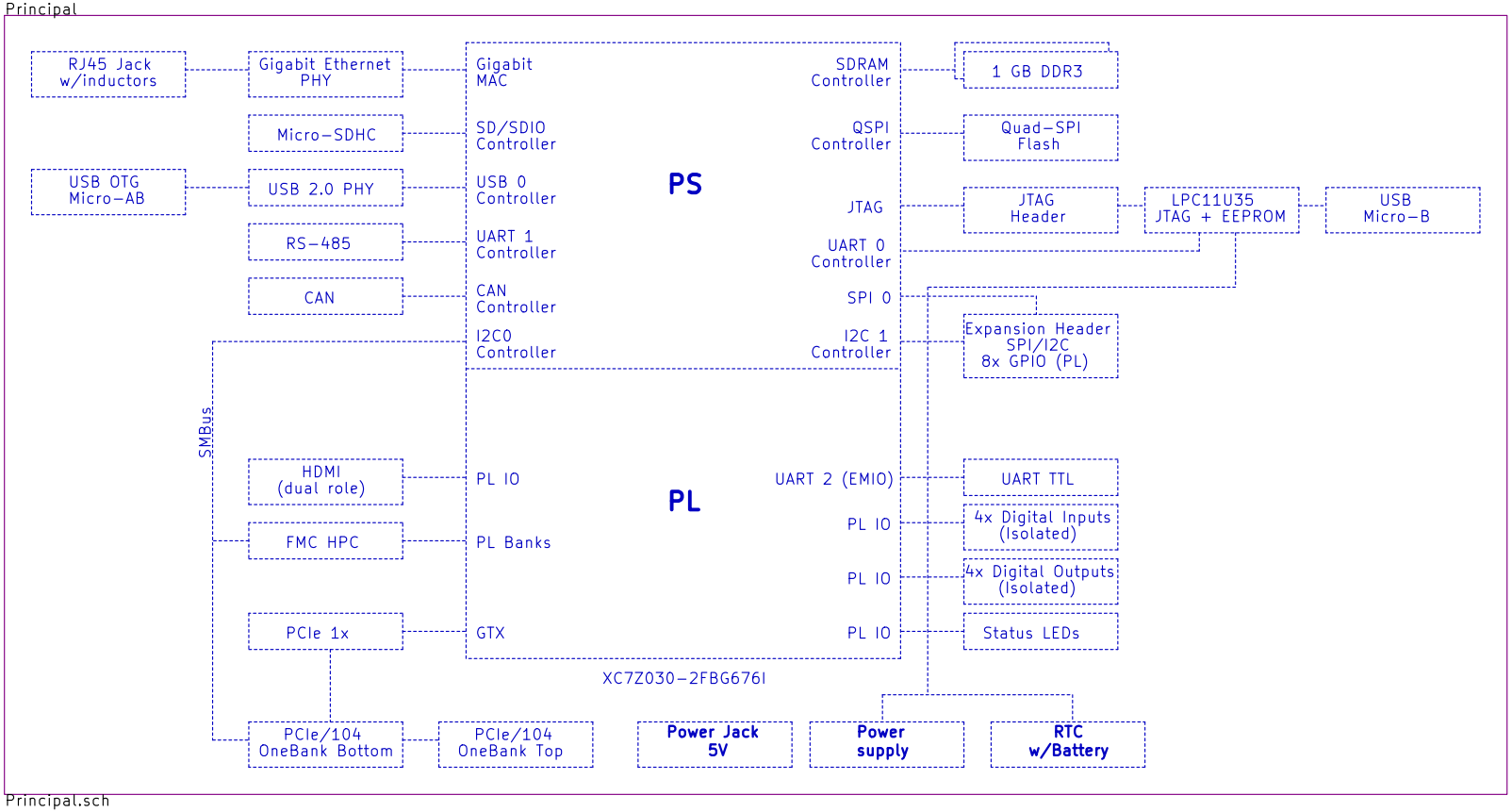
Computadora Industrial Abierta Argentina
CIAA–ACC
Xilinx XC7Z030 (2x Cortex A9 + Kintex–7 FPGA)

Principal



Principal.sch

INTI

CIAA

open source hardware

Authors: See 'doc/CHANGES.txt' file. License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

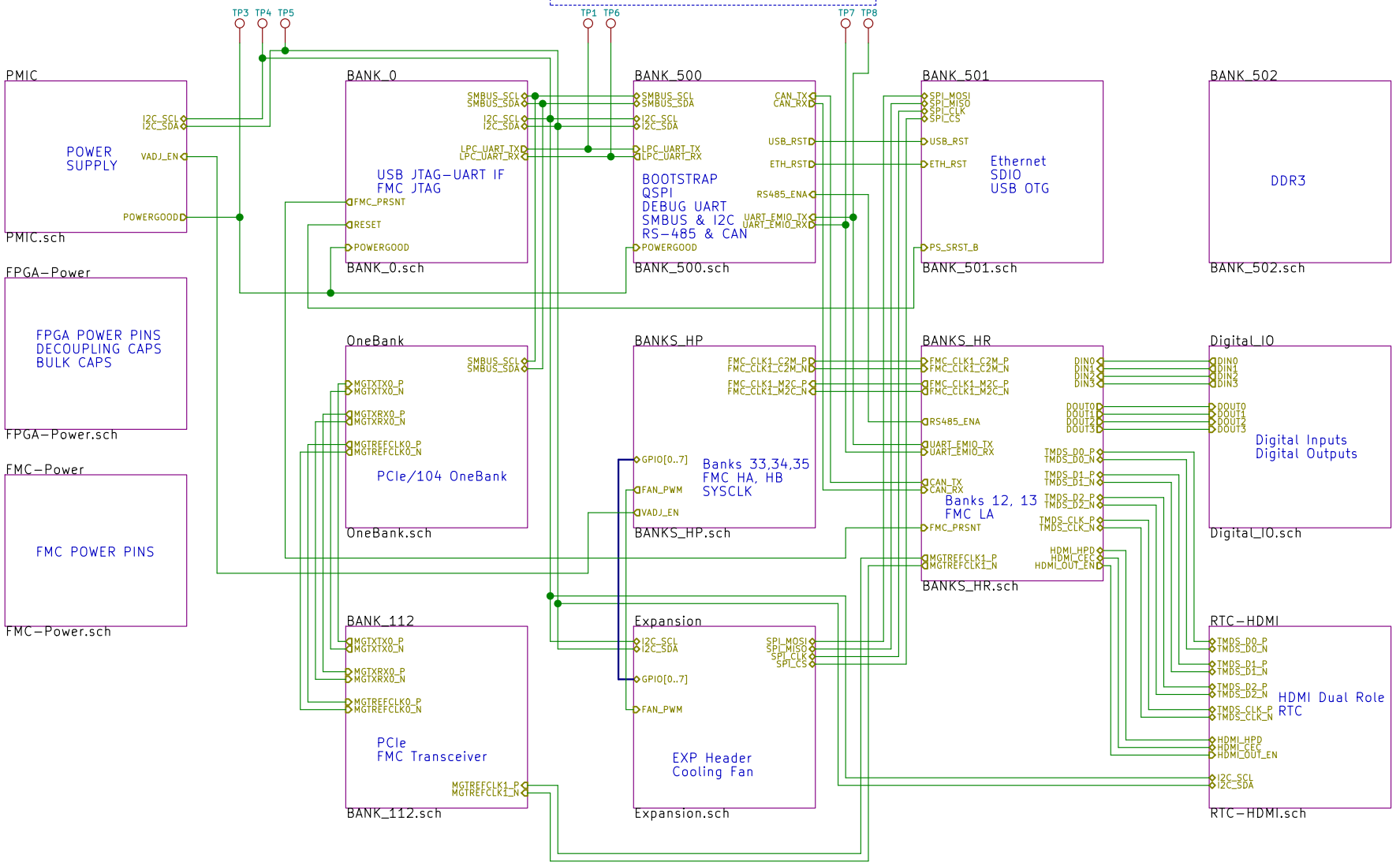
COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA–ACC (HPC)

Sheet: /
File: ciaa_acc.sch

Title: CIAA–ACC Block Diagram

Size: A4	Date: 2019–03–28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1–1bpo9+1		Id: 1/16

Hierarchical Schematic



FMC COMPATIBILITY NOTE:

Currents:
3.3V: 3A
VADJ: 2A
12V: Not implemented

VIO_B_M2C: Not implemented
VADJ: Powers the LA bank only
Banks HA & HB: 1.5/1.8V only, selectable by switch

Authors: See 'doc/CHANGES.txt' file.

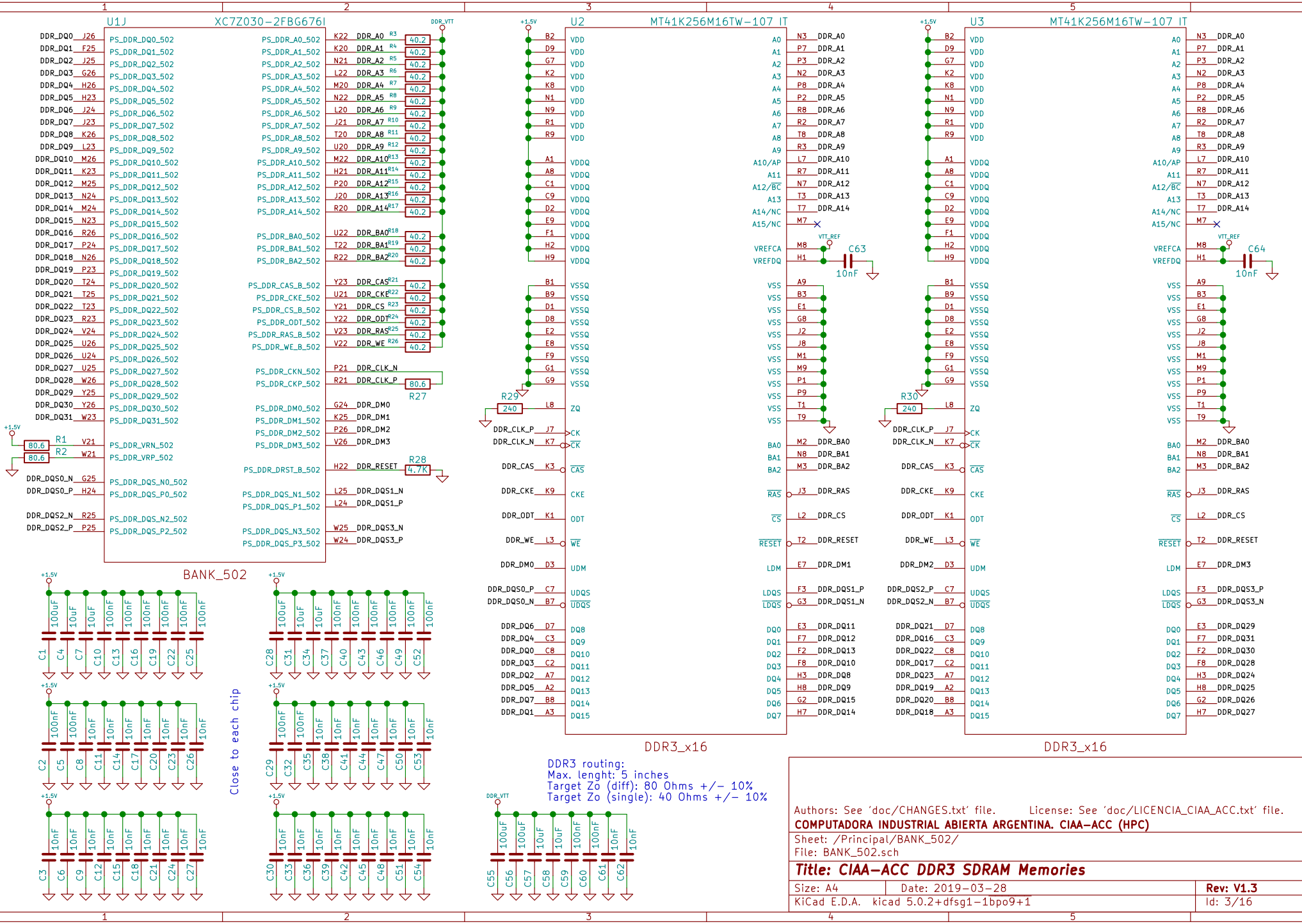
License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA–ACC (HPC)

Sheet: /Principal/
File: Principal.sch

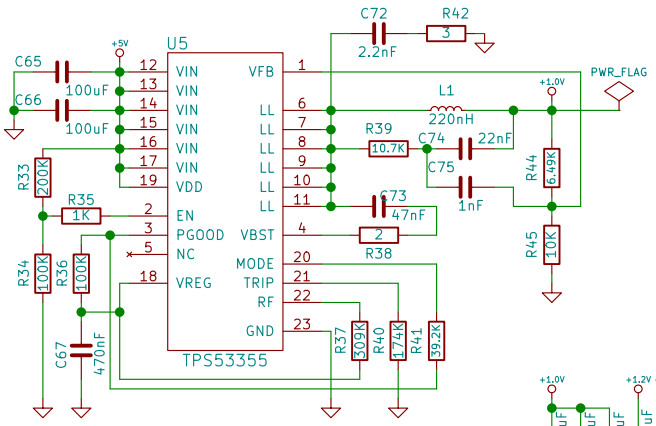
Title: CIAA–ACC Hierarchical schematic

Size: A4	Date: 2019–03–28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1–1bpo9+1		Id: 2/16

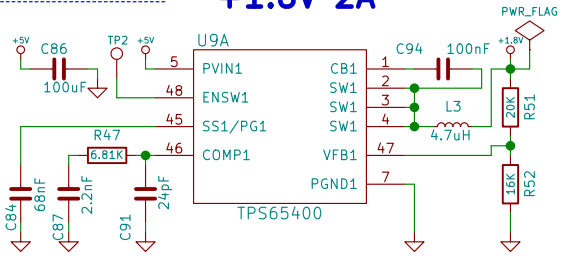

U1J
XC7Z030-2FBG676I
BANK_502
U2
MT41K256M16TW-107 IT
DDR3_x16
U3
MT41K256M16TW-107 IT
DDR3_x16
DDR_VTT
+1.5V
VTT_REF
R1
80.6
R2
80.6
R27
80.6
R28
4.7K
R29
240
R30
240
C63
10nF
C64
10nF
Close to each chip
DDR3 routing:
Max. lenght: 5 inches
Target Zo (diff): 80 Ohms +/- 10%
Target Zo (single): 40 Ohms +/- 10%
Authors: See 'doc/CHANGES.txt' file.
License: See 'doc/LICENCIA_CIAA_ACC.txt' file.
COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)
Sheet: /Principal/BANK_502/
File: BANK_502.sch
Title: CIAA-ACC DDR3 SDRAM Memories
Size: A4
Date: 2019-03-28
Rev: V1.3
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1
Id: 3/16

Power Supply

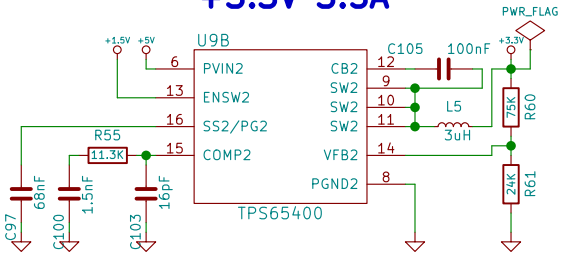
+1.0V 25A



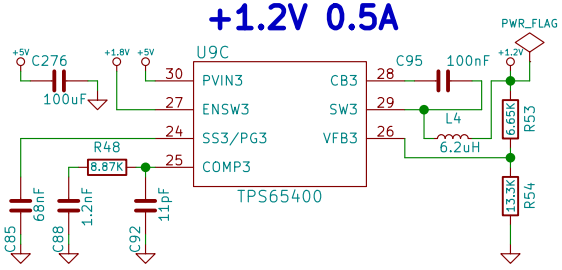
+1.8V 2A



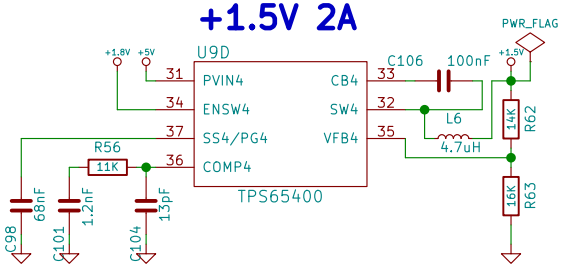
+3.3V 3.5A



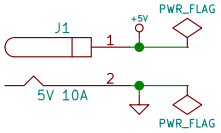
+1.2V 0.5A

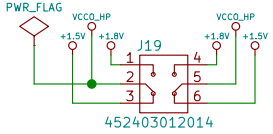


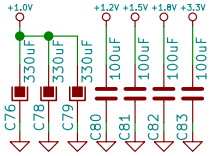
+1.5V 2A



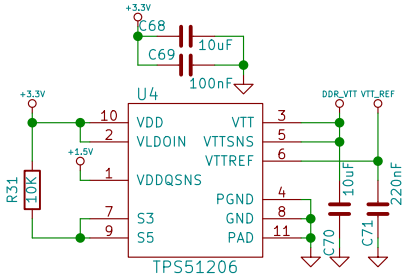
DC Input +5V 10A



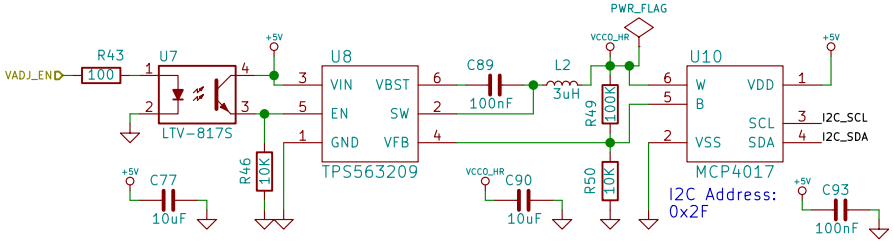




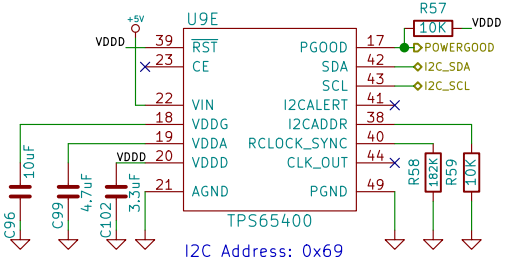
DDR_VTT +0.75V



VADJ 2A



"EN" del TPS563209:
Conectado a pines del FPGA para apagar antes de cambiar feedback.
ver si va con 1.5V o poner transistor



Last POWERGOOD signal, when it is active all voltages are in the right level.

Voltage	Power
+1V	25W
+1.2V	0.6W
+1.5V	3W
+1.8V	3.6W
+3.3V	11.55W
VADJ	6.6W
Total	50W

Authors: See 'doc/CHANGES.txt' file. License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

Sheet: /Principal/PMIC/
File: PMIC.sch

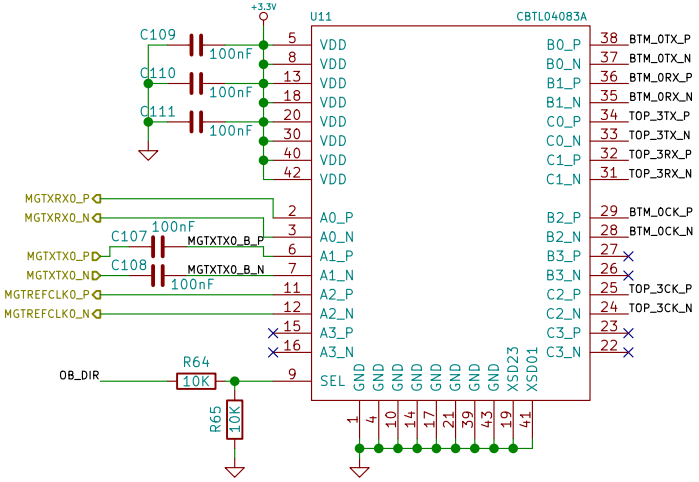
Title: CIAA-ACC Power supply

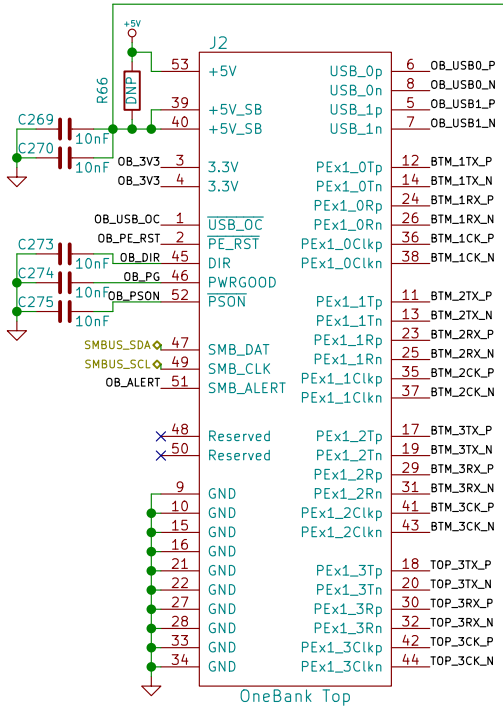
Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 4/16

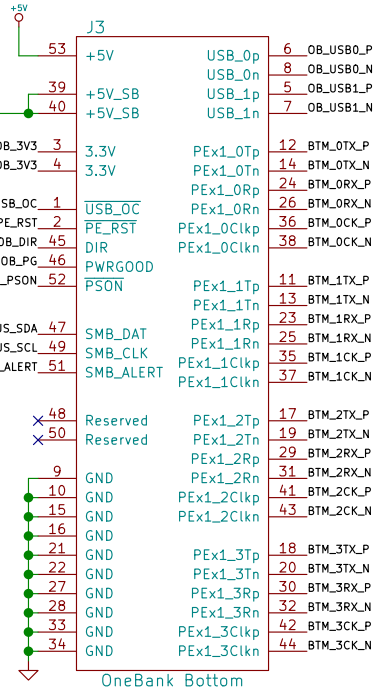
PCIe/104 OneBank Connector

H1 H3
H2 H4
Holes PCIe 104

Mux/Demux Switch







PCIe OneBank device routing:
Max. lenght: 4 inches
Target Zo (diff): 85 Ohms +/- 15%
Spacing between links: 20 mils
Matching tolerance (intra-pair): 5 mils
Matching tolerance (inter-pair): Not required

Authors: See 'doc/CHANGES.txt' file. License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

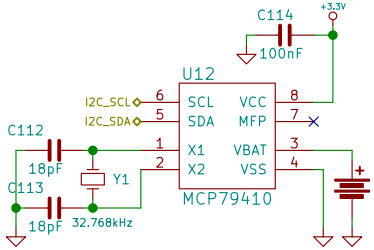
COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

Sheet: /Principal/OneBank/
File: OneBank.sch

Title: CIAA-ACC PCIe/104 OneBank Connector

Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 5/16

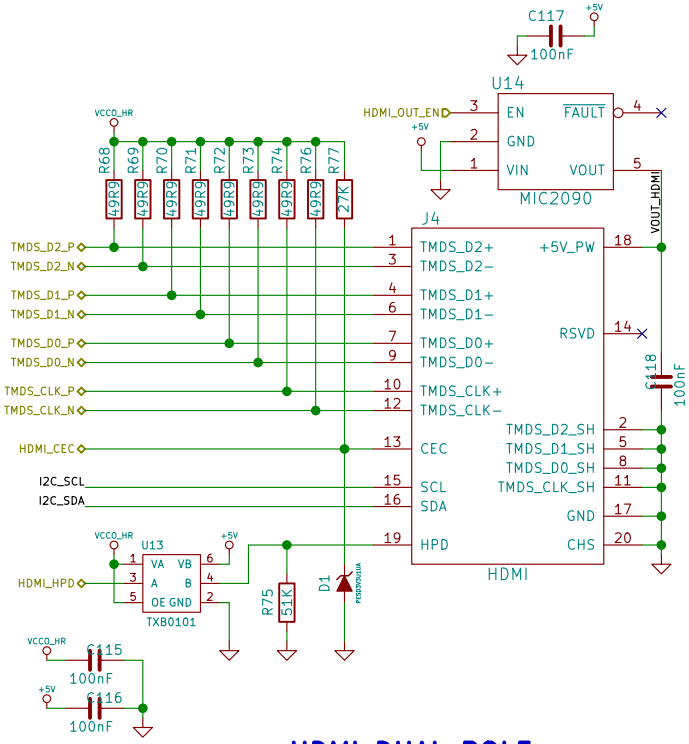
HDMI / RTC



Mounting indication:
Please remove battery
holder pins before solder.

I2C Addresses: 0x6F & 0x57

Real Time Clock



HDMI DUAL ROLE

Note for HDMI: VCCO_HR must be 3.3V

Authors: See 'doc/CHANGES.txt' file.

License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

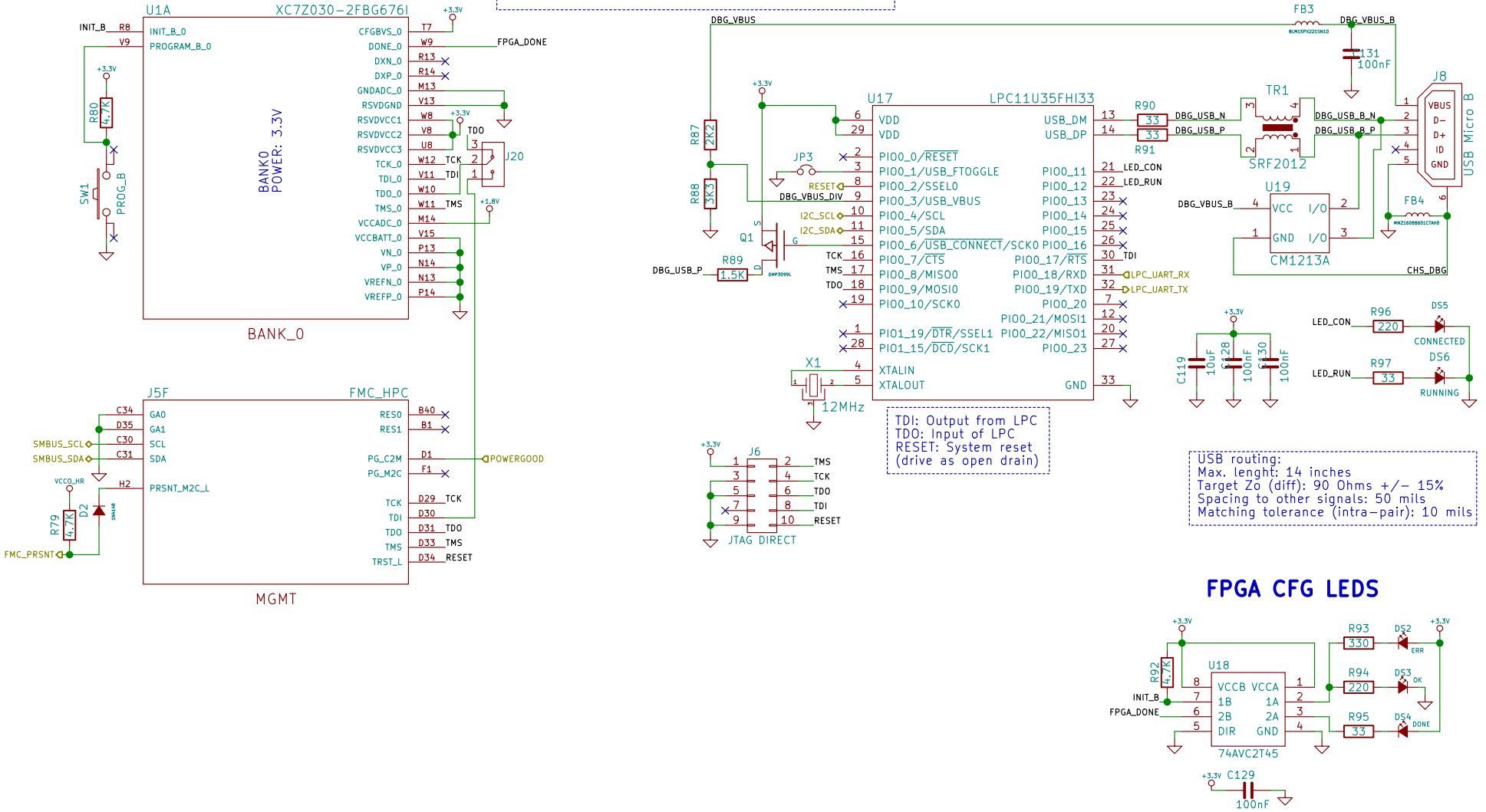
COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

Sheet: /Principal/RTC-HDMI/
File: RTC-HDMI.sch

Title: CIAA-ACC HDMI Dual Role

Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 6/16

USB JTAG UART / FMC JTAG



Authors: See 'doc/CHANGES.txt' file. License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

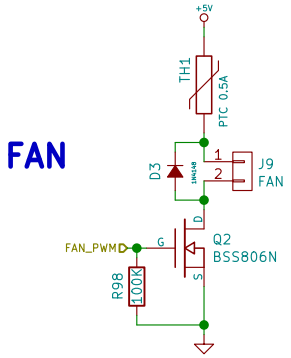
Sheet: /Principal/BANK_0/
File: BANK_0.sch

Title: CIAA-ACC USB JTAG UART / FMC JTAG

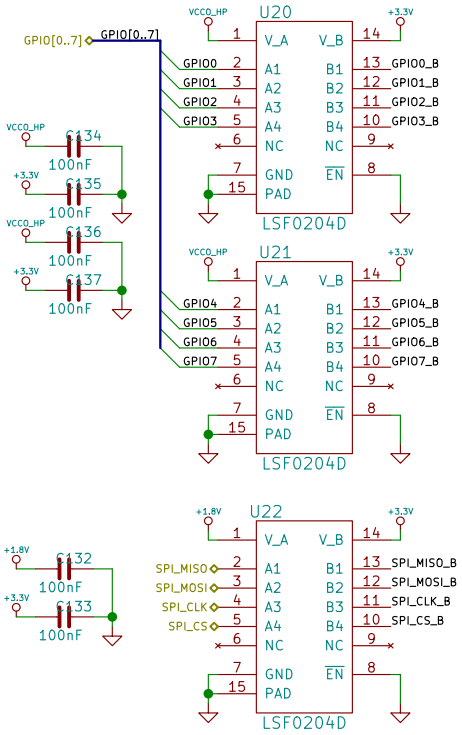
Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 7/16

Expansion Header / FAN Connector

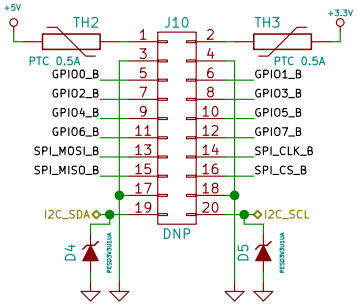
FAN



Voltage level translator



Expansion Header



GPIO Only available when VCCO_HP = 1.8V

F1 F2 F3 F4

Authors: See 'doc/CHANGES.txt' file. License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

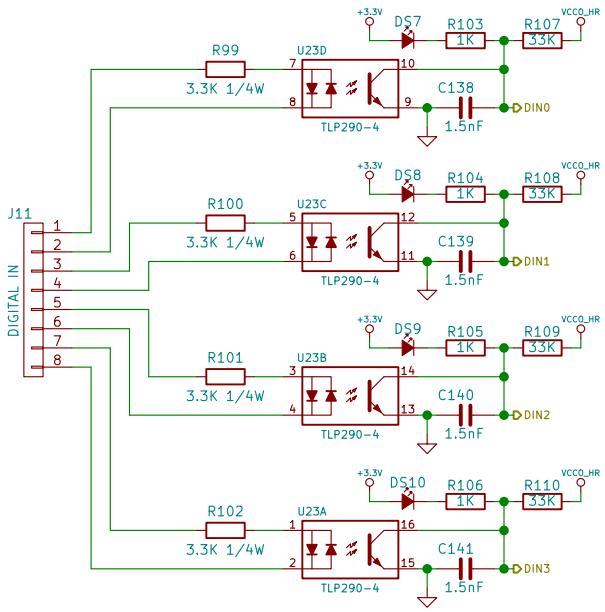
COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

Sheet: /Principal/Expansion/
File: Expansion.sch

Title: CIAA-ACC Expansion Header (GPIO, SPI, I2C) / FAN Connector

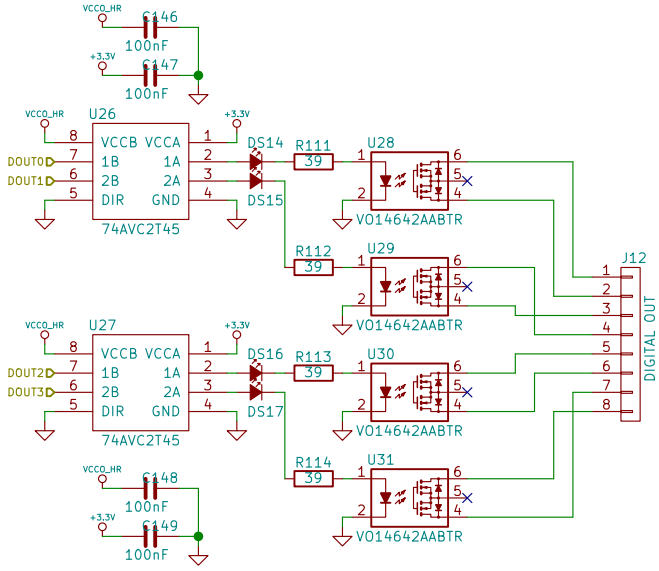
Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 8/16

Digital Inputs and Outputs



ISOLATED DIGITAL INPUTS

Range: 12 to 24 V



ISOLATED DIGITAL OUTPUTS

Range: up to 60 V

Authors: See 'doc/CHANGES.txt' file. License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

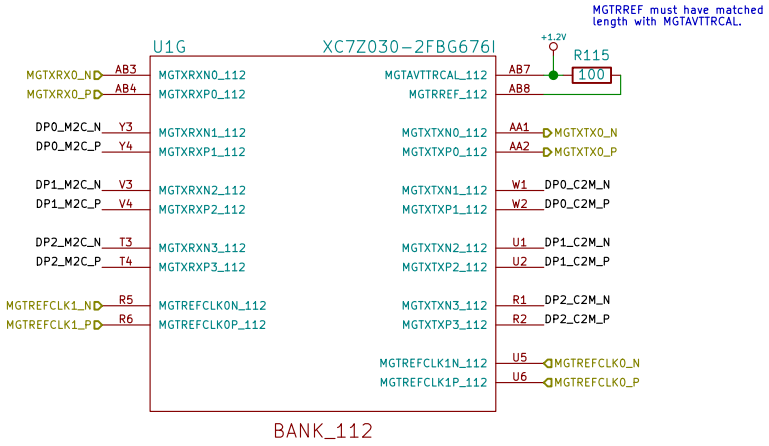
COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

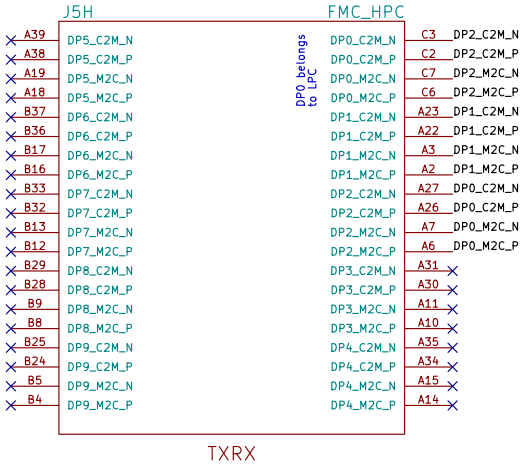
Sheet: /Principal/Digital_IO/
File: Digital_IO.sch

Title: CIAA-ACC Digital Inputs and Outputs

Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 9/16

PCIe / FMC Transceiver





Coupling capacitor for transceivers must be in FMC mezzanine card.

PCIe routing:
Target Zo (diff): 85 Ohms +/- 15%
Spacing between links: 20 mils
Matching tolerance (intra-pair): 5 mils
Matching tolerance (inter-pair): Not required

Authors: See 'doc/CHANGES.txt' file.

License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

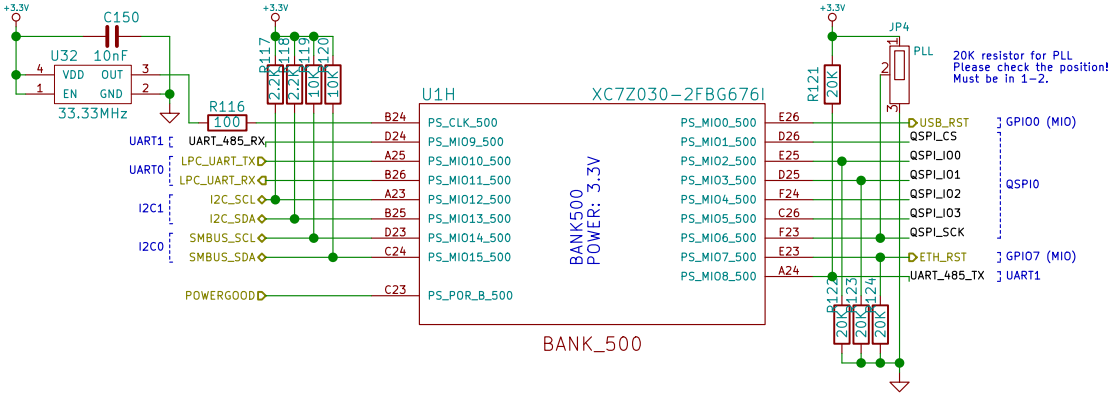
COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

Sheet: /Principal/BANK_112/
File: BANK_112.sch

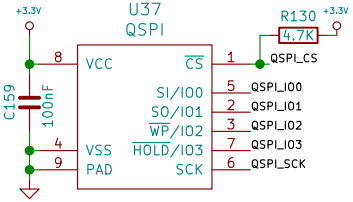
Title: CIAA-ACC FPGA PCIe / FMC transceiver

Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 10/16

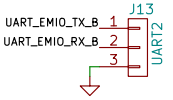
UART, QSPI, I2C, CAN, RS485



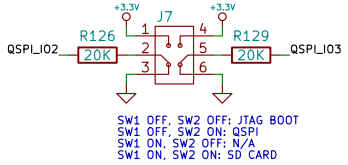
QSPI



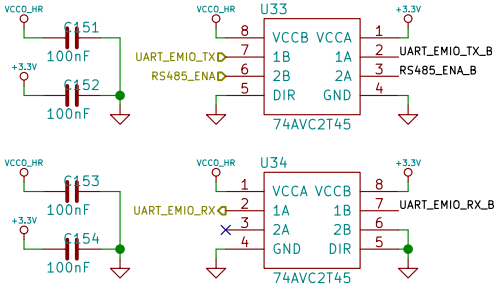
QSPI Routing:
Target Zo: 50 Ohms +/- 5%
Spacing to other signals: 3w
Matching tolerance: 3 mm

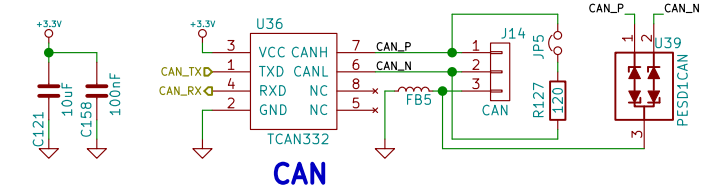


UART 2

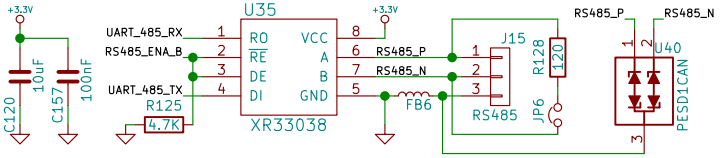


BOOT SELECTOR





CAN



RS-485

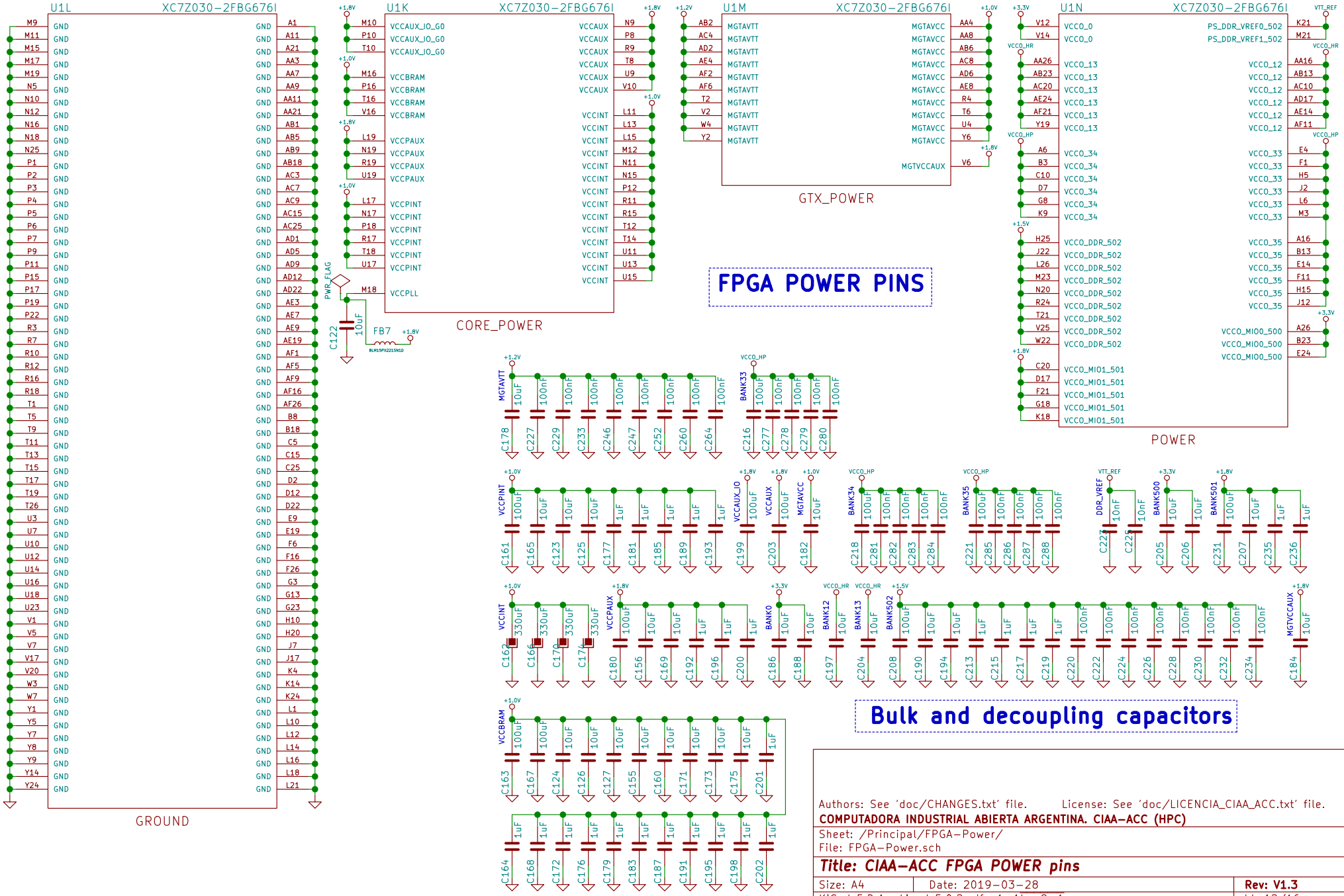
Authors: See 'doc/CHANGES.txt' file. License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

Sheet: /Principal/BANK_500/
File: BANK_500.sch

Title: CIAA-ACC UART, QSPI, I2C, CAN, RS485

Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 11/16



Authors: See 'doc/CHANGES.txt' file. License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

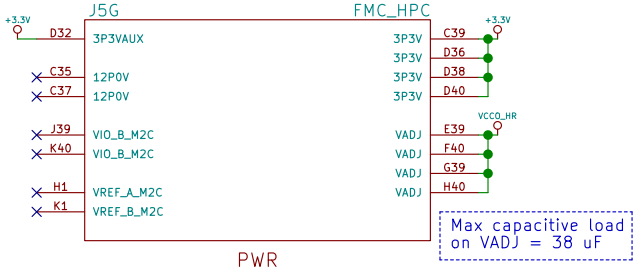
COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

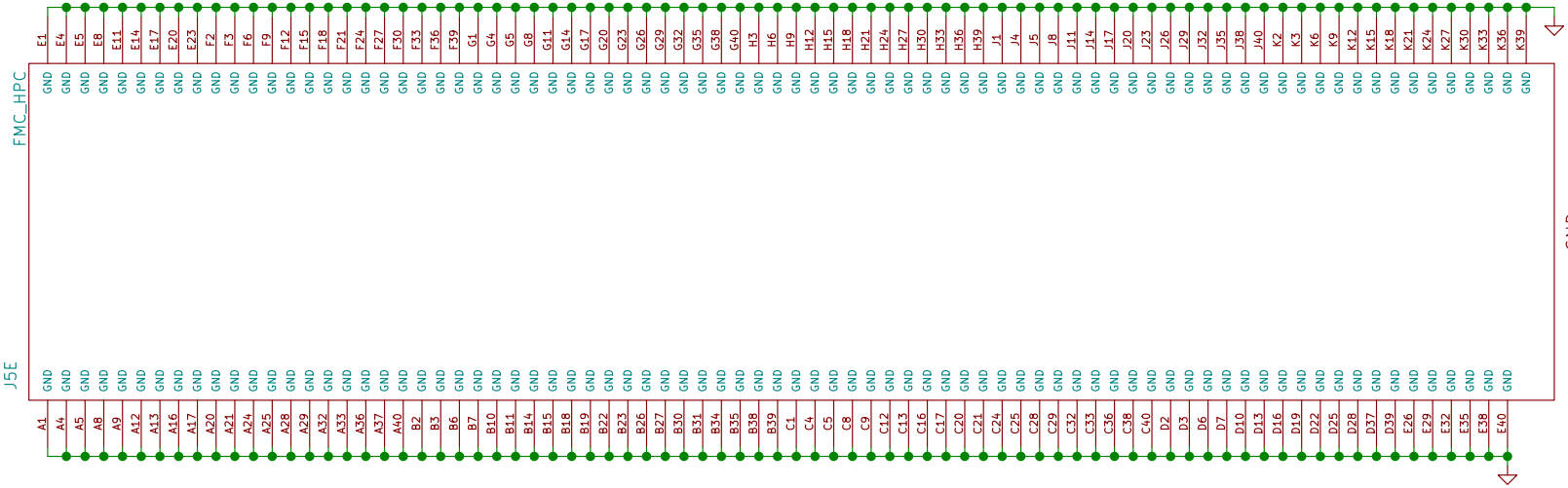
Sheet: /Principal/FPGA-Power/
File: FPGA-Power.sch

Title: CIAA-ACC FPGA POWER pins

Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 12/16

FMC POWER PINS





Authors: See 'doc/CHANGES.txt' file. License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

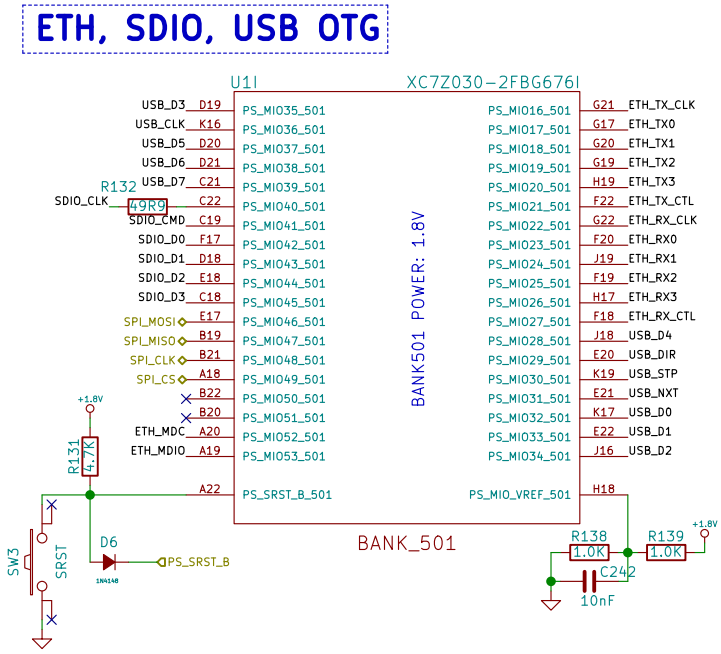
COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

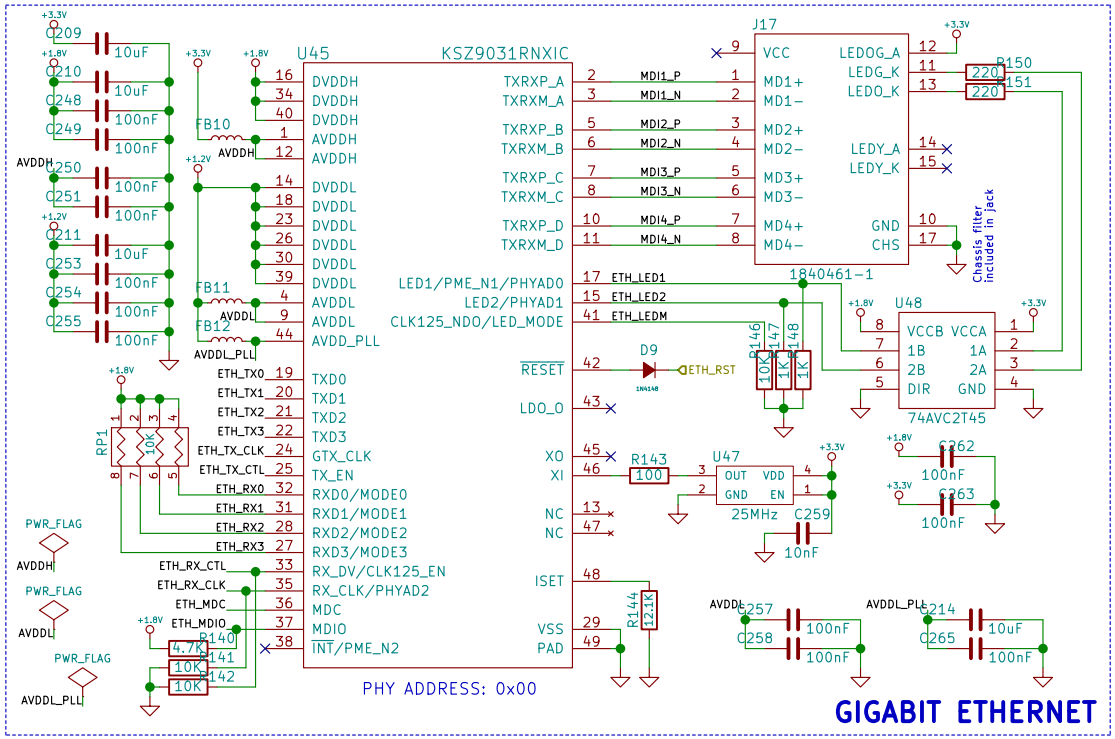
Sheet: /Principal/FMC-Power/
File: FMC-Power.sch

Title: CIAA-ACC FMC POWER pins

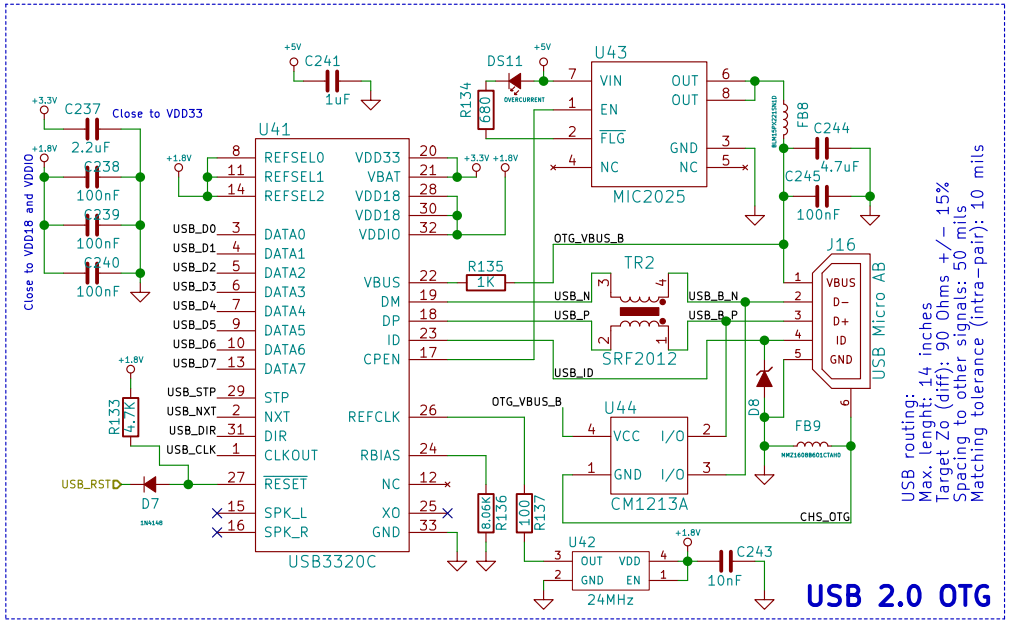
Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 13/16

ETH, SDIO, USB OTG

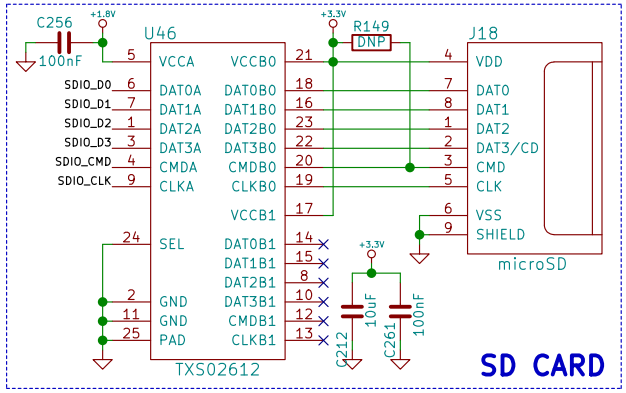




GIGABIT ETHERNET



USB 2.0 OTG



SD CARD

Authors: See 'doc/CHANGES.txt' file. License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

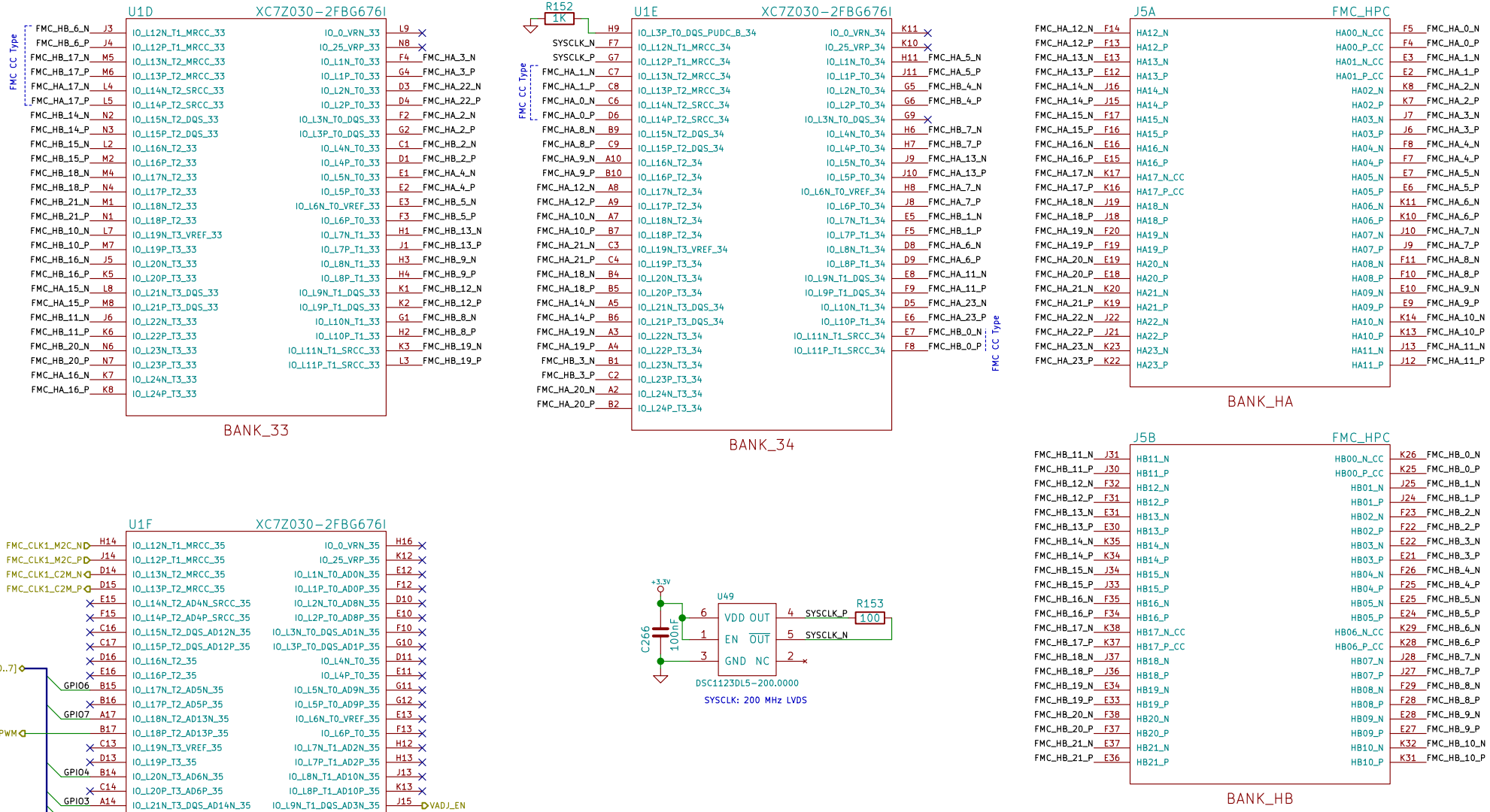
COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

Sheet: /Principal/BANK_501/
File: BANK_501.sch

Title: CIAA-ACC Ethernet, SDIO, USB OTG

Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 14/16

FMC HB / FMC HA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FMC_HB_6_P J4
FMC_HB_17_N M5
FMC_HB_17_P M6
FMC_HA_17_N L4
FMC_HA_17_P L5
FMC_HB_14_N N2
FMC_HB_14_P N3
FMC_HB_15_N L2
FMC_HB_15_P M2
FMC_HB_18_N M4
FMC_HB_18_P N4
FMC_HB_21_N M1
FMC_HB_21_P N1
FMC_HB_10_N L7
FMC_HB_10_P M7
FMC_HB_16_N J5
FMC_HB_16_P K5
FMC_HA_15_N L8
FMC_HA_15_P M8
FMC_HB_11_N J6
FMC_HB_11_P K6
FMC_HB_20_N N6
FMC_HB_20_P N7
FMC_HA_16_N K7
FMC_HA_16_P K8
FMC CC Type
IO_L12N_T1_MRCC_33
IO_L12P_T1_MRCC_33
IO_L13N_T2_MRCC_33
IO_L13P_T2_MRCC_33
IO_L14N_T2_SRCC_33
IO_L14P_T2_SRCC_33
IO_L15N_T2_DQS_33
IO_L15P_T2_DQS_33
IO_L16N_T2_33
IO_L16P_T2_33
IO_L17N_T2_33
IO_L17P_T2_33
IO_L18N_T2_33
IO_L18P_T2_33
IO_L19N_T3_VREF_33
IO_L19P_T3_33
IO_L20N_T3_33
IO_L20P_T3_33
IO_L21N_T3_DQS_33
IO_L21P_T3_DQS_33
IO_L22N_T3_33
IO_L22P_T3_33
IO_L23N_T3_33
IO_L23P_T3_33
IO_L24N_T3_33
IO_L24P_T3_33
IO_0_VRN_33
IO_25_VRP_33
IO_L1N_T0_33
IO_L1P_T0_33
IO_L2N_T0_33
IO_L2P_T0_33
IO_L3N_T0_DQS_33
IO_L3P_T0_DQS_33
IO_L4N_T0_33
IO_L4P_T0_33
IO_L5N_T0_33
IO_L5P_T0_33
IO_L6N_T0_VREF_33
IO_L6P_T0_33
IO_L7N_T1_33
IO_L7P_T1_33
IO_L8N_T1_33
IO_L8P_T1_33
IO_L9N_T1_DQS_33
IO_L9P_T1_DQS_33
IO_L10N_T1_33
IO_L10P_T1_33
IO_L11N_T1_SRCC_33
IO_L11P_T1_SRCC_33
L9
N8
F4 FMC_HA_3_N
G4 FMC_HA_3_P
D3 FMC_HA_22_N
D4 FMC_HA_22_P
F2 FMC_HA_2_N
G2 FMC_HA_2_P
C1 FMC_HB_2_N
D1 FMC_HB_2_P
E1 FMC_HA_4_N
E2 FMC_HA_4_P
E3 FMC_HB_5_N
F3 FMC_HB_5_P
H1 FMC_HB_13_N
J1 FMC_HB_13_P
H3 FMC_HB_9_N
H4 FMC_HB_9_P
K1 FMC_HB_12_N
K2 FMC_HB_12_P
G1 FMC_HB_8_N
H2 FMC_HB_8_P
K3 FMC_HB_19_N
L3 FMC_HB_19_P
BANK_33
R152
1K
U1E XC7Z030-2FBG676I
SYSCLK_N F7
SYSCLK_P G7
FMC_HA_1_N C7
FMC_HA_1_P C8
FMC_HA_0_N C6
FMC_HA_0_P D6
FMC_HA_8_N B9
FMC_HA_8_P C9
FMC_HA_9_N A10
FMC_HA_9_P B10
FMC_HA_12_N A8
FMC_HA_12_P A9
FMC_HA_10_N A7
FMC_HA_10_P B7
FMC_HA_21_N C3
FMC_HA_21_P C4
FMC_HA_18_N B4
FMC_HA_18_P B5
FMC_HA_14_N A5
FMC_HA_14_P B6
FMC_HA_19_N A3
FMC_HA_19_P A4
FMC_HB_3_N B1
FMC_HB_3_P C2
FMC_HA_20_N A2
FMC_HA_20_P B2
FMC CC Type
IO_L3P_T0_DQS_PUDC_B_34
IO_L12N_T1_MRCC_34
IO_L12P_T1_MRCC_34
IO_L13N_T2_MRCC_34
IO_L13P_T2_MRCC_34
IO_L14N_T2_SRCC_34
IO_L14P_T2_SRCC_34
IO_L15N_T2_DQS_34
IO_L15P_T2_DQS_34
IO_L16N_T2_34
IO_L16P_T2_34
IO_L17N_T2_34
IO_L17P_T2_34
IO_L18N_T2_34
IO_L18P_T2_34
IO_L19N_T3_VREF_34
IO_L19P_T3_34
IO_L20N_T3_34
IO_L20P_T3_34
IO_L21N_T3_DQS_34
IO_L21P_T3_DQS_34
IO_L22N_T3_34
IO_L22P_T3_34
IO_L23N_T3_34
IO_L23P_T3_34
IO_L24N_T3_34
IO_L24P_T3_34
IO_0_VRN_34
IO_25_VRP_34
IO_L1N_T0_34
IO_L1P_T0_34
IO_L2N_T0_34
IO_L2P_T0_34
IO_L3N_T0_DQS_34
IO_L4N_T0_34
IO_L4P_T0_34
IO_L5N_T0_34
IO_L5P_T0_34
IO_L6N_T0_VREF_34
IO_L6P_T0_34
IO_L7N_T1_34
IO_L7P_T1_34
IO_L8N_T1_34
IO_L8P_T1_34
IO_L9N_T1_DQS_34
IO_L9P_T1_DQS_34
IO_L10N_T1_34
IO_L10P_T1_34
IO_L11N_T1_SRCC_34
IO_L11P_T1_SRCC_34
K11
K10
H11 FMC_HA_5_N
J11 FMC_HA_5_P
G5 FMC_HB_4_N
G6 FMC_HB_4_P
G9
H6 FMC_HB_7_N
H7 FMC_HB_7_P
J9 FMC_HA_13_N
J10 FMC_HA_13_P
H8 FMC_HA_7_N
J8 FMC_HA_7_P
E5 FMC_HB_1_N
F5 FMC_HB_1_P
D8 FMC_HA_6_N
D9 FMC_HA_6_P
E8 FMC_HA_11_N
F9 FMC_HA_11_P
D5 FMC_HA_23_N
E6 FMC_HA_23_P
E7 FMC_HB_0_N
F8 FMC_HB_0_P
FMC CC Type
BANK_34
J5A FMC_HPC
FMC_HA_12_N F14
FMC_HA_12_P F13
FMC_HA_13_N E13
FMC_HA_13_P E12
FMC_HA_14_N J16
FMC_HA_14_P J15
FMC_HA_15_N F17
FMC_HA_15_P F16
FMC_HA_16_N E16
FMC_HA_16_P E15
FMC_HA_17_N K17
FMC_HA_17_P K16
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FMC_HA_18_P J18
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FMC_HA_20_N E19
FMC_HA_20_P E18
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FMC_HA_21_P K19
FMC_HA_22_N J22
FMC_HA_22_P J21
FMC_HA_23_N K23
FMC_HA_23_P K22
HA12_N
HA12_P
HA13_N
HA13_P
HA14_N
HA14_P
HA15_N
HA15_P
HA16_N
HA16_P
HA17_N_CC
HA17_P_CC
HA18_N
HA18_P
HA19_N
HA19_P
HA20_N
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HA21_N
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HA07_N
HA07_P
HA08_N
HA08_P
HA09_N
HA09_P
HA10_N
HA10_P
HA11_N
HA11_P
F5 FMC_HA_0_N
F4 FMC_HA_0_P
E3 FMC_HA_1_N
E2 FMC_HA_1_P
K8 FMC_HA_2_N
K7 FMC_HA_2_P
J7 FMC_HA_3_N
J6 FMC_HA_3_P
F8 FMC_HA_4_N
F7 FMC_HA_4_P
E7 FMC_HA_5_N
E6 FMC_HA_5_P
K11 FMC_HA_6_N
K10 FMC_HA_6_P
J10 FMC_HA_7_N
J9 FMC_HA_7_P
F11 FMC_HA_8_N
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E10 FMC_HA_9_N
E9 FMC_HA_9_P
K14 FMC_HA_10_N
K13 FMC_HA_10_P
J13 FMC_HA_11_N
J12 FMC_HA_11_P
BANK_HA
J5B FMC_HPC
FMC_HB_11_N J31
FMC_HB_11_P J30
FMC_HB_12_N F32
FMC_HB_12_P F31
FMC_HB_13_N E31
FMC_HB_13_P E30
FMC_HB_14_N K35
FMC_HB_14_P K34
FMC_HB_15_N J34
FMC_HB_15_P J33
FMC_HB_16_N F35
FMC_HB_16_P F34
FMC_HB_17_N K38
FMC_HB_17_P K37
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FMC_HB_19_P E33
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FMC_HB_20_P F37
FMC_HB_21_N E37
FMC_HB_21_P E36
HB11_N
HB11_P
HB12_N
HB12_P
HB13_N
HB13_P
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HB16_N
HB16_P
HB17_N_CC
HB17_P_CC
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HB18_P
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HB00_P_CC
HB01_N
HB01_P
HB02_N
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HB06_P_CC
HB07_N
HB07_P
HB08_N
HB08_P
HB09_N
HB09_P
HB10_N
HB10_P
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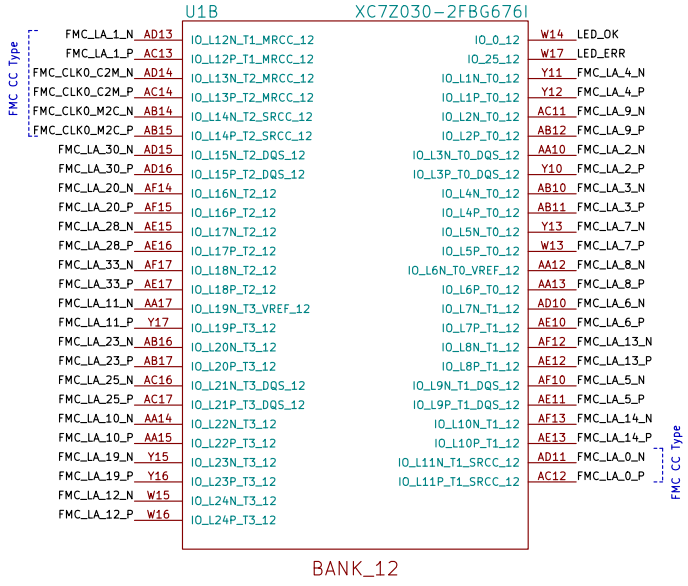
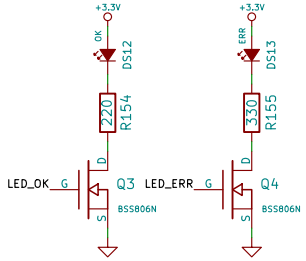
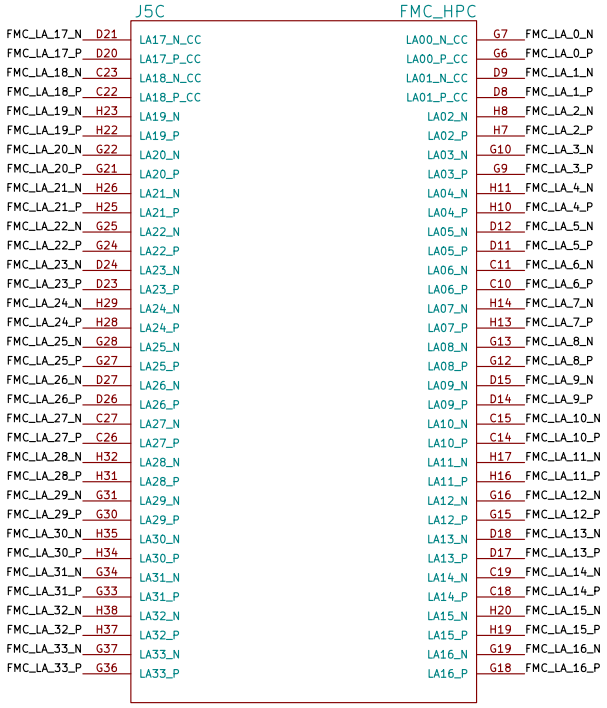
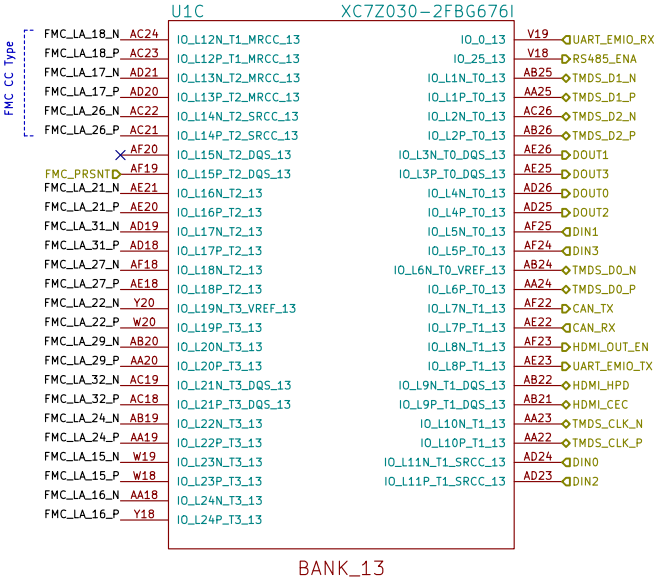
K25 FMC_HB_0_P
J25 FMC_HB_1_N
J24 FMC_HB_1_P
F23 FMC_HB_2_N
F22 FMC_HB_2_P
E22 FMC_HB_3_N
E21 FMC_HB_3_P
F26 FMC_HB_4_N
F25 FMC_HB_4_P
E25 FMC_HB_5_N
E24 FMC_HB_5_P
K29 FMC_HB_6_N
K28 FMC_HB_6_P
J28 FMC_HB_7_N
J27 FMC_HB_7_P
F29 FMC_HB_8_N
F28 FMC_HB_8_P
E28 FMC_HB_9_N
E27 FMC_HB_9_P
K32 FMC_HB_10_N
K31 FMC_HB_10_P
BANK_HB
U1F XC7Z030-2FBG676I
FMC_CLK1_M2C_N H14
FMC_CLK1_M2C_P J14
FMC_CLK1_C2M_N D14
FMC_CLK1_C2M_P D15
GPIO[0..7]
GPIO6 B15
GPIO7 A17
FAN_PWM B17
GPIO4 B14
GPIO3 A14
GPIO5 A15
GPIO1 B12
GPIO0 A12
GPIO2 A13
GPIO[0..7]
IO_L12N_T1_MRCC_35
IO_L12P_T1_MRCC_35
IO_L13N_T2_MRCC_35
IO_L13P_T2_MRCC_35
IO_L14N_T2_AD4N_SRCC_35
IO_L14P_T2_AD4P_SRCC_35
IO_L15N_T2_DQS_AD12N_35
IO_L15P_T2_DQS_AD12P_35
IO_L16N_T2_35
IO_L16P_T2_35
IO_L17N_T2_AD5N_35
IO_L17P_T2_AD5P_35
IO_L18N_T2_AD13N_35
IO_L18P_T2_AD13P_35
IO_L19N_T3_VREF_35
IO_L19P_T3_35
IO_L20N_T3_AD6N_35
IO_L20P_T3_AD6P_35
IO_L21N_T3_DQS_AD14N_35
IO_L21P_T3_DQS_AD14P_35
IO_L22N_T3_AD7N_35
IO_L22P_T3_AD7P_35
IO_L23N_T3_35
IO_L23P_T3_35
IO_L24N_T3_AD15N_35
IO_L24P_T3_AD15P_35
IO_0_VRN_35
IO_25_VRP_35
IO_L1N_T0_AD0N_35
IO_L1P_T0_AD0P_35
IO_L2N_T0_AD8N_35
IO_L2P_T0_AD8P_35
IO_L3N_T0_DQS_AD1N_35
IO_L3P_T0_DQS_AD1P_35
IO_L4N_T0_35
IO_L4P_T0_35
IO_L5N_T0_AD9N_35
IO_L5P_T0_AD9P_35
IO_L6N_T0_VREF_35
IO_L6P_T0_35
IO_L7N_T1_AD2N_35
IO_L7P_T1_AD2P_35
IO_L8N_T1_AD10N_35
IO_L8P_T1_AD10P_35
IO_L9N_T1_DQS_AD3N_35
IO_L9P_T1_DQS_AD3P_35
IO_L10N_T1_AD11N_35
IO_L10P_T1_AD11P_35
IO_L11N_T1_SRCC_35
IO_L11P_T1_SRCC_35
H16
K12
E12
D12
D10
E10
F10
G10
D11
E11
G11
G12
E13
F13
H12
H13
J13
K13
J15 VADJ_EN
K15
G15
G16
F14
G14
BANK_35
+3.3V
C266
100nF
U49
VDD OUT
EN OUT
GND NC
6
1
3
4 SYSCLK_P
5 SYSCLK_N
2
R153
100
DSC1123DL5-200.0000
SYSCLK: 200 MHz LVDS
PUCD: PUDC_B must be tied either directly (or through a 1KΩ or less resistor) to VCCO_34 or GND.
Do not allow this pin to float before and during configuration.
Authors: See 'doc/CHANGES.txt' file.
License: See 'doc/LICENCIA_CIAA_ACC.txt' file.
COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)
Sheet: /Principal/BANKS_HP/
File: BANKS_HP.sch
Title: CIAA-ACC FMC HB / FMC HA
Size: A4
Date: 2019-03-28
Rev: V1.3
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1
Id: 15/16

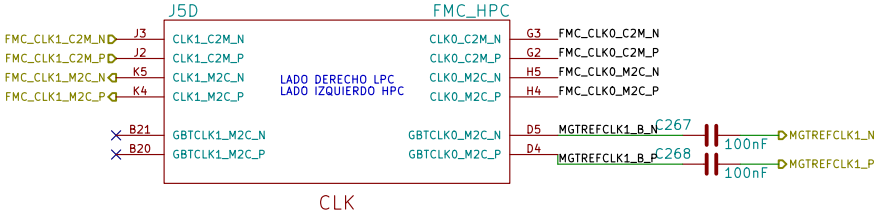
FMC LA / FPGA BANKS 12, 13











Authors: See 'doc/CHANGES.txt' file. License: See 'doc/LICENCIA_CIAA_ACC.txt' file.

COMPUTADORA INDUSTRIAL ABIERTA ARGENTINA. CIAA-ACC (HPC)

Sheet: /Principal/BANKS_HR/
File: BANKS_HR.sch

Title: CIAA-ACC FMC LA / FPGA BANKS 12, 13

Size: A4	Date: 2019-03-28	**Rev: V1.3**
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1		Id: 16/16