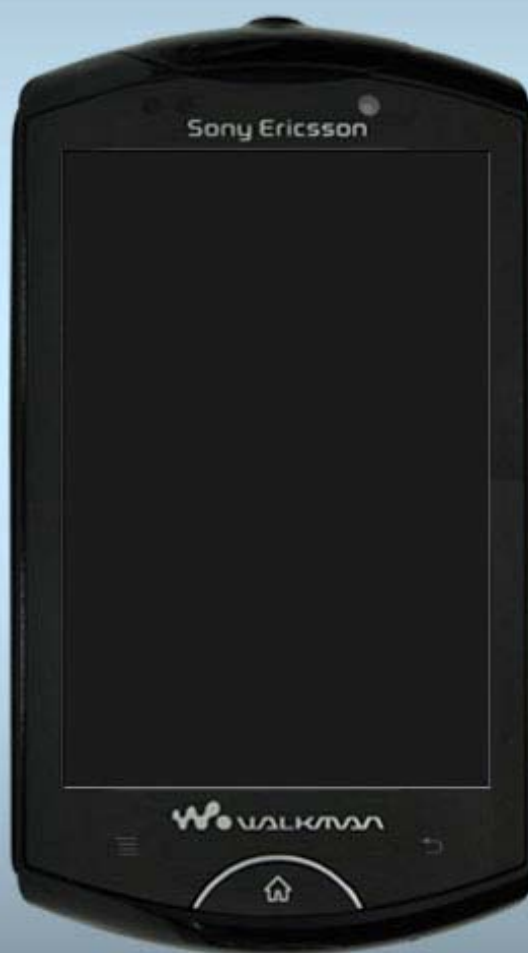




Sony Ericsson

Component Replacement

- electrical -



WT18i

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***For general information about electrical repair related issues, refer to
1220-1336: Generic Repair Manual - electrical***

1 Replaceable Components

EXPLANATION OF ABBREVIATIONS USED IN THE COLUMN 'COMMENTS' BELOW

COMPONENT LOCATION

P = Primary side

S = Secondary side

MOISTURE SENSITIVITY LEVEL

MSLX (X = 1, 2, 2A, 3, 4, 5, 5A or 6)

For more information on moisture sensitivity levels:

Refer to 1220-1336: Generic Repair Manual – electrical, section 'Moisture & Baking'!

REPAIR METHOD

HA = Hot Air (removal & mounting)

ST = Soldering Tool (removal & mounting)

HA/ST = Hot Air for removal - Soldering Tool for mounting

BGA = BGA Station

BH = Bottom Heater

ADDITIONAL INFORMATION

⇒1 (2,3,4, etc.) = Proceed to 'Additional Repair Info' for further instructions in the indicated section(s).

CALIBRATION

C = Calibration of the phone is required after replacing the component

Calibration to be done by authorized centers only!

Component Replacement Repair Drawing Electrical/WT18/

Position	Component	Part no.	Comments
ANT2101	Conn Pogopin Plug 1p	1244-5407	S HA ⇒ 7
ANT2102	Conn Pogopin Plug 1p	1244-5407	S HA ⇒ 13
ANT2103	Conn Pogopin Plug 1p	1244-5407	S HA ⇒ 13
ANT2201	CONN_Pogo Pin_2PIN_circle_5.5*2.5*2.5mm	MEMUL4D008A	S HA
ANT2301	Conn Pogopin 2p	1214-8705	S HA
ANT2401	Conn 0p	1218-0391	S HA ⇒ 13
CON1301	Conn MicroSD reader	1241-0946	S HA ⇒ 12
CON1302	Card Conn SIM	1248-1893	S HA ⇒ 11
CON1501	Conn FPC 9p	1248-1890	S HA ⇒ 8
CON1502	Conn FPC 51p	1248-1871	P HA
CON1601	Connector Micro USB	1242-6545	P HA
CON1801	Camera Socket	MEMUL4A003A	S HA
CON1901	Conn FPC 4p	1228-2783	S HA ⇒ 9
CON2101	CONN_RF_6PIN_2.5*2.5*1.4mm	SN081302060	S HA ⇒ 7
CON901	Connector Battery 5p	1232-1629	S HA ⇒ 1
D1101	Diode Schottky 30.0 V SOD-523	1247-9121	S HA
D901	Diode Schottky 30, V SC79	1202-9472	P HA
ESD1505	ESD_Multiplayer Chip Varistor (4 Bit Arr	SG103010110	P HA ⇒ 2
ESD1506	ESD_Multiplayer Chip Varistor (4 Bit Arr	SG103010110	P HA ⇒ 2
ESD1507	ESD_Multiplayer Chip Varistor (4 Bit Arr	SG103010110	P HA ⇒ 2
ESD1508	ESD_Multiplayer Chip Varistor (4 Bit Arr	SG103010110	P HA ⇒ 2
ESD1509	ESD_Multiplayer Chip Varistor (4 Bit Arr	SG103010110	P HA ⇒ 2
ESD1510	ESD_Multiplayer Chip Varistor (4 Bit Arr	SG103010110	P HA ⇒ 2
ESD1511	ESD_Multiplayer Chip Varistor (4 Bit Arr	SG103010110	P HA ⇒ 2
ESD1601	ESD_Multilayer Chip Varistor_30V_45pF	SG053045110	P HA ⇒ 4
ESD1604	ESD_EMI common filter_1.7pF_90Ω_6P_1210	SG2112900A0	P HA ⇒ 4
ESD1703	ESD_ESD Protect Diode_5V_1*0.37*0.6mm	1209-6023	S HA
ESD1705	ESD_2 Channel Headset Speaker EMI Filter	SG2MI201130	P HA ⇒ 5
ESD1709	ESD_2 Channel Headset Microphone EMI Fil	SG2MI202130	S HA
ESD1710	ESD_ESD Protect Diode_5V_1*0.37*0.6mm	1209-6023	P HA ⇒ 2
ESD1801	ESD_EMI_18V_1.6 *0.8* 0.5_7.5pF_10Ω_10P	SG2100FR110	S HA ⇒ 6
ESD1802	ESD_EMI_18V_1.6 *0.8* 0.5_7.5pF_10Ω_10P	SG2100FR110	S HA ⇒ 6
ESD1803	ESD_EMI_18V_1.6 *0.8* 0.5_7.5pF_10Ω_10P	SG2100FR110	S HA ⇒ 6
ESD703	ESD_2 Channel Headset Microphone EMI Fil	SG2MI202130	S HA ⇒ 6
ESD704	Diode 0.0 SOT883	1001-0054	P HA ⇒ 2
ESD705	Diode 0.0 SOT883	1001-0054	S HA ⇒ 3
ESD706	Diode 0.0 SOT883	1001-0054	P HA ⇒ 13, 14
L2304	IND_Coil_270nH_0402_110mA_4.94Ω_+/-5%	SI227H20151	P HA ⇒ 5
LED301	LED Red+Green 1.6x1.3x0.4	1237-3187	PHA/ST ⇒ 15
L901	IND_Coil_1.2uH_3*3_1.7A_0.065Ω_+/-30%	SI212GX09E3	P HA ⇒ 4
L902	IND_Coil_1.5uH_3*3_1.44A_0.075Ω_+/-30%	SI215GX09E3	P HA ⇒ 4
L903	IND_Coil_1.5uH_3*3_1.44A_0.075Ω_+/-30%	SI215GX09E3	P HA ⇒ 4
LED101	IC_Infrared LED_1.6V_3.2*1.6*1.1_2P_1206	SA0EC2160A0	P HA/ST
LED601	LED Amber h=0,4	1000-7561	S HA/ST ⇒ 10
LED602	LED Amber h=0,4	1000-7561	S HA/ST ⇒ 10
SP701	Conn 0p	1218-0391	S HA ⇒ 7
SP702	Conn 0p	1218-0391	S HA ⇒ 7
SP703	Conn 0p	1218-0391	S HA ⇒ 6
SP704	Conn 0p	1218-0391	S HA ⇒ 6
SW1901	CONN_Switch Sidekey_5PIN_2.9*3.5*1.35mm	MELHE4C001A	S HA/ST ⇒ 3
SW1903	CONN_Switch Sidekey_5PIN_2.9*3.5*1.35mm	MELHE4C001A	S HA/ST
SW1907	Side push switch	1000-7670	P HA/ST



Component Replacement Repair Drawing Electrical/WT18/

Position	Component	Part no.	Comments
MIC701	Microphone	1206-4070	P HA ⇒ 2
U101	IC_Proximity Sensor_2.8V_2.65*2*0.7_8P	SA0502AL0A0	P HA
U1402	MEMS Accelerometer 3 Axis Digital 10bit	1237-6046	P HA
U1403	MEMS Compass Analog	1228-7182	P HA ⇒ 2
U1501	IC_LED DRIVER_-0.3V~6V_3*4*0.75_24P	SA063MKT0A0	P HA ⇒ 5
U1601	IC Lin 2x2 SON	1204-3124	P HA ⇒ 4
U201	IC_LOW-POWER AND GATE_3V_1.5*1.05*0.6_6P	1252-2391	P HA
U2201	IC_GPS_1.8V_3.02*2.85*0.5_42P_WLBGA	SA051UBG010	P HA ⇒ 14
U2202	Filter SAW 1.575 GHz	1231-0570	P HA ⇒ 14
U2205	IC Vreg PLP1820-6	1206-0025	P HA ⇒ 14
U2207	IC_LOW-POWER AND GATE_3V_1.5*1.05*0.6_6P	1252-2391	P HA ⇒ 14
U2303	IC Vreg PLP1820-6	1206-0025	P HA ⇒ 5
U2304	IC Vreg PLP1820-6	1223-6466	P HA ⇒ 5
U2401	ASIC CMMB	SA022849010	P HA ⇒ 13
U2402	IC Vreg PLP1820-6	1206-0025	P HA ⇒ 13
U2403	IC Vreg DFN(PLP)1820-6 Low noise 300mA L	1248-4578	P HA ⇒ 13
U2404	Filter SAW SAW 897.5 MHz 1.35x1.05x0.60	1236-7839	P HA ⇒ 13
U702	IC Vreg PLP1010-4	1201-6460	P HA
U703	IC Amplifier 500mA	1203-4594	P HA
U704	IC Amplifier 500mA	1203-4594	P HA

2 Component Placing

To access the Component Placing document, double-click the icon below.
Applicable for on-screen viewing only – icon not shown on hard-copies.





3 Repair Actions

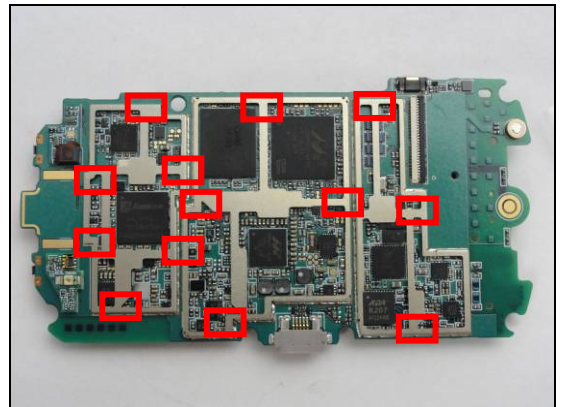
Refer to the Tools Catalogue/Matrix for information about equipment required for PBA repair!

3.1 Shield Can Fence Modifications

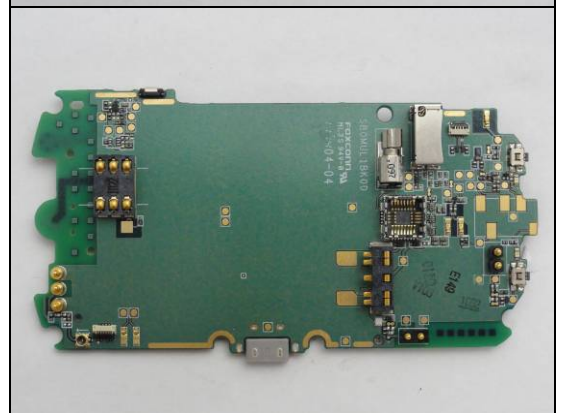
Refer to picture below of the primary side for repairs:

- The shielding cover has to be removed
- The red symbols show where the shielding frame should be cut to enable rework
- After rework the height of the frame should not be affected
- It should not be visible that rework has been carried out when the shielding cover has been mounted

Primary side



Secondary side



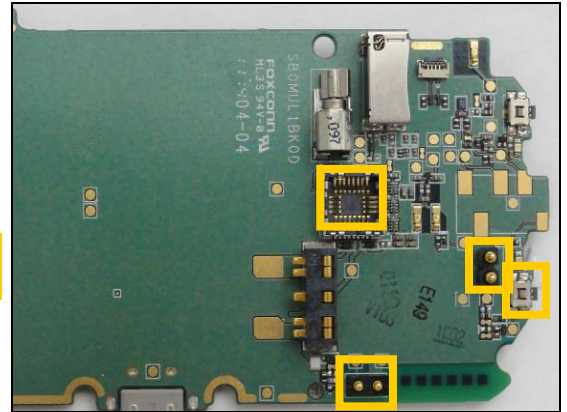
Repair Actions

3.2 Additional Repair Info

1

CON901

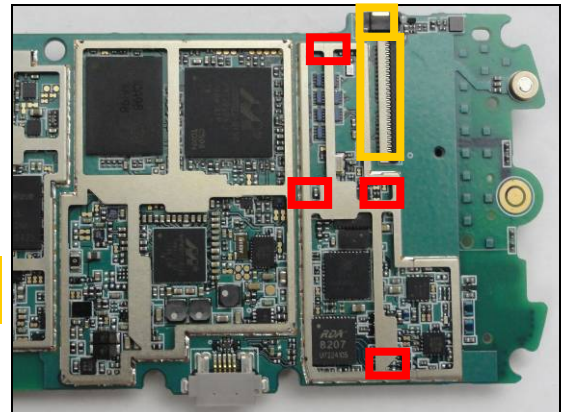
Protect the antenna connector, camera socket, and walkman-key with capton tap!



2

ESD1505/ ESD1506/ ESD1507/ ESD1508/ ESD1509/
ESD1510/ ESD1511/ ESD703/ ESD1710/ U1403 / ESD704/
MIC701

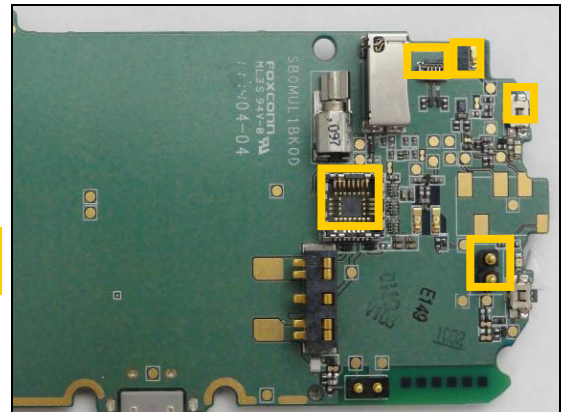
Protect the camera-key and LCM connector with capton tap!



3

SW1901/ ESD705

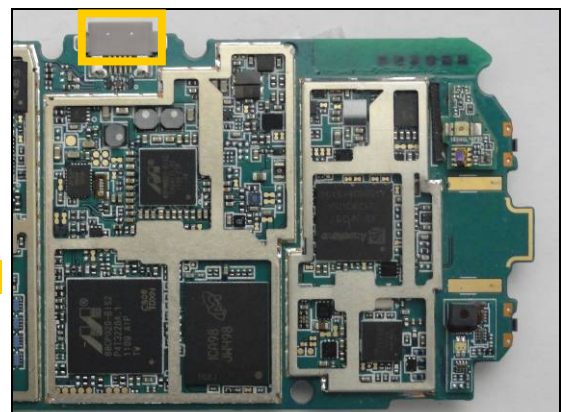
Protect volume-key connector, ring LED, antenna connector and camera socket with capton tap!



4

L901/ L902/ L903/ ESD1604/ U1601/ ESD1601

Protect USB connector with capton tap!

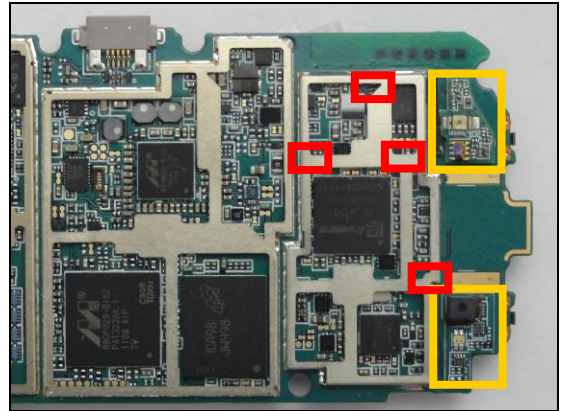


Repair Actions: Additional Repair Info

5

ESD1705/ U1501/ U2301/ U2303/ U2304/ L2304

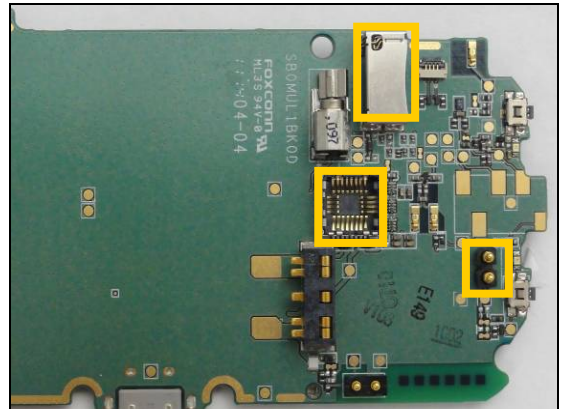
Protect two sub board with P/L sensor and VGA camera with capton tap!



6

SP703/SP704/ ESD1801/ ESD1802/ ESD1803

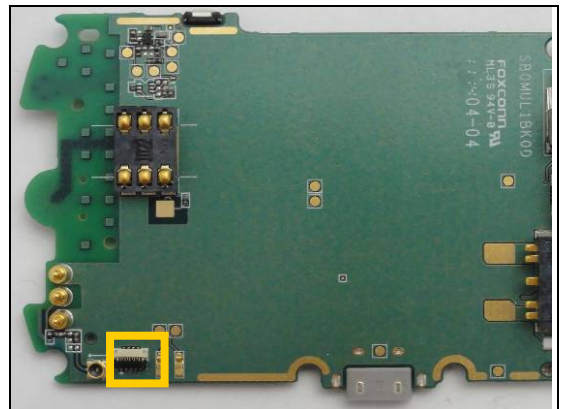
Protect antenna connector, Micro-SD card connector and camera socket with capton tap!



7

SP701/ SP702/ ANT2101/ ANT2102/ ANT2103/ CON2101

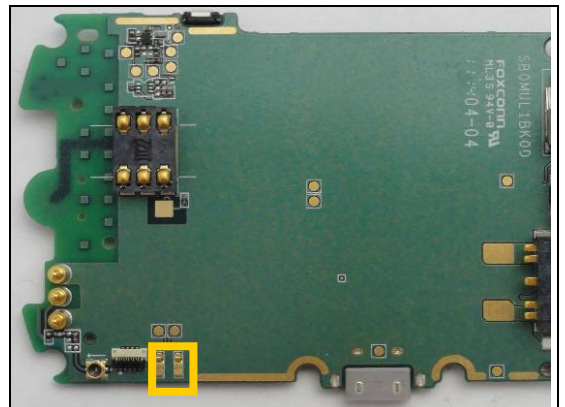
Protect touch panel connector with capton tap!



8

CON1501

Protect speaker spring with capton tap!

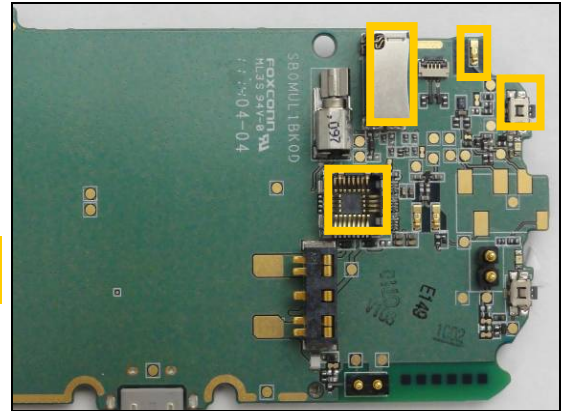


Repair Actions: Additional Repair Info

9

CON1901

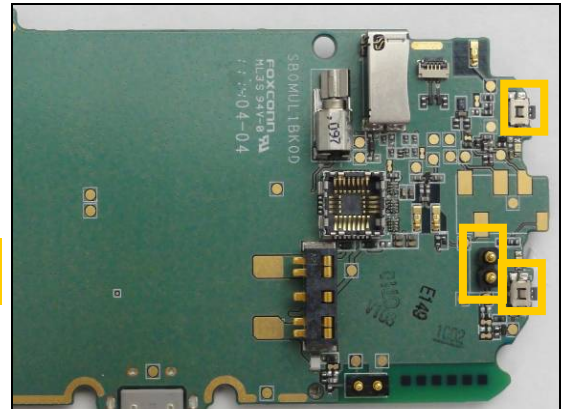
Protect antenna connector, Micro-SD card connector, camera socket and power-key with capton tap!



10

LED601/LED602

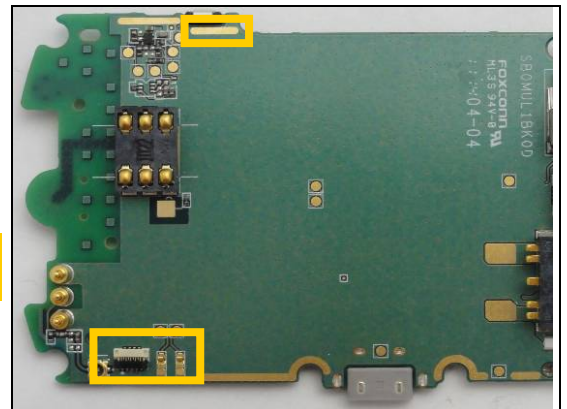
Protect power-key, walkman-key and antenna connector with capton tap!



11

CON1302

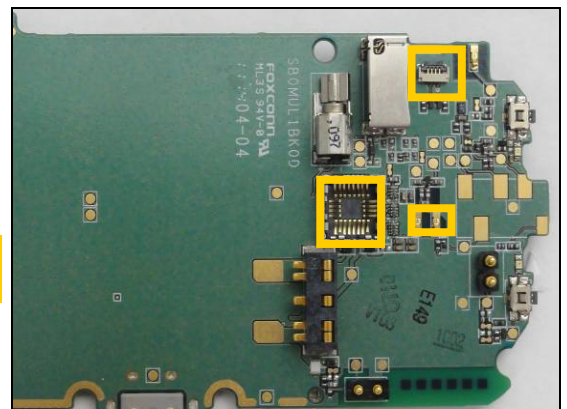
Protect camera-key, speaker spring and touch panel connector with capton tap!



12

CON1301

Protect volume-key connector, speaker spring and camera socket with capton tap!

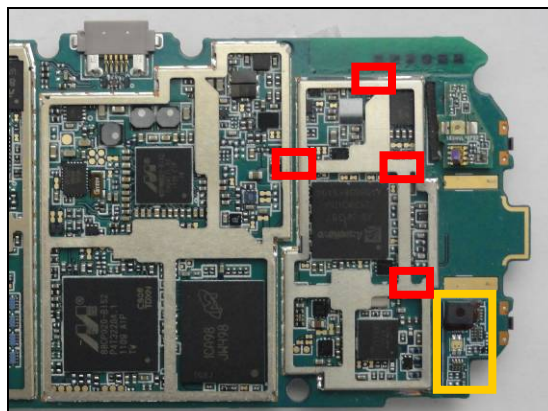


Repair Actions: Additional Repair Info

13

U2401/ U2402/ U2403/ U2404/ ANT2401 / ESD706

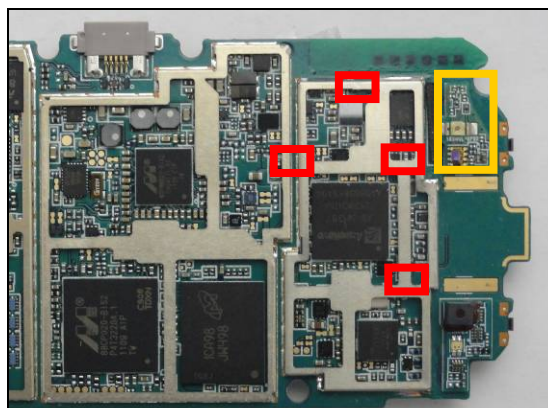
Protect VGA sub board with capton tap!



14

U2201/ U2202/ U2205/ U2207 / ESD706

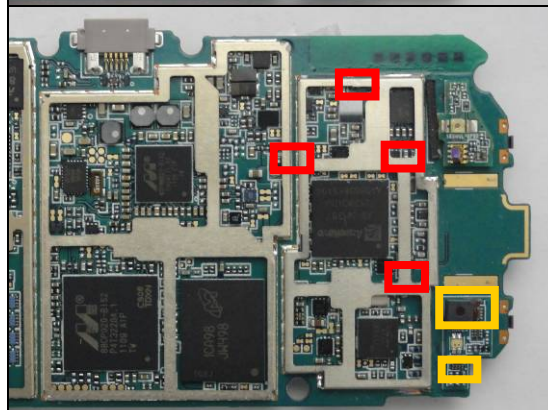
Protect sensor sub board with capton tap!



15

LED301

Protect VGA with capton tap!





4 Revision History

Rev.	Date	Changes / Comments
1	2011-07-04	Initial release
2	2011-08-30	Update 3 parts' description using +/- instead of \pm .
3	2011-09-05	Update ANT2201 P/N to FIH P/N.