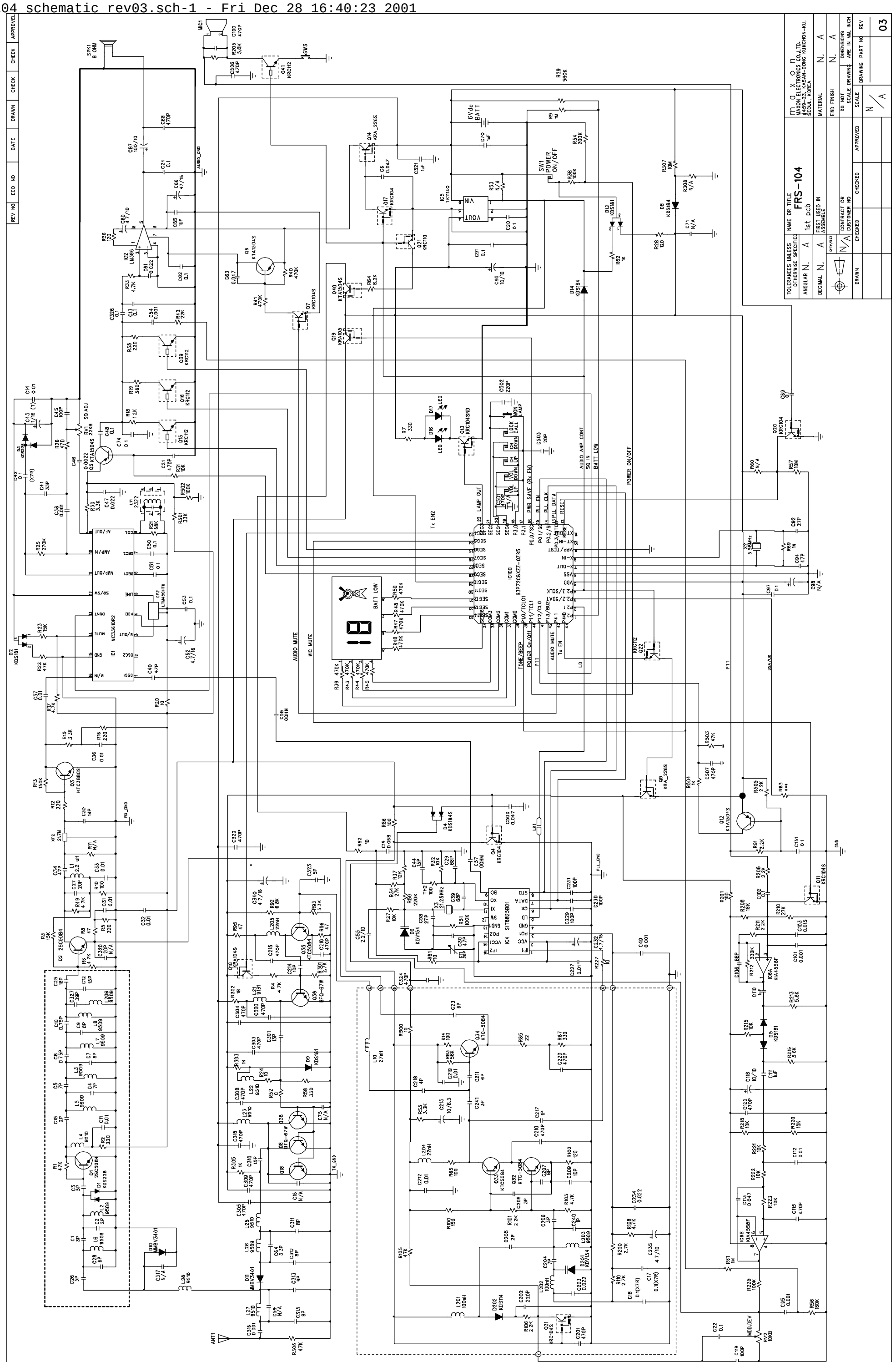
REV NO
ECO NO
DATE
DRAWN
CHECK
CHECK
APPROVEL
maxon
MAXON ELECTRONICS CO.,LTD.
#439-23 KASAN-DONG KUMCHON-KU,
SEOUL, KOREA
NAME OR TITLE
FRS-104
1st pcb
FIRST USED IN ASSEMBLE
CONTRACT OR CUSTOMER NO
MATERIAL
END FINISH
DO NOT SCALE DRAWING
DIMENSIONS ARE IN MM, INCH
SCALE
APPROVED
CHECKED
DRAWING PART NO
REV
03
TOLERANCES UNLESS OTHERWISE SPECIFIED
ANGULAR N. A
DECIMAL N. A
DRAWN
CHECKED
QTY/SET
N/A
SPK1 8 OHM
MIC1
SW3
Q41 KRC112
R203 5.6K
C100 470P
C506 470P
R29 560K
6Vdc BATT
SW1 POWER ON/OFF
R9 1M
R54 220K
R38 100K
R307 10M
R308 N/A
D8 KDS184
C71 N/A
D12 KDS181
R28 12D
R62 1K
D14 KDS184
C70 1uF
C321 1uF
C6 0.047
Q14 KRA_226S
Q17 KRC104
Q21 KRC110
IC5 TK11140
VIN
VOUT
R53 N/A
C20 0.1
C91 0.1
C90 10/10
Q40 KTA1504S
R64 8.2K
Q19 KRA105
R40 470K
Q7 KRC104S
Q6 KTA1504S
C63 0.047
R41 470K
C326 0.1
C13 0.1
C54 0.001
R42 22K
R33 4.7K
C61 0.022
C62 0.1
IC2 LM386
R36 10D
C60 47/10
C66 47/16
C85 1UF
C24 0.1
C67 100/10
C68 470P
AUDIO_GND
R35 22D
Q39 KRC112
R19 56D
Q16 KRC112
R18 1.2K
Q15 KRC112
C48 0.1
C74 0.1
Q5 KTA1504S
C21 470P
R31 10K
R502 100K
C46 0.0022
C14 0.01
C43 1/16 (1)
C45 100P
RV1 22KB
SQ ADJ
D3 KDS226
R26 470
C42 0.1 (X7R)
C41 33P
C38 0.001
R30 3.3K
C47 0.022
L11 2322
R21 68K
R501 33K
R25 270K
C50 0.1
C51 0.1
C53 0.1
C52 4.7/16
C40 47P
R20 10
R17 4.7K
C37 0.01
R23 15K
R22 47K
D2 KDS181
IC1 WC1361DR2
DF2 LTM450HTU
C15 0OHM
R15 3.3K
R16 220
C36 0.01
R13 150K
Q3 KTC3880S
R12 220
C35 14P
RX_GND
XF2 21.7M
R11 N/A
C34 47P
L1 2.2 uH
C33 0.01
C27 20P
R10 100
R49 4.7K
C31 0.01
R5 220
C32 0.01
R1 15K
Q2 2SC5084
R8 47
R6 4.7K
C320 20P N/A
C25 18P
C12 15P
C327 39P
L206 9509
C10 0.75P
C9 8P
L8 9509
C8 0.75P
C7 8P
L7 9509
C5 7P
C4 7P
L3 9509
C15 2P
L5 9509
C11 0.01
L4 9510
R2 220
Q1 2SC5084
R1 47K
C3 5P
D1 KDS226
L2 9509
C2 2P
C1 3P
L6 9509
C28 6P
C26 3P
D10 MMBV3401
C317 N/A
L26 9510
ANT1
C316 0.001
L27 9510
C59 N/A
C315 9P
D11 MMBV3401
C313 9P
L26 9509
C644 3.3P
C312 8P
L25 9510
C311 8P
C305 470P
R306 47K
C309 470P
C310 15P
R305 1K
Q18
Q38
Q8 BFQ-67W
C318 470P
L23 9510
R52 0
R58 330
C75 N/A
L22 9510
R24 10
C308 470P
R303 1K
D9 KDS181
C303 470P
C301 15P
L21 9131
R4 4.7K
Q36 BFQ-67W
C304 470P
C300 470P
R302 1B
C324 470P
C322 470P
C323 5P
C340 4.7/16
R92 6.8K
R93 3.3K
L205 22nH
R95 47
R96 47
C215 470P
C216 470P
C214 10P
R301 2.7K
D10 KRA104S
C324 470P
R82 10
R86 100
D4 KDS184
C19 0.0068
C44 15P
R32 10K
C29 68P
C57 0OHM
Q4 KRC104
LK1
C50 0.047
R37 12K
R34 27K
R59 220K
TH2 10D
X1 21.25MHz
C39 68P
C58 27P
R27 10K
R51 100K
D6 KDV154
C30 47P
R81 10
IC4 S1T8825B01
C55 2.2/10
C231 100P
C230 100P
C229 100P
C232 4.7/16
C49 0.001
C227 0.01
R227 10
C23 6P
R500 10
L10 27nH
R14 100
R83 56K
Q14 KTC-3084
R85 22
R87 330
C220 470P
C219 0.01
C211 6P
C218 4P
C241 3P
R55 3.3K
C213 10/6.3
C217 1P
C210 470P
L204 22nH
R65 100
Q33 KTC5084
Q32 KTC-5084
C207 6P
C209 10P
R102 120
C212 0.01
C208 3P
R103 4.7K
R100 150
R101 2.2K
C206 3P
C240 1P
C205 2P
L203 9509
R105 47K
C204 7P
D201 KDV154
L202 100nH
C203 0.022
L201 100nH
D202 KDS114
C202 220P
R106 2.2K
Q31 KRC104S
C201 470P
C22 0.1
C119 10DP
RV2 10KB
MOD_DEV
R56 180K
C95 0.001
C101 0.001
C103 0.015
R213 5.6K
R215 10K
D5 KDS181
R216 5.6K
C118 10/10
C111 1uF
C112 0.01
C115 470P
C113 0.047
R222 10K
R223 10K
R221 10K
C102 0.1
R210 27K
R211 2.2K
R208 18K
R206 2.2K
C110 1uF
R212 330K
R214 10K
IC6A KIA4558F
IC6B KIA4558F
R201 10K
C131 0.1
R91 2.2K
Q11 KRC104S
Q12 KTA1504S
R505 2.2K
R504 1K
C507 470P
R503 47K
R83 ***
Q9 KRA_226S
C502 220P
C503 20P
R7 330
D16 LED
D17 LED
Q13 KRC104SND
LOCK CALL
MON LAMP
CH DOWN
CH UP
VOL DOWN
VOL UP
R530 4700
R531 N/A
R60 N/A
R67 10M
C92 27P
X2 3.58MHz
R69 1M
C94 47P
C97 0.1
C98 N/A
Q20 KRC104
IC100 S3P72C8/XZZ-QZR5
R50 470K
R48 470K
R47 470K
R46 470K
R39 470K
R43 470K
R44 470K
R45 470K
BATT LOW
AUDIO MUTE
MIC MUTE
TONE/BEEP
POWER On/Off
PTT
Tx EN
LD
LAMP OUT
PWR SAVE (Rx EN)
PLL_EN
PLL_CLK
PLL_DATA
RESET
AUDIO AMP CONT
SQ IN
BATT LOW
POWER ON/OFF
USA/UK
Q22 KRC112
C69 0.1