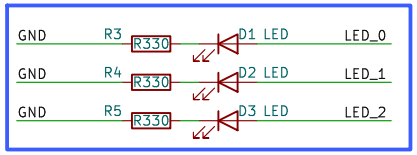
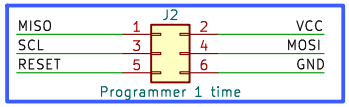
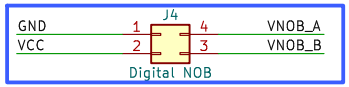
Output LEDs



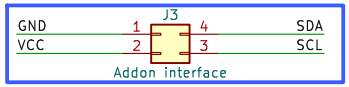
Programmer outputs



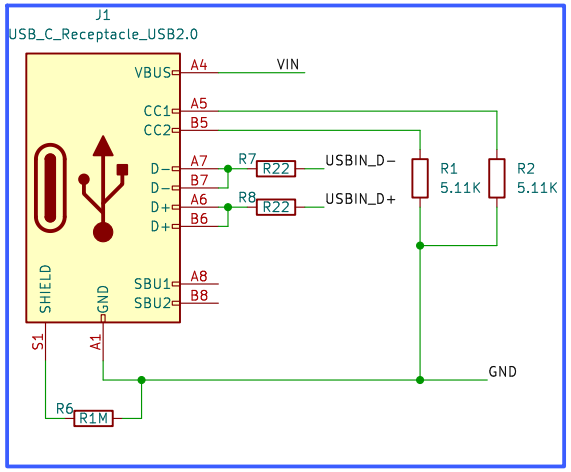
Nob IO

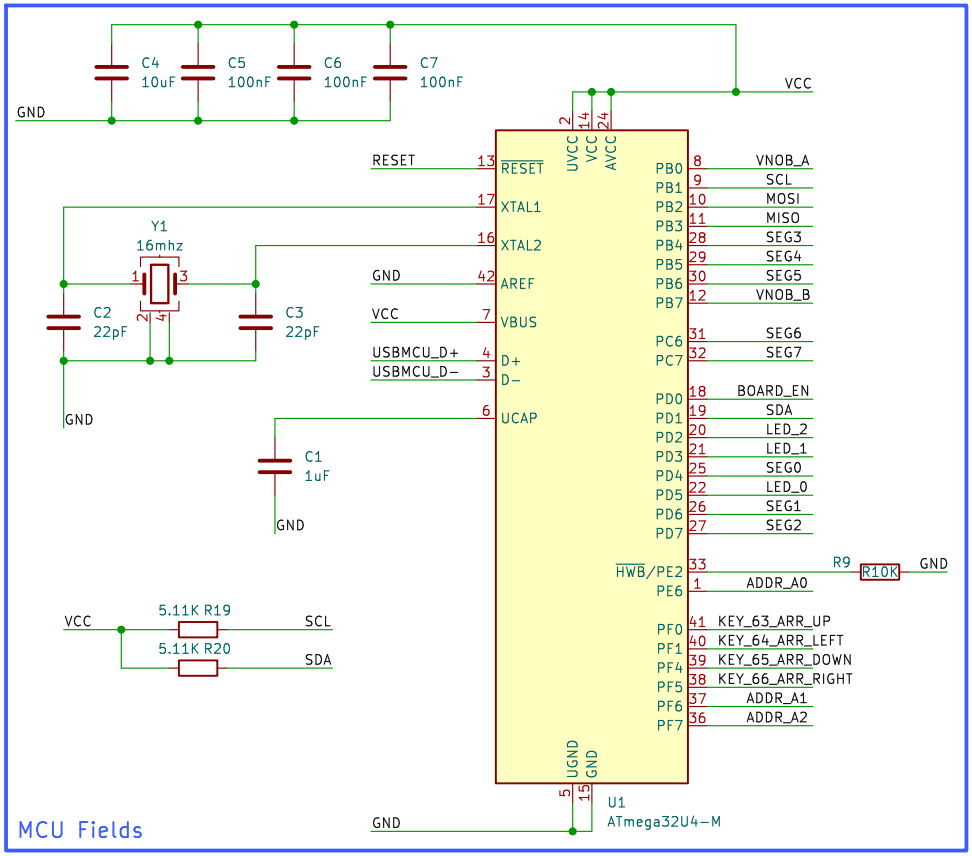


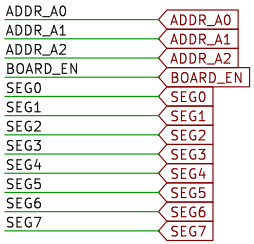
Addon IO

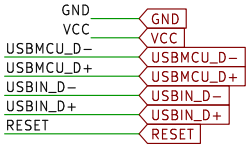


USB Power and signal fields









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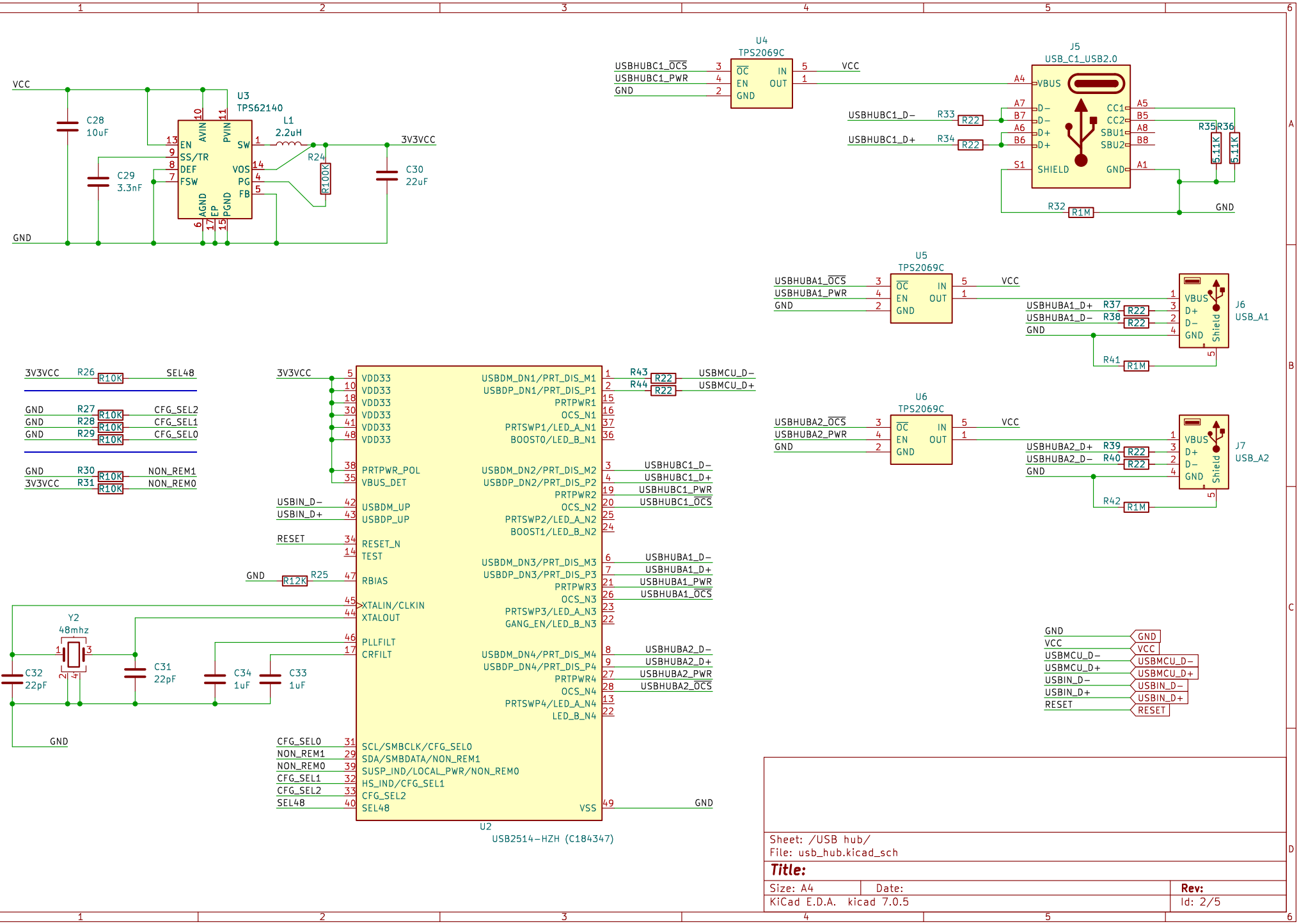
U3
TPS62140
C28
10uF
C29
3.3nF
L1
2.2uH
R24
R100K
C30
22uF
VCC
GND
3V3VCC
U4
TPS2069C
USBHUBC1_OCS
USBHUBC1_PWR
GND
VCC
J5
USB_C1_USB2.0
USBHUBC1_D−
USBHUBC1_D+
R33
R34
R22
R35
R36
5.11K
R32
R1M
U5
TPS2069C
USBHUBA1_OCS
USBHUBA1_PWR
J6
USB_A1
USBHUBA1_D+
USBHUBA1_D−
R37
R38
R41
U6
TPS2069C
USBHUBA2_OCS
USBHUBA2_PWR
J7
USB_A2
USBHUBA2_D+
USBHUBA2_D−
R39
R40
R42
3V3VCC
R26
SEL48
GND
R27
CFG_SEL2
R28
CFG_SEL1
R29
CFG_SEL0
R30
NON_REM1
R31
NON_REM0
R10K
USBIN_D−
USBIN_D+
RESET
R25
R12K
Y2
48mhz
C32
22pF
C31
22pF
C34
1uF
C33
1uF
U2
USB2514−HZH (C184347)
VDD33
PRTPWR_POL
VBUS_DET
USBDM_UP
USBDP_UP
RESET_N
TEST
RBIAS
XTALIN/CLKIN
XTALOUT
PLLFILT
CRFILT
USBDM_DN1/PRT_DIS_M1
USBDP_DN1/PRT_DIS_P1
PRTPWR1
OCS_N1
PRTSWP1/LED_A_N1
BOOST0/LED_B_N1
USBDM_DN2/PRT_DIS_M2
USBDP_DN2/PRT_DIS_P2
PRTPWR2
OCS_N2
PRTSWP2/LED_A_N2
BOOST1/LED_B_N2
USBDM_DN3/PRT_DIS_M3
USBDP_DN3/PRT_DIS_P3
PRTPWR3
OCS_N3
PRTSWP3/LED_A_N3
GANG_EN/LED_B_N3
USBDM_DN4/PRT_DIS_M4
USBDP_DN4/PRT_DIS_P4
PRTPWR4
OCS_N4
PRTSWP4/LED_A_N4
LED_B_N4
SCL/SMBCLK/CFG_SEL0
SDA/SMBDATA/NON_REM1
SUSP_IND/LOCAL_PWR/NON_REM0
HS_IND/CFG_SEL1
CFG_SEL2
SEL48
VSS
USBMCU_D−
USBMCU_D+
USBHUBC1_D−
USBHUBC1_D+
USBHUBC1_PWR
USBHUBC1_OCS
USBHUBA1_D−
USBHUBA1_D+
USBHUBA1_PWR
USBHUBA1_OCS
USBHUBA2_D−
USBHUBA2_D+
USBHUBA2_PWR
USBHUBA2_OCS
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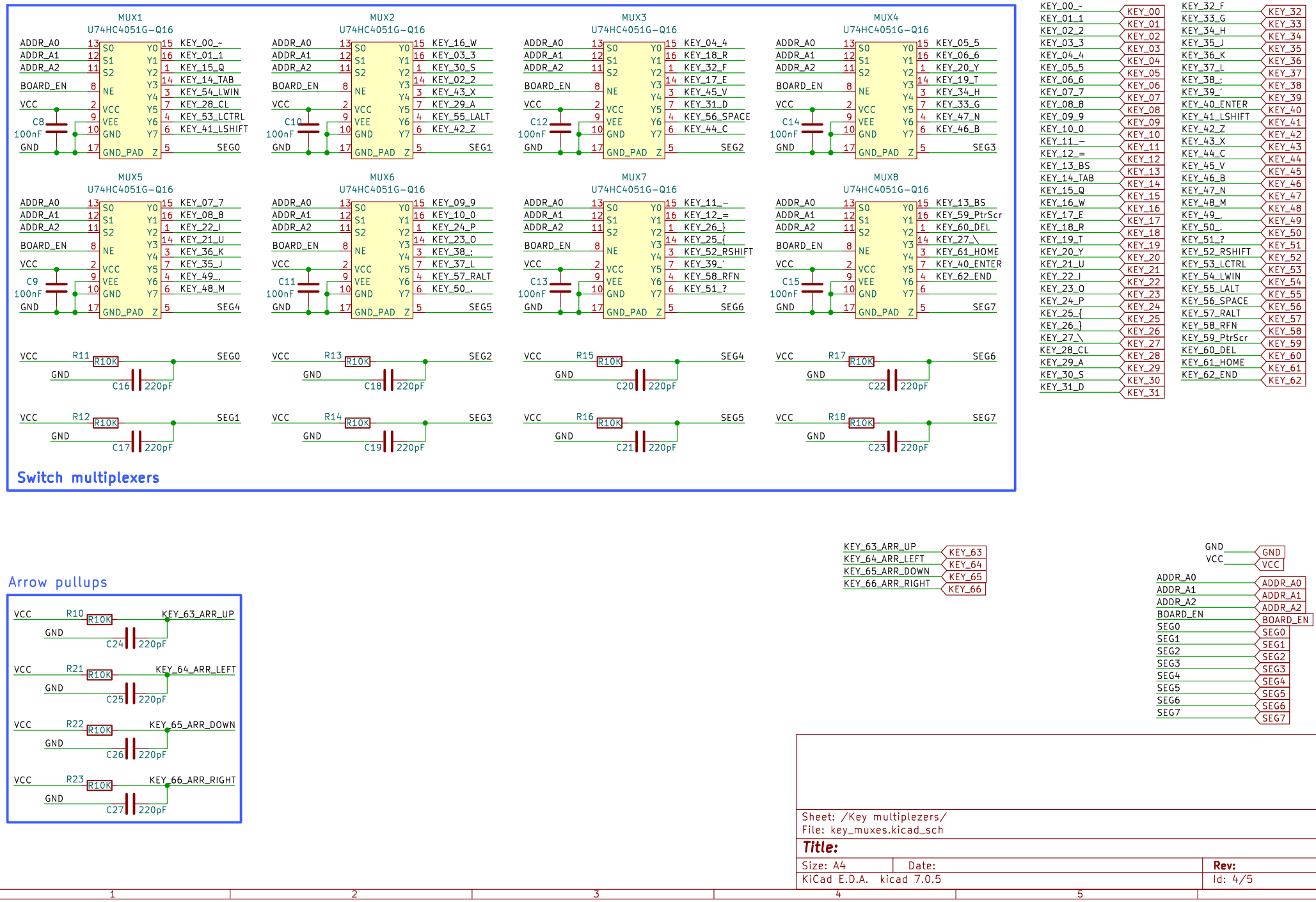
MUX1
U74HC4051G-Q16
ADDR_A0 13 S0 Y0 15 KEY_00_~
ADDR_A1 12 S1 Y1 16 KEY_01_1
ADDR_A2 11 S2 Y2 1 KEY_15_Q
BOARD_EN 8 NE Y3 14 KEY_14_TAB
Y4 3 KEY_54_LWIN
VCC 2 VCC Y5 7 KEY_28_CL
C8 9 VEE Y6 4 KEY_53_LCTRL
100nF 10 GND Y7 6 KEY_41_LSHIFT
GND 17 GND_PAD Z 5 SEG0
MUX2
U74HC4051G-Q16
ADDR_A0 13 S0 Y0 15 KEY_16_W
ADDR_A1 12 S1 Y1 16 KEY_03_3
ADDR_A2 11 S2 Y2 1 KEY_30_S
BOARD_EN 8 NE Y3 14 KEY_02_2
Y4 3 KEY_43_X
VCC 2 VCC Y5 7 KEY_29_A
C10 9 VEE Y6 4 KEY_55_LALT
100nF 10 GND Y7 6 KEY_42_Z
GND 17 GND_PAD Z 5 SEG1
MUX3
U74HC4051G-Q16
ADDR_A0 13 S0 Y0 15 KEY_04_4
ADDR_A1 12 S1 Y1 16 KEY_18_R
ADDR_A2 11 S2 Y2 1 KEY_32_F
BOARD_EN 8 NE Y3 14 KEY_17_E
Y4 3 KEY_45_V
VCC 2 VCC Y5 7 KEY_31_D
C12 9 VEE Y6 4 KEY_56_SPACE
100nF 10 GND Y7 6 KEY_44_C
GND 17 GND_PAD Z 5 SEG2
MUX4
U74HC4051G-Q16
ADDR_A0 13 S0 Y0 15 KEY_05_5
ADDR_A1 12 S1 Y1 16 KEY_06_6
ADDR_A2 11 S2 Y2 1 KEY_20_Y
BOARD_EN 8 NE Y3 14 KEY_19_T
Y4 3 KEY_34_H
VCC 2 VCC Y5 7 KEY_33_G
C14 9 VEE Y6 4 KEY_47_N
100nF 10 GND Y7 6 KEY_46_B
GND 17 GND_PAD Z 5 SEG3
MUX5
U74HC4051G-Q16
ADDR_A0 13 S0 Y0 15 KEY_07_7
ADDR_A1 12 S1 Y1 16 KEY_08_8
ADDR_A2 11 S2 Y2 1 KEY_22_I
BOARD_EN 8 NE Y3 14 KEY_21_U
Y4 3 KEY_36_K
VCC 2 VCC Y5 7 KEY_35_J
C9 9 VEE Y6 4 KEY_49_,
100nF 10 GND Y7 6 KEY_48_M
GND 17 GND_PAD Z 5 SEG4
MUX6
U74HC4051G-Q16
ADDR_A0 13 S0 Y0 15 KEY_09_9
ADDR_A1 12 S1 Y1 16 KEY_10_0
ADDR_A2 11 S2 Y2 1 KEY_24_P
BOARD_EN 8 NE Y3 14 KEY_23_O
Y4 3 KEY_38_;
VCC 2 VCC Y5 7 KEY_37_L
C11 9 VEE Y6 4 KEY_57_RALT
100nF 10 GND Y7 6 KEY_50_.
GND 17 GND_PAD Z 5 SEG5
MUX7
U74HC4051G-Q16
ADDR_A0 13 S0 Y0 15 KEY_11_-
ADDR_A1 12 S1 Y1 16 KEY_12_=
ADDR_A2 11 S2 Y2 1 KEY_26_}
BOARD_EN 8 NE Y3 14 KEY_25_{
Y4 3 KEY_52_RSHIFT
VCC 2 VCC Y5 7 KEY_39_'
C13 9 VEE Y6 4 KEY_58_RFN
100nF 10 GND Y7 6 KEY_51_?
GND 17 GND_PAD Z 5 SEG6
MUX8
U74HC4051G-Q16
ADDR_A0 13 S0 Y0 15 KEY_13_BS
ADDR_A1 12 S1 Y1 16 KEY_59_PtrScr
ADDR_A2 11 S2 Y2 1 KEY_60_DEL
BOARD_EN 8 NE Y3 14 KEY_27_\
Y4 3 KEY_61_HOME
VCC 2 VCC Y5 7 KEY_40_ENTER
C15 9 VEE Y6 4 KEY_62_END
100nF 10 GND Y7 6
GND 17 GND_PAD Z 5 SEG7
VCC R11 R10K SEG0
GND C16 220pF
VCC R13 R10K SEG2
GND C18 220pF
VCC R15 R10K SEG4
GND C20 220pF
VCC R17 R10K SEG6
GND C22 220pF
VCC R12 R10K SEG1
GND C17 220pF
VCC R14 R10K SEG3
GND C19 220pF
VCC R16 R10K SEG5
GND C21 220pF
VCC R18 R10K SEG7
GND C23 220pF
Switch multiplexers
KEY_00_~ KEY_00
KEY_01_1 KEY_01
KEY_02_2 KEY_02
KEY_03_3 KEY_03
KEY_04_4 KEY_04
KEY_05_5 KEY_05
KEY_06_6 KEY_06
KEY_07_7 KEY_07
KEY_08_8 KEY_08
KEY_09_9 KEY_09
KEY_10_0 KEY_10
KEY_11_- KEY_11
KEY_12_= KEY_12
KEY_13_BS KEY_13
KEY_14_TAB KEY_14
KEY_15_Q KEY_15
KEY_16_W KEY_16
KEY_17_E KEY_17
KEY_18_R KEY_18
KEY_19_T KEY_19
KEY_20_Y KEY_20
KEY_21_U KEY_21
KEY_22_I KEY_22
KEY_23_O KEY_23
KEY_24_P KEY_24
KEY_25_{ KEY_25
KEY_26_} KEY_26
KEY_27_\ KEY_27
KEY_28_CL KEY_28
KEY_29_A KEY_29
KEY_30_S KEY_30
KEY_31_D KEY_31
KEY_32_F KEY_32
KEY_33_G KEY_33
KEY_34_H KEY_34
KEY_35_J KEY_35
KEY_36_K KEY_36
KEY_37_L KEY_37
KEY_38_; KEY_38
KEY_39_' KEY_39
KEY_40_ENTER KEY_40
KEY_41_LSHIFT KEY_41
KEY_42_Z KEY_42
KEY_43_X KEY_43
KEY_44_C KEY_44
KEY_45_V KEY_45
KEY_46_B KEY_46
KEY_47_N KEY_47
KEY_48_M KEY_48
KEY_49_, KEY_49
KEY_50_. KEY_50
KEY_51_? KEY_51
KEY_52_RSHIFT KEY_52
KEY_53_LCTRL KEY_53
KEY_54_LWIN KEY_54
KEY_55_LALT KEY_55
KEY_56_SPACE KEY_56
KEY_57_RALT KEY_57
KEY_58_RFN KEY_58
KEY_59_PtrScr KEY_59
KEY_60_DEL KEY_60
KEY_61_HOME KEY_61
KEY_62_END KEY_62
Arrow pullups
VCC R10 R10K KEY_63_ARR_UP
GND C24 220pF
VCC R21 R10K KEY_64_ARR_LEFT
GND C25 220pF
VCC R22 R10K KEY_65_ARR_DOWN
GND C26 220pF
VCC R23 R10K KEY_66_ARR_RIGHT
GND C27 220pF
KEY_63_ARR_UP KEY_63
KEY_64_ARR_LEFT KEY_64
KEY_65_ARR_DOWN KEY_65
KEY_66_ARR_RIGHT KEY_66
GND GND
VCC VCC
ADDR_A0 ADDR_A0
ADDR_A1 ADDR_A1
ADDR_A2 ADDR_A2
BOARD_EN BOARD_EN
SEG0 SEG0
SEG1 SEG1
SEG2 SEG2
SEG3 SEG3
SEG4 SEG4
SEG5 SEG5
SEG6 SEG6
SEG7 SEG7
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Size: A4
Date:
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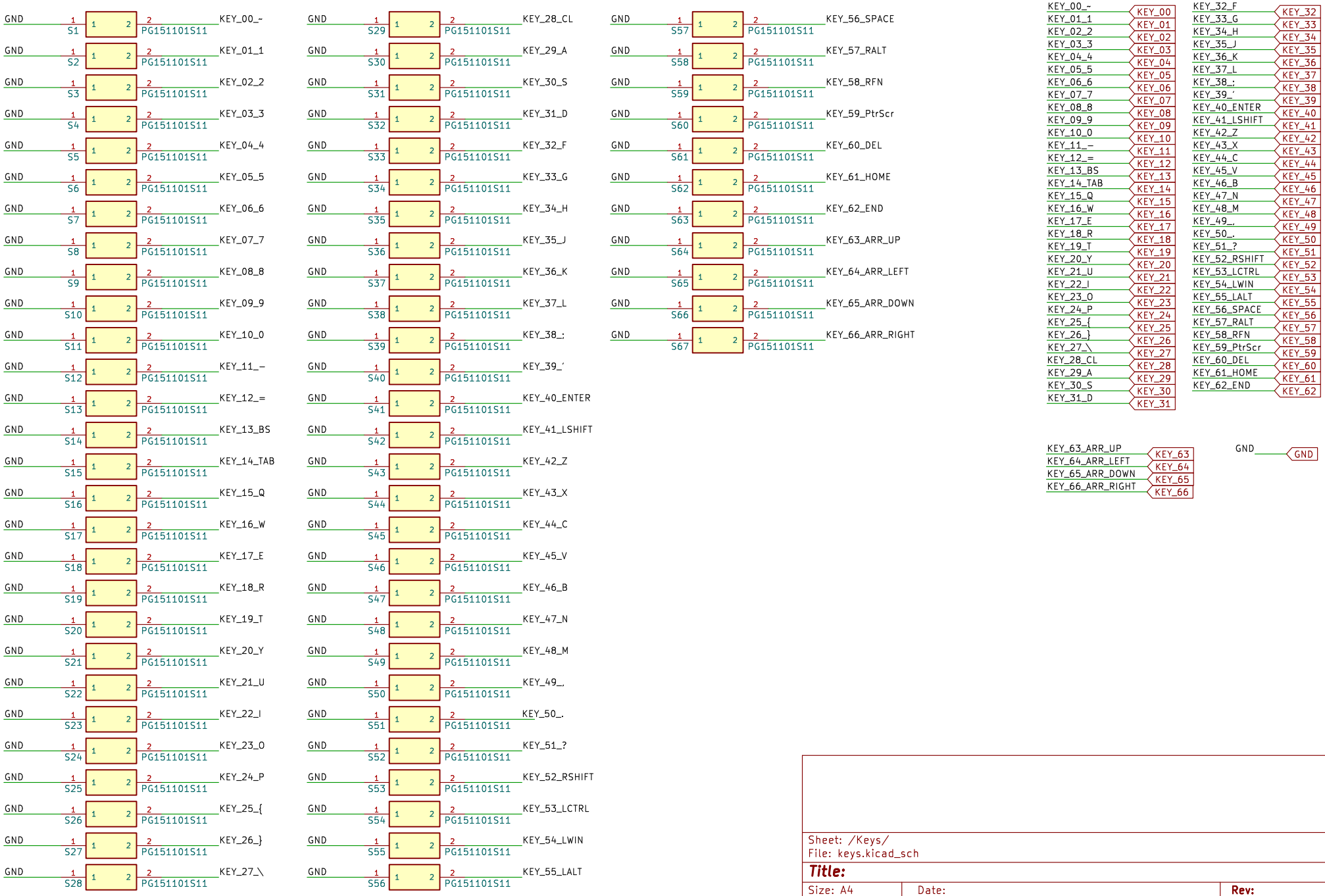
GND 1 S1 1 2 2 PG151101S11 KEY_00_~
GND 1 S2 1 2 2 PG151101S11 KEY_01_1
GND 1 S3 1 2 2 PG151101S11 KEY_02_2
GND 1 S4 1 2 2 PG151101S11 KEY_03_3
GND 1 S5 1 2 2 PG151101S11 KEY_04_4
GND 1 S6 1 2 2 PG151101S11 KEY_05_5
GND 1 S7 1 2 2 PG151101S11 KEY_06_6
GND 1 S8 1 2 2 PG151101S11 KEY_07_7
GND 1 S9 1 2 2 PG151101S11 KEY_08_8
GND 1 S10 1 2 2 PG151101S11 KEY_09_9
GND 1 S11 1 2 2 PG151101S11 KEY_10_0
GND 1 S12 1 2 2 PG151101S11 KEY_11_-
GND 1 S13 1 2 2 PG151101S11 KEY_12_=
GND 1 S14 1 2 2 PG151101S11 KEY_13_BS
GND 1 S15 1 2 2 PG151101S11 KEY_14_TAB
GND 1 S16 1 2 2 PG151101S11 KEY_15_Q
GND 1 S17 1 2 2 PG151101S11 KEY_16_W
GND 1 S18 1 2 2 PG151101S11 KEY_17_E
GND 1 S19 1 2 2 PG151101S11 KEY_18_R
GND 1 S20 1 2 2 PG151101S11 KEY_19_T
GND 1 S21 1 2 2 PG151101S11 KEY_20_Y
GND 1 S22 1 2 2 PG151101S11 KEY_21_U
GND 1 S23 1 2 2 PG151101S11 KEY_22_I
GND 1 S24 1 2 2 PG151101S11 KEY_23_O
GND 1 S25 1 2 2 PG151101S11 KEY_24_P
GND 1 S26 1 2 2 PG151101S11 KEY_25_{
GND 1 S27 1 2 2 PG151101S11 KEY_26_}
GND 1 S28 1 2 2 PG151101S11 KEY_27_\
GND 1 S29 1 2 2 PG151101S11 KEY_28_CL
GND 1 S30 1 2 2 PG151101S11 KEY_29_A
GND 1 S31 1 2 2 PG151101S11 KEY_30_S
GND 1 S32 1 2 2 PG151101S11 KEY_31_D
GND 1 S33 1 2 2 PG151101S11 KEY_32_F
GND 1 S34 1 2 2 PG151101S11 KEY_33_G
GND 1 S35 1 2 2 PG151101S11 KEY_34_H
GND 1 S36 1 2 2 PG151101S11 KEY_35_J
GND 1 S37 1 2 2 PG151101S11 KEY_36_K
GND 1 S38 1 2 2 PG151101S11 KEY_37_L
GND 1 S39 1 2 2 PG151101S11 KEY_38_:
GND 1 S40 1 2 2 PG151101S11 KEY_39_'
GND 1 S41 1 2 2 PG151101S11 KEY_40_ENTER
GND 1 S42 1 2 2 PG151101S11 KEY_41_LSHIFT
GND 1 S43 1 2 2 PG151101S11 KEY_42_Z
GND 1 S44 1 2 2 PG151101S11 KEY_43_X
GND 1 S45 1 2 2 PG151101S11 KEY_44_C
GND 1 S46 1 2 2 PG151101S11 KEY_45_V
GND 1 S47 1 2 2 PG151101S11 KEY_46_B
GND 1 S48 1 2 2 PG151101S11 KEY_47_N
GND 1 S49 1 2 2 PG151101S11 KEY_48_M
GND 1 S50 1 2 2 PG151101S11 KEY_49_,
GND 1 S51 1 2 2 PG151101S11 KEY_50_.
GND 1 S52 1 2 2 PG151101S11 KEY_51_?
GND 1 S53 1 2 2 PG151101S11 KEY_52_RSHIFT
GND 1 S54 1 2 2 PG151101S11 KEY_53_LCTRL
GND 1 S55 1 2 2 PG151101S11 KEY_54_LWIN
GND 1 S56 1 2 2 PG151101S11 KEY_55_LALT
GND 1 S57 1 2 2 PG151101S11 KEY_56_SPACE
GND 1 S58 1 2 2 PG151101S11 KEY_57_RALT
GND 1 S59 1 2 2 PG151101S11 KEY_58_RFN
GND 1 S60 1 2 2 PG151101S11 KEY_59_PtrScr
GND 1 S61 1 2 2 PG151101S11 KEY_60_DEL
GND 1 S62 1 2 2 PG151101S11 KEY_61_HOME
GND 1 S63 1 2 2 PG151101S11 KEY_62_END
GND 1 S64 1 2 2 PG151101S11 KEY_63_ARR_UP
GND 1 S65 1 2 2 PG151101S11 KEY_64_ARR_LEFT
GND 1 S66 1 2 2 PG151101S11 KEY_65_ARR_DOWN
GND 1 S67 1 2 2 PG151101S11 KEY_66_ARR_RIGHT
KEY_00_~ KEY_00
KEY_01_1 KEY_01
KEY_02_2 KEY_02
KEY_03_3 KEY_03
KEY_04_4 KEY_04
KEY_05_5 KEY_05
KEY_06_6 KEY_06
KEY_07_7 KEY_07
KEY_08_8 KEY_08
KEY_09_9 KEY_09
KEY_10_0 KEY_10
KEY_11_- KEY_11
KEY_12_= KEY_12
KEY_13_BS KEY_13
KEY_14_TAB KEY_14
KEY_15_Q KEY_15
KEY_16_W KEY_16
KEY_17_E KEY_17
KEY_18_R KEY_18
KEY_19_T KEY_19
KEY_20_Y KEY_20
KEY_21_U KEY_21
KEY_22_I KEY_22
KEY_23_O KEY_23
KEY_24_P KEY_24
KEY_25_{ KEY_25
KEY_26_} KEY_26
KEY_27_\ KEY_27
KEY_28_CL KEY_28
KEY_29_A KEY_29
KEY_30_S KEY_30
KEY_31_D KEY_31
KEY_32_F KEY_32
KEY_33_G KEY_33
KEY_34_H KEY_34
KEY_35_J KEY_35
KEY_36_K KEY_36
KEY_37_L KEY_37
KEY_38_: KEY_38
KEY_39_' KEY_39
KEY_40_ENTER KEY_40
KEY_41_LSHIFT KEY_41
KEY_42_Z KEY_42
KEY_43_X KEY_43
KEY_44_C KEY_44
KEY_45_V KEY_45
KEY_46_B KEY_46
KEY_47_N KEY_47
KEY_48_M KEY_48
KEY_49_, KEY_49
KEY_50_. KEY_50
KEY_51_? KEY_51
KEY_52_RSHIFT KEY_52
KEY_53_LCTRL KEY_53
KEY_54_LWIN KEY_54
KEY_55_LALT KEY_55
KEY_56_SPACE KEY_56
KEY_57_RALT KEY_57
KEY_58_RFN KEY_58
KEY_59_PtrScr KEY_59
KEY_60_DEL KEY_60
KEY_61_HOME KEY_61
KEY_62_END KEY_62
KEY_63_ARR_UP KEY_63
KEY_64_ARR_LEFT KEY_64
KEY_65_ARR_DOWN KEY_65
KEY_66_ARR_RIGHT KEY_66
GND GND
Sheet: /Keys/
File: keys.kicad_sch
Title:
Size: A4
Date:
Rev:
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