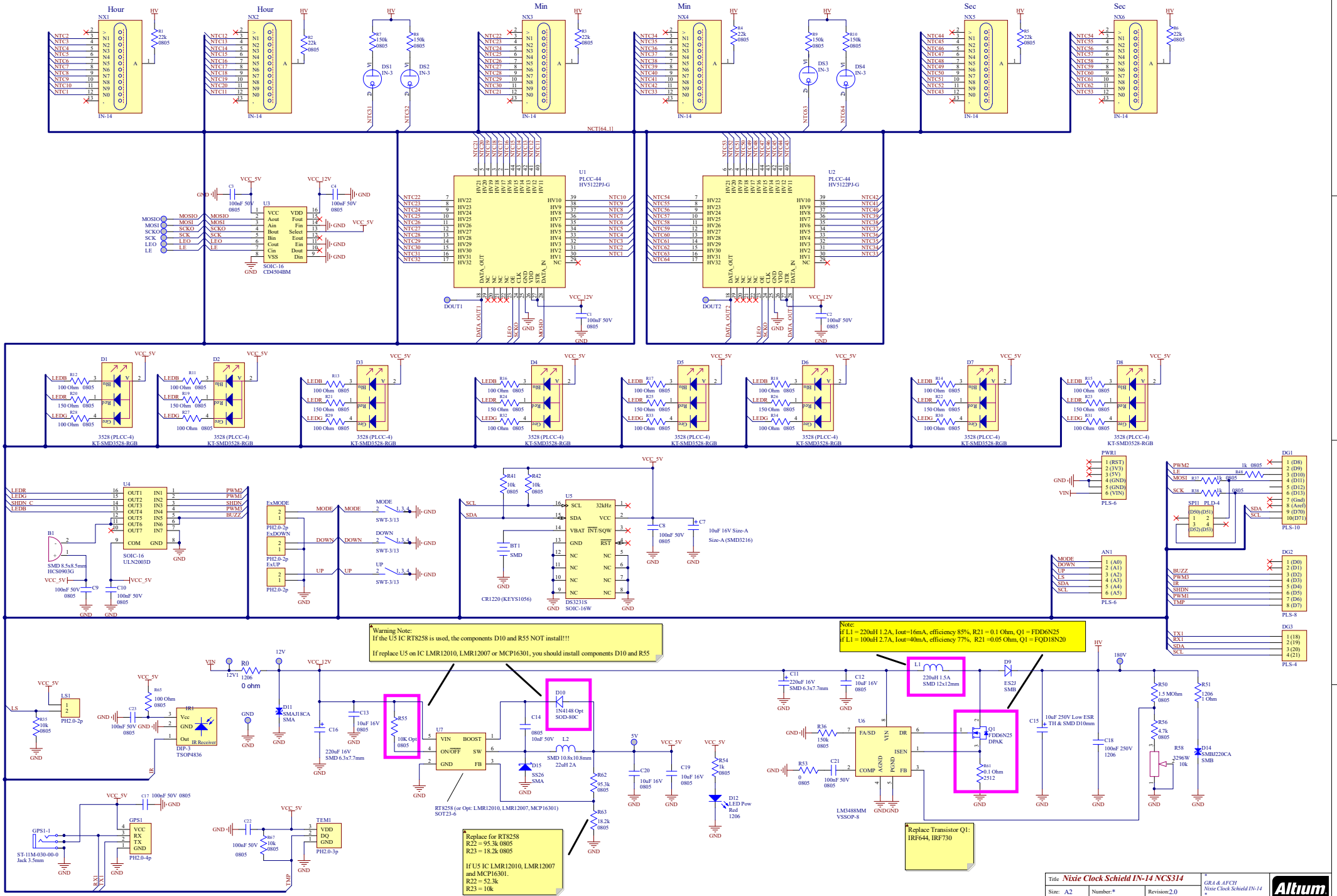
Hour
Hour
Min
Min
Sec
Sec
U1 PLCC-44 HV5122PJ-G
U2 PLCC-44 HV5122PJ-G
U3 SOIC-16 CD4504BM
U4 SOIC-16 ULN2003D
U5 DS3231S SOIC-16W
U7 RT8258 (or Opt: LMR12010, LMR12007, MCP16301) SOT23-6
U6 LM3488MM VSSOP-8
Warning Note:
If the U5 IC RT8258 is used, the components D10 and R55 NOT install!!!
If replace U5 on IC LMR12010, LMR12007 or MCP16301, you should install components D10 and R55
Note:
if L1 = 220uH 1.2A, Iout=16mA, efficiency 85%, R21 = 0.1 Ohm, Q1 = FDD6N25
if L1 = 100uH 2.7A, Iout=40mA, efficiency 77%, R21 =0.05 Ohm, Q1 = FQD18N20
Replace for RT8258
R22 = 95.3k 0805
R23 = 18.2k 0805
If U5 IC LMR12010, LMR12007 and MCP16301.
R22 = 52.3k
R23 = 10k
Replace Transistor Q1: IRF644, IRF730
Title Nixie Clock Schield IN-14 NCS314
Size: A2
Number:*
Revision:2.0
Date: 27.06.2017
Time: 16:34:17
Sheet* of *
File: D:\Dropbox\Project\Nixie_Clock\PCB_Nixie_Clock_Shield_NCS314_v2\Nixie_Clock_Shield.SchDoc
GRA & AFCH
Nixie Clock Schield IN-14
Grisha Anufriev
Altium