ROSELA LABS

SM-A520F_DS_REV0.4A

2016.11.09

sheet01 : **GSM / WCDMA / LTE RF**

sheet02 : **TRANCEIVER, DRX**

sheet03 : **JOON(EXYNOS7880), eMMC**

sheet04 : **SENSORS, GPS, BT/WIFI, NFC, BTP, FM RADIO**

sheet05 : **PMIC(Main,IF), MST, KEY, MOTOR**

sheet06 : **Audio, SD/SIM, IF Conn'**

sheet07 : **CAMERA, DISPLAY, SHEILD CAN, TDMB**

Engineer:
Drawn by:
R&D CHK:
DOC CTRL CHK:
MFG ENGR CHK:
TITLE:
Changed by: Date Changed: Title Changed: QA CHK: REV   Drawing Number: Page:
user|swcad83|10.253.20.36|20161124-133349

RF PART 1

VBAT   VBAT_RF

VRF_MIPI_IO_1P8   VDD_1P8_CP

VRF_FEM_2P8   VRF_PRX_LNA_2P8

GRIP_SENSOR

MAIN CA FEMID

GND CONTACT

FOR CANADA

B28 DPX

APT MODULATOR

B2,B4 Quad

B13

RF

TITLE

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RF PART 2

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MMMB PA
2G : EGSM / DCS / PCS / GSM850
3G : B1 / 2 / 4 / 5 / 8
FDD LTE : B1 / 2 / 3 / 4 / 5 / 8 / 17 / 20 / 28

HIGH BAND PA
FDD LTE: B7
TDD LTE: B38 / 40 / 41

SUB ANT2 (LB)

SUB ANT1 (MB/HB)

SUB ANT2 XGND

SUB ANT2 XGND

TRANSCEIVER

26MHz TCXO

B38/41

B2

B40

B28

B29

FOR CANADA

Engineer		RF
Drawn by		
R&D CHK		TITLE
DOC CTRL CHK		
MFG ENGR CHK		
Changed by	Date Changed	Time Changed	GA CHK	REV	Drawing Number	Sheet

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EXYNOS7880(JOON)

POP LP4 3G : 1st Micron
2nd SEC

Salt Water detect
MUX
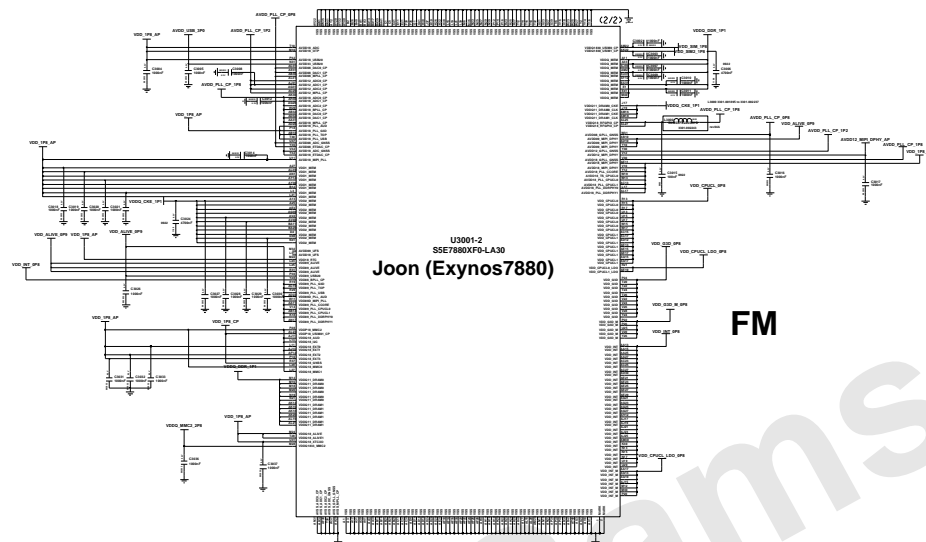
U3001-2
S5E7880XF0-LA30
Joon (Exynos7880)

FM
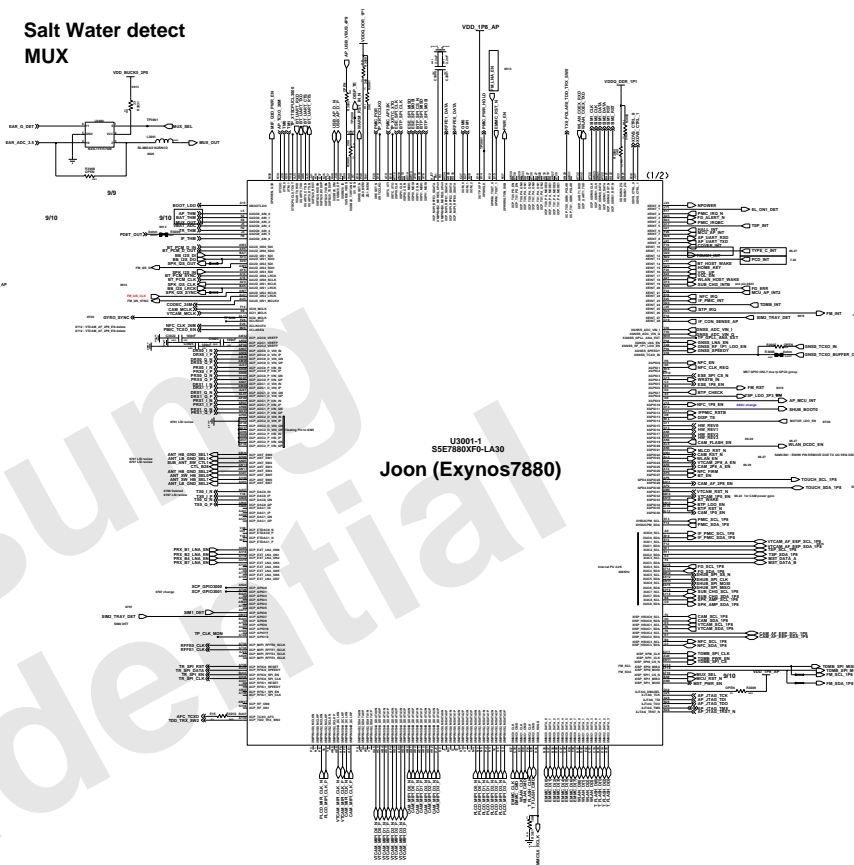
U3001-1
S5E7880XF0-LA30
Joon (Exynos7880)

eMMC 32GB 5.1
1st : SEC
2nd : TOSHIBA

UME3000
KLMBG2JENB-B041

PCB JTAG
JTAG3003
JTAG-34PIN
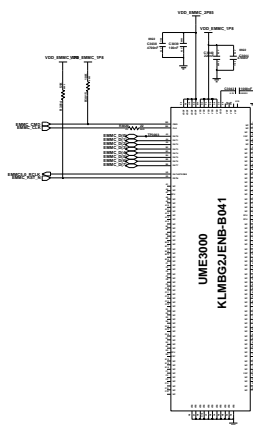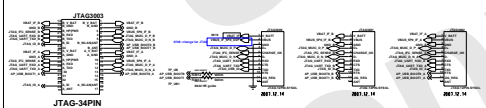
AP JTAG
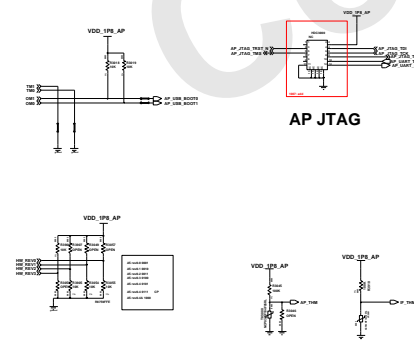
I2C Pull-up Register

AP Decap

SENSORS

BT/WIFI

Debug port

SENSOR HUB
(2017 A)

for MOBEAM

for MOBEAM

OSC4000
CX2016DB48000C0FLHA1

REV0.1
0823: change
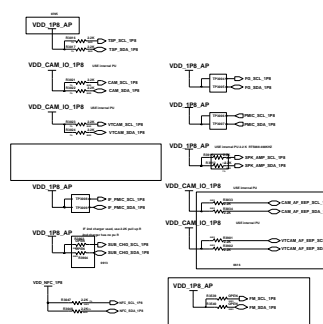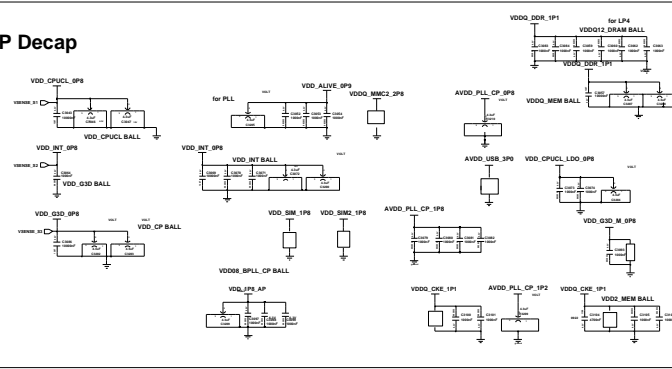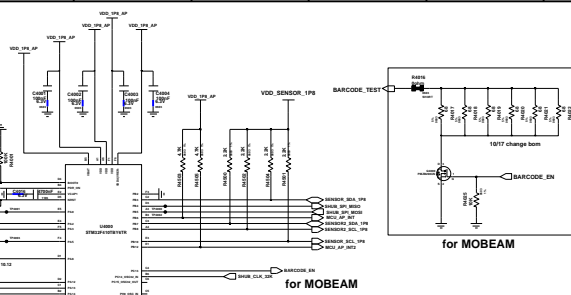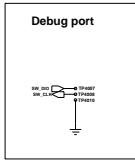
PROXY+RGB FPCB
TMD3725(AMS)

Hall IC

U4005

near to IF con AREA

Filp open/close

U4006
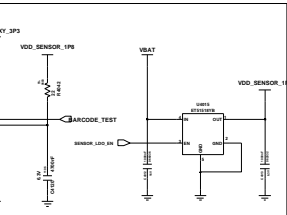
View Cover Detect

Magnetic Sensor

7/26 change

6/27

GPS

FM

OSC4010
KT2016K26000ACW18TAS
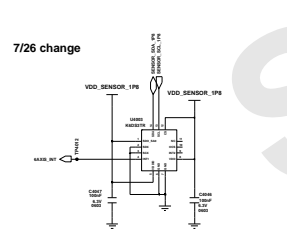
Pressure Sensor

6 Axis Sensor(ACC + GRYO)
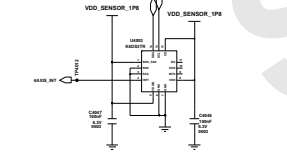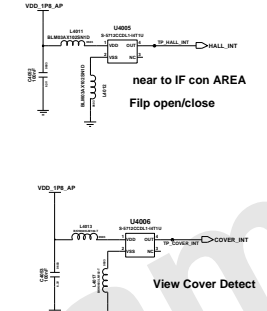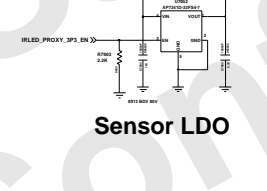
Sensor LDO

U4002
QCA9377-3

BTP + HOME KEY

NC

BTP DC-DC

NFC

BTP OCP and PWR

HEA4002
AXE612124

U4012
SEN8IDSXS1-YT30

0825:change

NFC_ANT1

NFC_ANT2

BTP IF Conn

SENSOR, WIFI/BT/GPS/NFC

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Main_PMIC

IF_PMIC

U5007
S2MPU05X01-6230

Buck1 & Buck3 inductor -> Isat max >= 3.5A , Irms max >= 3.5A

IF PMIC (S2MU004) MAIN CHG

BAT THEM

REPLACE NEAR IF CON
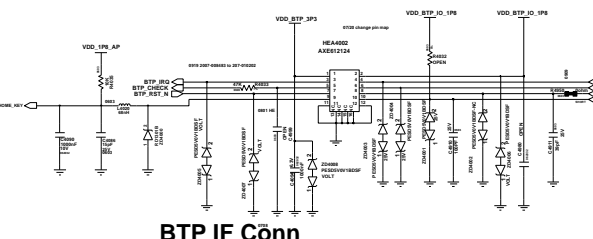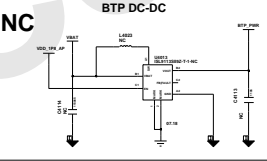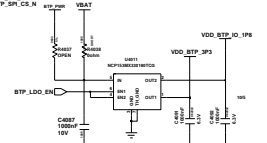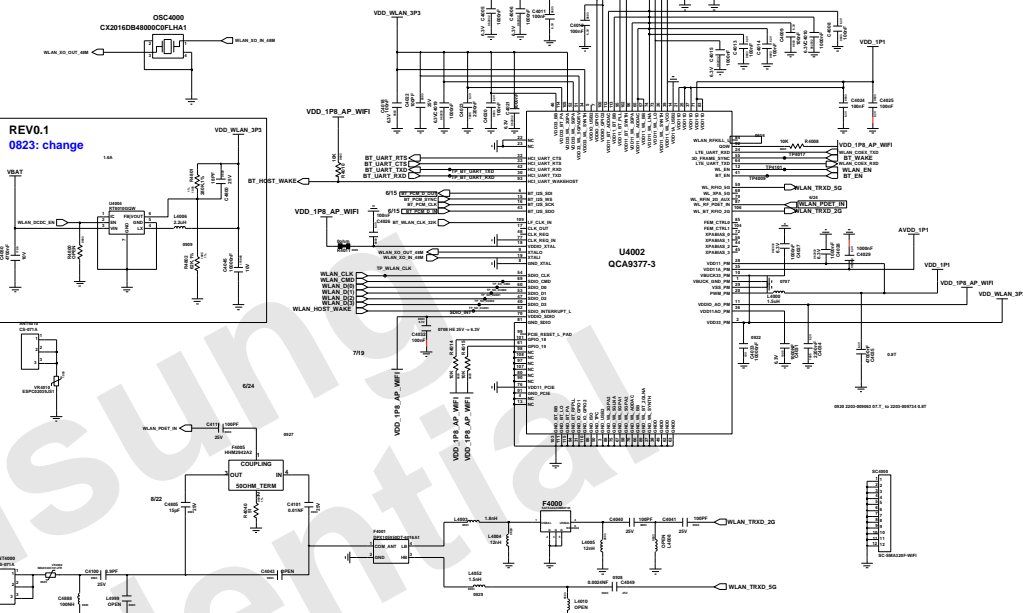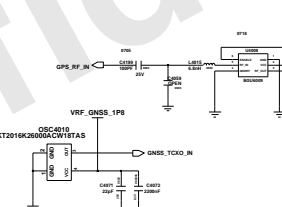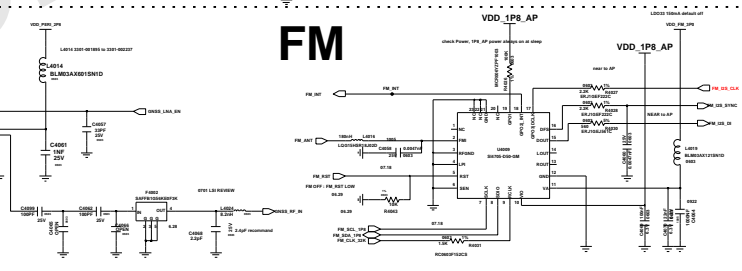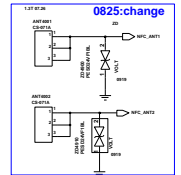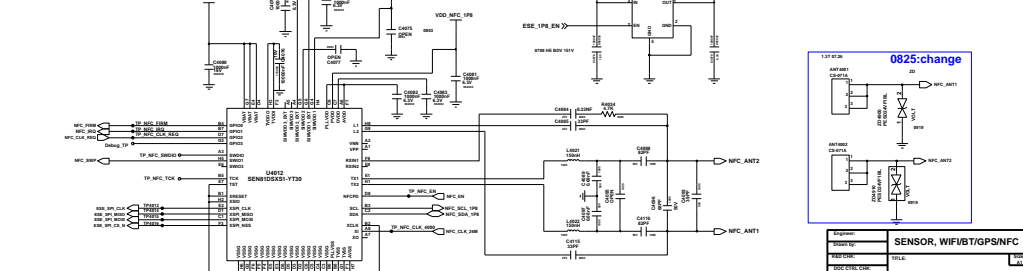
MST

09.22

Battery Connector

POWER KEY

VOLUME KEY

7/26 change conn.

MOTOR

7/26 LDO change
MOTOR LDO

APSF/SUB PMIC, WLCHG

AUDIO

SIM & SD

0616

MAIN MIC

SUB MIC

RCV CONN.

SPK AMP

SPK CONTACT

Ear MIC

SIM2 TFLASH

SIM1

	R6022	R6021
NFC	OPEN	SHORT
non NFC	SHORT	OPEN

7/26 chage conn.

EARJACK CON

1111

NC for test

TOUCHKEY CONN

IF CON

Touch Key + Grip Sensor

Drawn by:		AUDIO, SUB PCB CON.
R&D CHK.		TITLE:
DOC CTRL CHK.		
	Changed by:	Date Changed:

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CAMERA

16M_REAR_Camera Connector (MIPI)

LSI 3P8 with PDAF

LSI 3P8

MAIN CAM FILTER

Front_CAMERA (16M FF)

VDD_VTCAM_1P0

0826: add

0826: change

LSI 2P7

FRONT CAM FILTER

DUMMY CAP

0825: add (scs plate)

SHIELD CAN/BOTH HOLE

CIS	E	E
SEA	E	G
SWA	G	M
MEA	M	L
EUR OPEN	L	A
	A	EG
NEWZEALAND		EGML
3G		EGM
Taiwan		GM
LA_LAX		EL
LA_UB		ML
KT		LA
SKT		A
LGT		L

BARCODE

2nd charger s/c   NFC s/c
BATTERY   BATTERY

DISPLAY

0823: change

Filter should be located inside Shieldcan

VDD_LCD_1P8   VDD_DDR_1P6
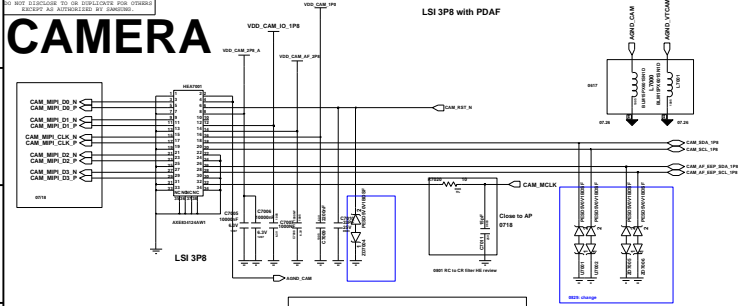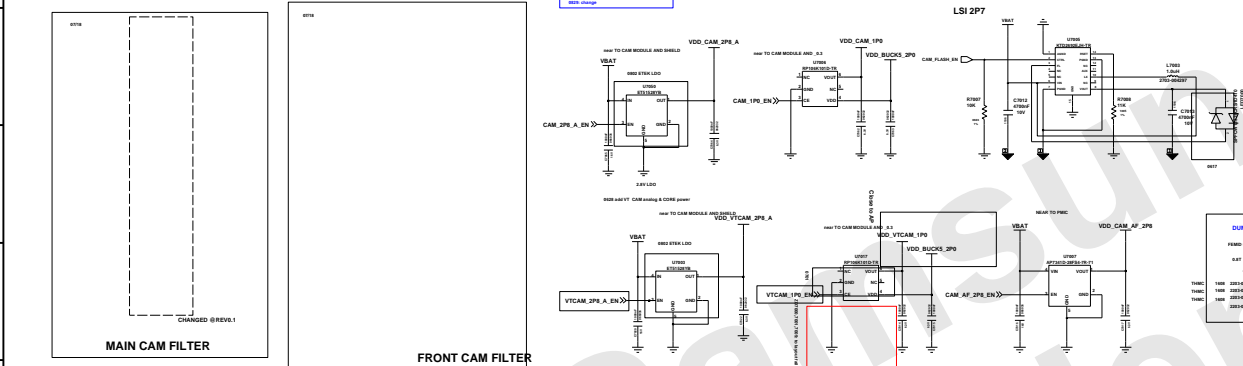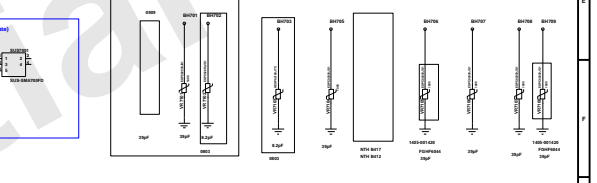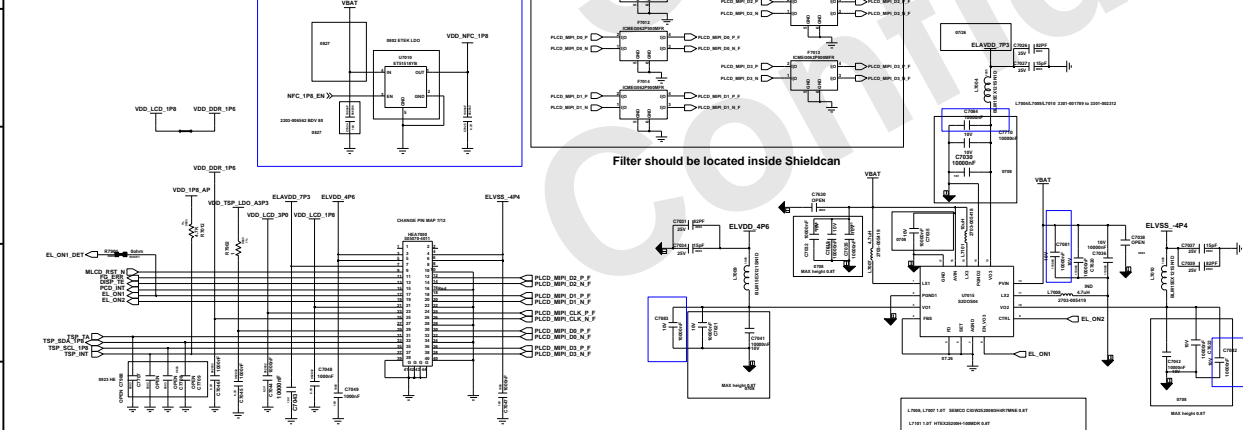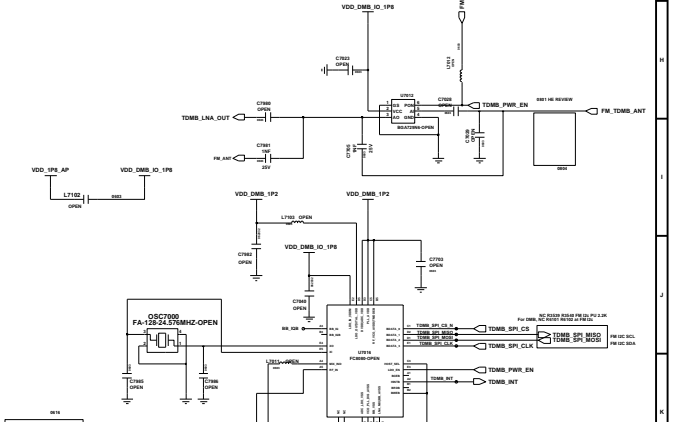
OCTA CONNECTOR

HD OCTA DC-DC

ELAVDD_7P3   ELVDD_4P6   ELVSS_-4P4

TDMB_for KOR

VDD_DMB_IO_1P8

TDMB_LNA_OUT

FM_ANT

VDD_1P8_AP   VDD_DMB_IO_1P8

VDD_DMB_1P2

VDD_DMB_IO_1P8

DSC7000
FA-128-24.576MHZ-OPEN

TDMB_SPI_CS
TDMB_SPI_MISO
TDMB_SPI_MOSI
TDMB_SPI_CLK
TDMB_PWR_EN
TDMB_INT

TDMB_LNA_OUT