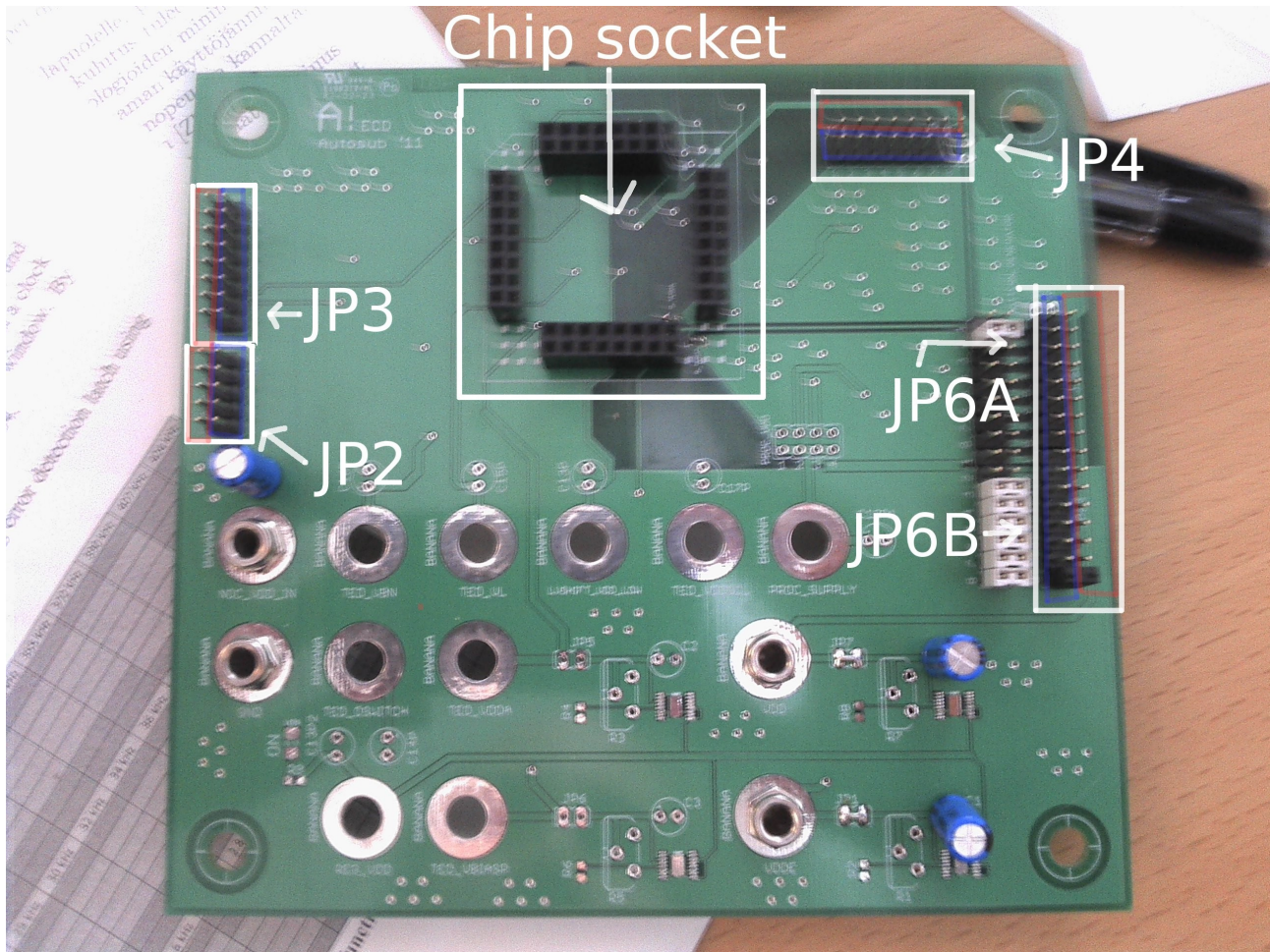


PCB manual v0.7



1. PCB connectors

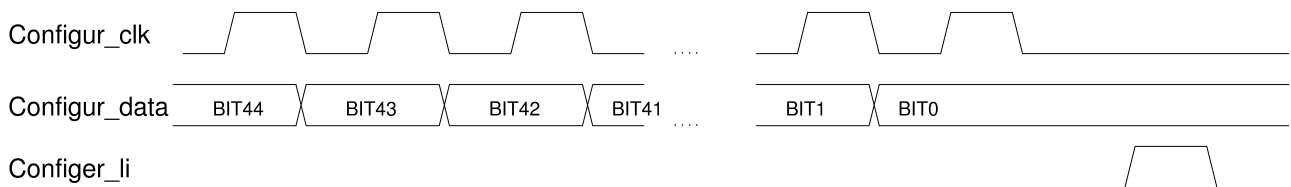
On the PCB there are 4 banana plugs for the power supplies, 0.1" pin headers for data signals (JP2, JP3, JP4 and JP6), and a Chip socket. For pin headers (JP2, JP3, JP4 and JP6) pins marked with red (pins on PCB edge side) are all ground pins, pins marked with blue are pins for i/o data. The table for all signals you should need:

Name on PCB	Function of signal
VDD	Supply for chip configuration logic, 1.2V
VDDE	Supply for chip pad ring, 1.8V
NOC_VDD_IN	Supply for NOC block on chip, 1.2V
GND	Ground
JP4-1	Data output from chip, R_Agent<0>
JP4-2	Data output from chip, R_Agent<1>
JP3-1	Data output from chip, credit_oLocal

JP3-2	Data output from chip, data_outLocal<0>
JP3-3	Data output from chip, data_outLocal<1>
JP3-4	Data output from chip, data_outLocal<2>
JP3-5	Data output from chip, data_outLocal<3>
JP3-6	Data output from chip, data_outLocal<4>
JP3-7	Data output from chip, data_outLocal<5>
JP3-8	Data output from chip, txLocal
JP2-1	Data input to chip, rxLocal
JP2-2	Data input to chip, InternalRun
JP2-3	Data input to chip, credit_iLocal
JP2-4	Data input to chip, data_inLocal<0>
JP2-5	Data input to chip, data_inLocal<1>
JP4-6	Data input to chip, data_inLocal<2>
JP4-7	Data input to chip, data_inLocal<3>
JP4-8	Data input to chip, data_inLocal<4>
JP6B-4	Data input to chip, data_inLocal<5>
JP6B-5	Data input to chip, reset
JP6B-6	Data input to chip, config_clk
JP6B-7	Data input to chip, config_data
JP6B-8	Data input to chip, config_li
JP6A-2	Data input to chip, NOC clock

2. Configuring chip

To configure the chip correctly signals config_clk(JP6B-6), config_data(JP6B-7) and config_li(JP6B-8) are used. Do not go over 5 MHz frequencies for configuring. Use the signals as shown:



After the configuration signals config_clk(JP6B-6), config_data(JP6B-7) and config_li(JP6B-8) need to stay low (GND) as long as the NOC is used. Here are the bit0 bit44 values in table:

Name	Value
BIT0	'0'
BIT1	'0'
BIT2	'0'
BIT3	'0'
BIT4	'1'
BIT5	'0'
BIT6	'0'
BIT7	'0'
BIT9	'0'
BIT10	'0'
BIT11	'0'
BIT12	'0'
BIT13	'0'
BIT14	'0'
BIT15	'1'
BIT16	'1'
BIT17	'1'
BIT19	'1'
BIT20	'1'
BIT21	'1'
BIT22	'1'
BIT23	'1'
BIT24	'1'
BIT25	'0'
BIT26	'0'
BIT27	'0'
BIT29	'0'
BIT20	'0'
BIT31	'0'
BIT32	'0'
BIT33	'0'
BIT34	'0'
BIT35	'0'
BIT36	'0'
BIT37	'0'
BIT39	'0'
BIT40	'0'
BIT41	'0'
BIT42	'0'
BIT43	'0'
BIT44	'0'

3. Using PBC and chip

Before using the pcb, put nuts and bolts to holes on PBC corners (i.e. to keep it elevated). After that the PBC will be on level with table and better to use. When using the board, events need to happen in this order:

A. Turn on all supplies

B. Configure Chip

C. Use the NOC block how you want