Power

File: mainboard__power.kicad_sch

Level Shifter / I2C

File: mainboard__level_shifter.kicad_sch

Z-Turn-Lite

File: mainboard__z_turn_lite.kicad_sch

AR0330

File: mainboard__ar0330.kicad_sch

Plugins / PMOD

File: mainboard__plugins.kicad_sch

AR1335

File: mainboard__ar1335.kicad_sch

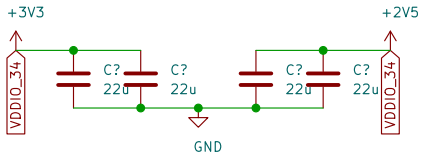
Apertus

Sheet: /
File: mainboard.kicad_sch

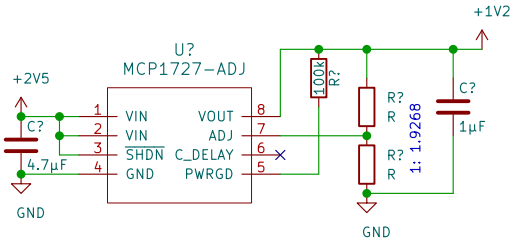
Title: AXIOM micro main board

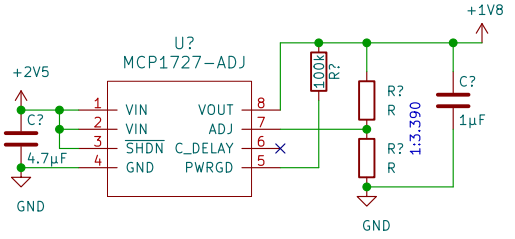
Size: A4	Date: 2021-01-18	**Rev: 2.1**
KiCad E.D.A. kicad (5.99.0-8453-g50e22de3ba)		Id: 1/7

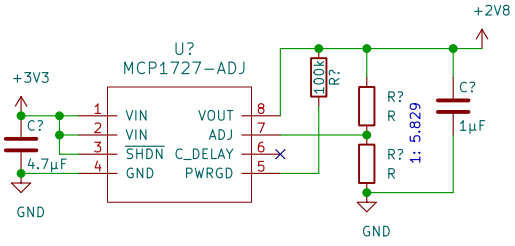
The Z-Turn Lite has generously sized DC/DC converters
(3A) for the vccio voltages. So we use them for almost everything

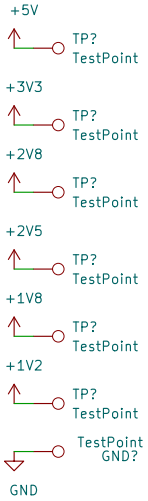


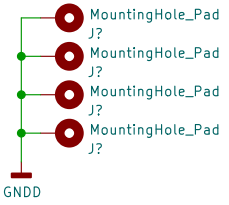
TODO: decide on resistor values









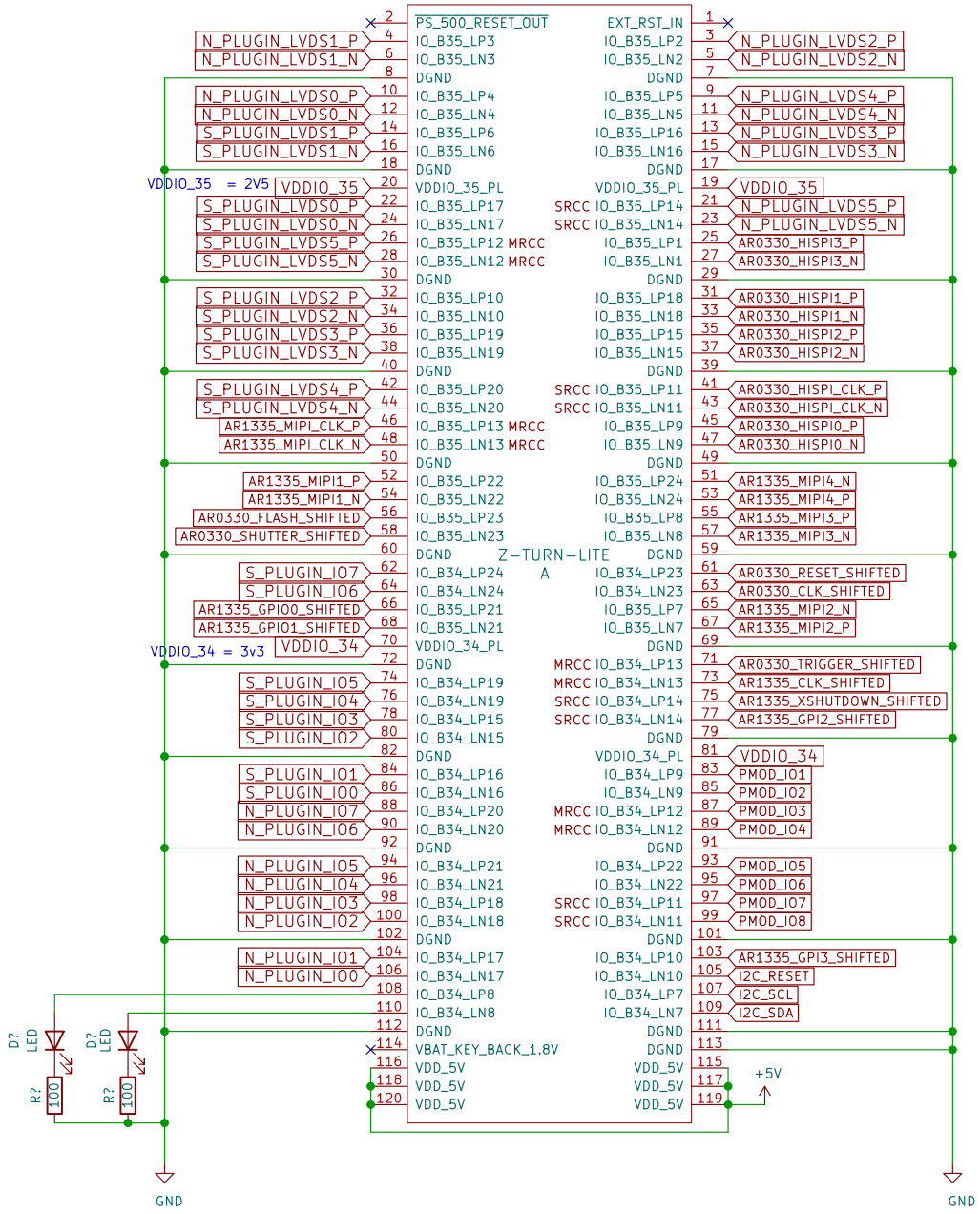


Apertus

Sheet: /Power/
File: mainboard__power.kicad_sch

Title: AXIOM Micro r2.1

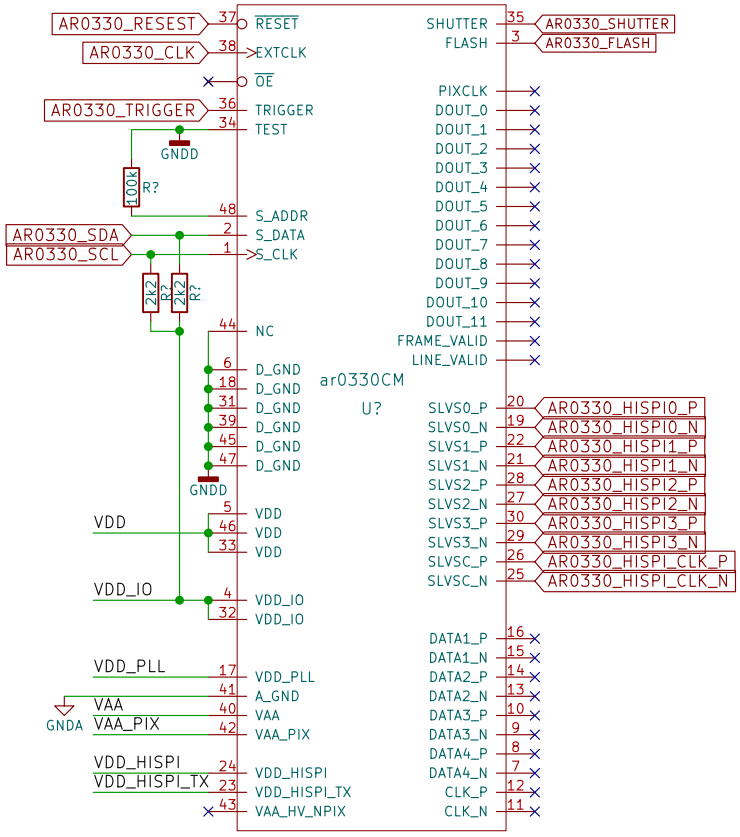
Size: A4	Date: 2021-01-18	**Rev: 2.1**
KiCad E.D.A. kicad (5.99.0-8453-g50e22de3ba)		Id: 2/7

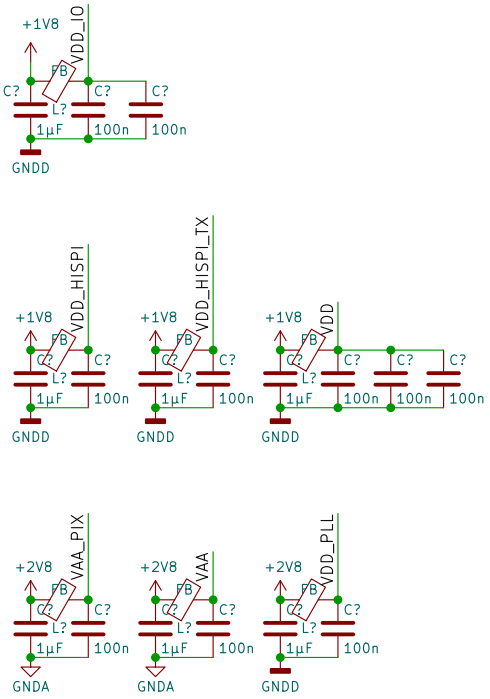


Sheet: / Z-Turn-Lite/
File: mainboard__z_turn_lite.kicad_sch

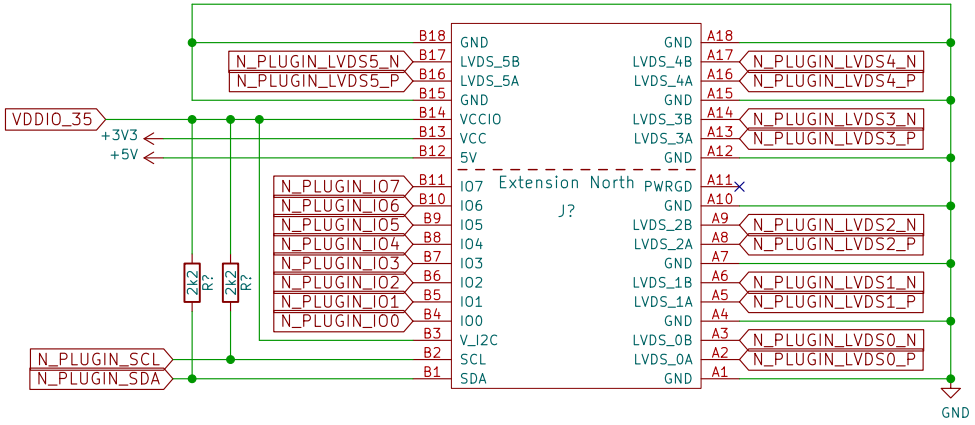
Title:

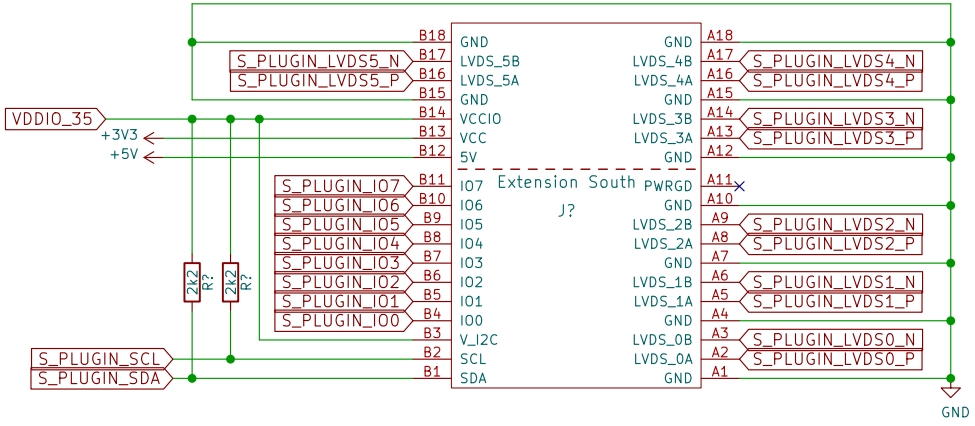
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (5.99.0-8453-g50e22de3ba)		Id: 3/7

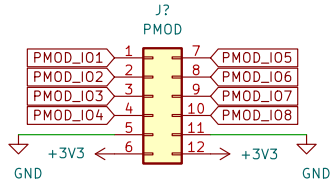




Sheet: /AR0330/		
File: mainboard__ar0330.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (5.99.0-8453-g50e22de3ba)		Id: 4/7



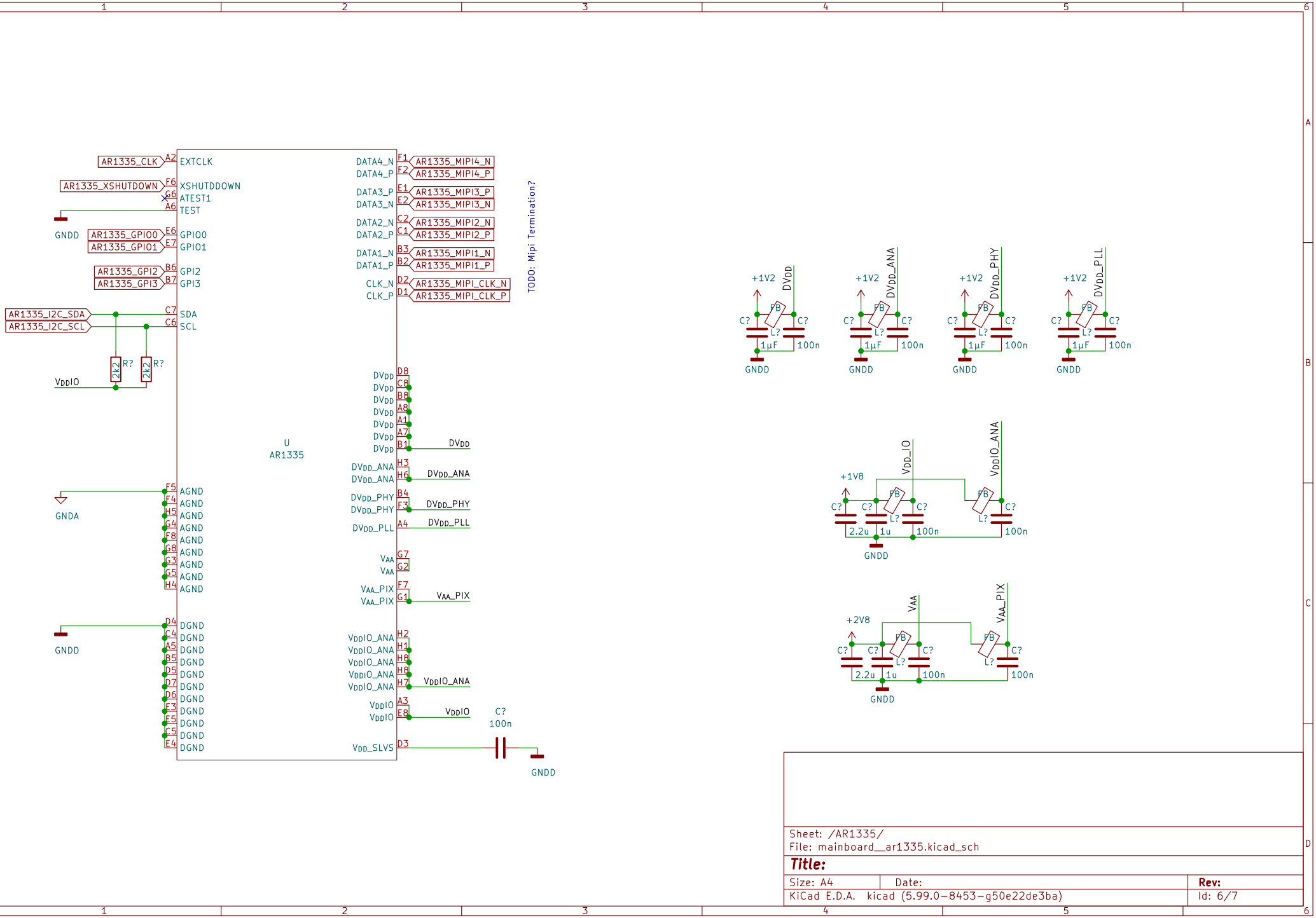




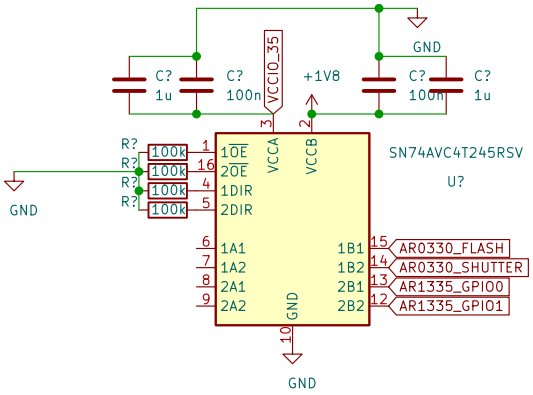
Sheet: /Plugins / PMOD/
File: mainboard__plugins.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (5.99.0-8453-g50e22de3ba)		Id: 5/7


AR1335_CLK
EXTCLK
AR1335_XSHUTDOWN
XSHUTDDOWN
ATEST1
TEST
GNDD
AR1335_GPIO0
AR1335_GPIO1
GPIO0
GPIO1
AR1335_GPI2
AR1335_GPI3
GPI2
GPI3
AR1335_I2C_SDA
AR1335_I2C_SCL
SDA
SCL
2k2
R?
VDDIO
GNDA
AGND
DGND
U
AR1335
DATA4_N
DATA4_P
DATA3_P
DATA3_N
DATA2_N
DATA2_P
DATA1_N
DATA1_P
CLK_N
CLK_P
AR1335_MIPI4_N
AR1335_MIPI4_P
AR1335_MIPI3_P
AR1335_MIPI3_N
AR1335_MIPI2_N
AR1335_MIPI2_P
AR1335_MIPI1_N
AR1335_MIPI1_P
AR1335_MIPI_CLK_N
AR1335_MIPI_CLK_P
TODO: Mipi Termination?
DVDD
DVDD_ANA
DVDD_PHY
DVDD_PLL
VAA
VAA_PIX
VDDIO_ANA
VDDIO
VDD_SLVS
C?
100n
+1V2
1µF
100n
+1V8
2.2u
1u
+2V8
VDD_IO
VDDIO_ANA
VAA
VAA_PIX
FB
L?
Sheet: /AR1335/
File: mainboard__ar1335.kicad_sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad (5.99.0-8453-g50e22de3ba)
Id: 6/7

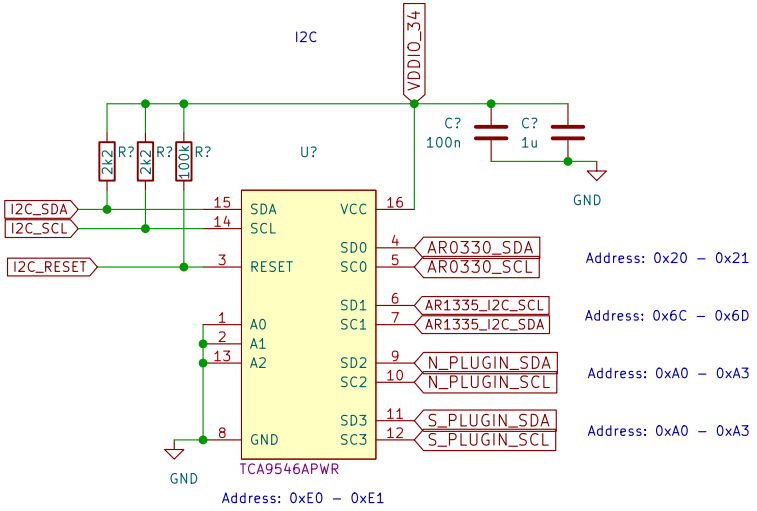
FPGA <- SENSOR



TestPoint TP? AR0330_FLASH
TestPoint TP? AR0330_SHUTTER
TestPoint TP? AR1335_GPIO0
TestPoint TP? AR1335_GPIO1

TestPoint TP? AR0330_FLASH_SHIFTED
TestPoint TP? AR0330_SHUTTER_SHIFTED
TestPoint TP? AR1335_GPIO0_SHIFTED
TestPoint TP? AR1335_GPIO1_SHIFTED

I2C



TestPoint TP? I2C_RESET
TestPoint TP? I2C_SCL
TestPoint TP? I2C_SDA

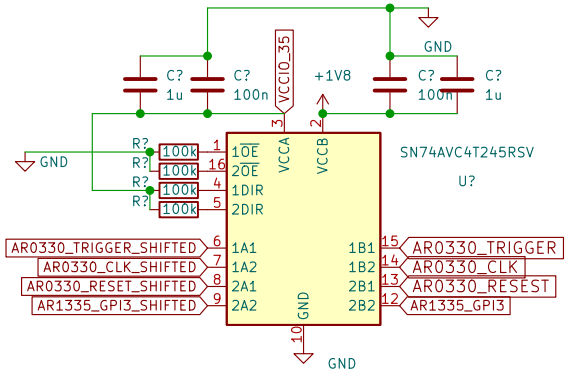
TestPoint TP? AR0330_SDA
TestPoint TP? AR0330_SCL

TestPoint TP? AR1335_I2C_SCL
TestPoint TP? AR1335_I2C_SDA

TestPoint TP? N_PLUGIN_SDA
TestPoint TP? N_PLUGIN_SCL

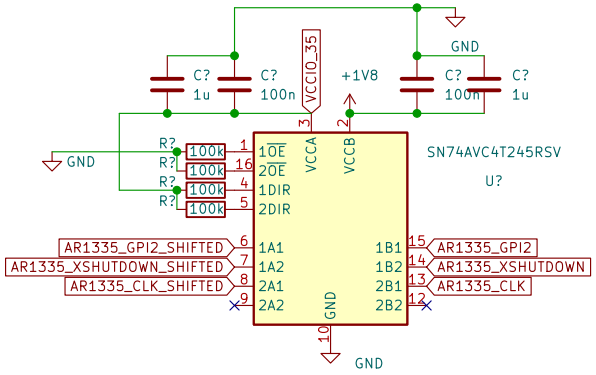
TestPoint TP? S_PLUGIN_SDA
TestPoint TP? S_PLUGIN_SCL

FPGA -> SENSOR



TestPoint TP? AR0330_TRIGGER
TestPoint TP? AR0330_CLK
TestPoint TP? AR0330_RESEST
TestPoint TP? AR1335_GPI3

TestPoint TP? AR0330_TRIGGER_SHIFTED
TestPoint TP? AR0330_CLK_SHIFTED
TestPoint TP? AR0330_RESET_SHIFTED
TestPoint TP? AR1335_GPI3_SHIFTED



TestPoint TP? AR1335_GPI2
TestPoint TP? AR1335_XSHUTDOWN
TestPoint TP? AR1335_CLK

TestPoint TP? AR1335_GPI2_SHIFTED
TestPoint TP? AR1335_XSHUTDOWN_SHIFTED
TestPoint TP? AR1335_CLK_SHIFTED

Sheet: /Level Shifter / I2C/
File: mainboard__level_shifter.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (5.99.0-8453-g50e22de3ba)		Id: 7/7