM NUMBER REV Rev
DRAWN BY User Name	SHEET Connect@ Date Drawing Date

<4-4-7_LCD_Backlight_Flash_DSV_IC_LM3632> Rev_0.3



LGE Internal Use Only

	LG Electronics
TITLE	LGH422
SIZE A2	DWG NO PDM NUMBER REV Rev
DRAWN BY User Name	SHEET 4-4-7_LCD_Backlight_Flash_DSV_IC_LM3632

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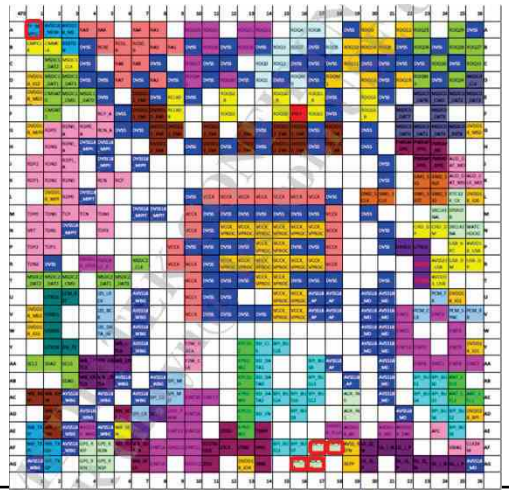
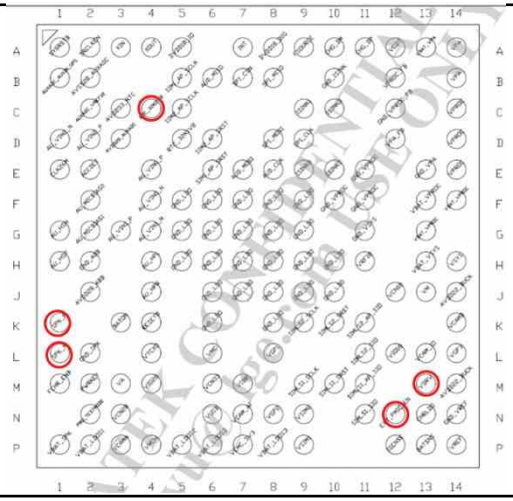
 O Not used	 O Not used
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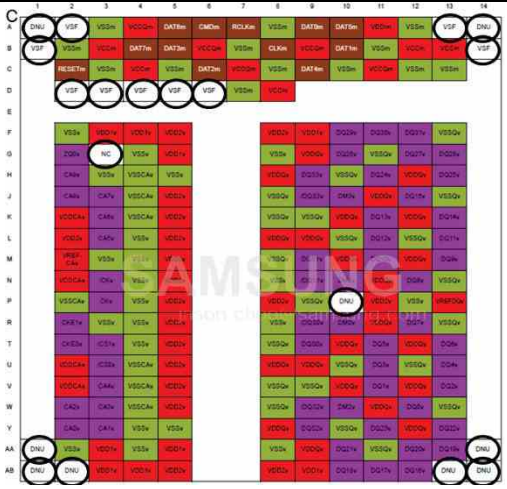 O Not used	

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