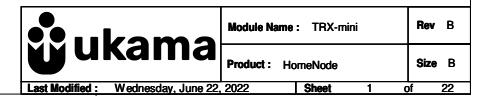
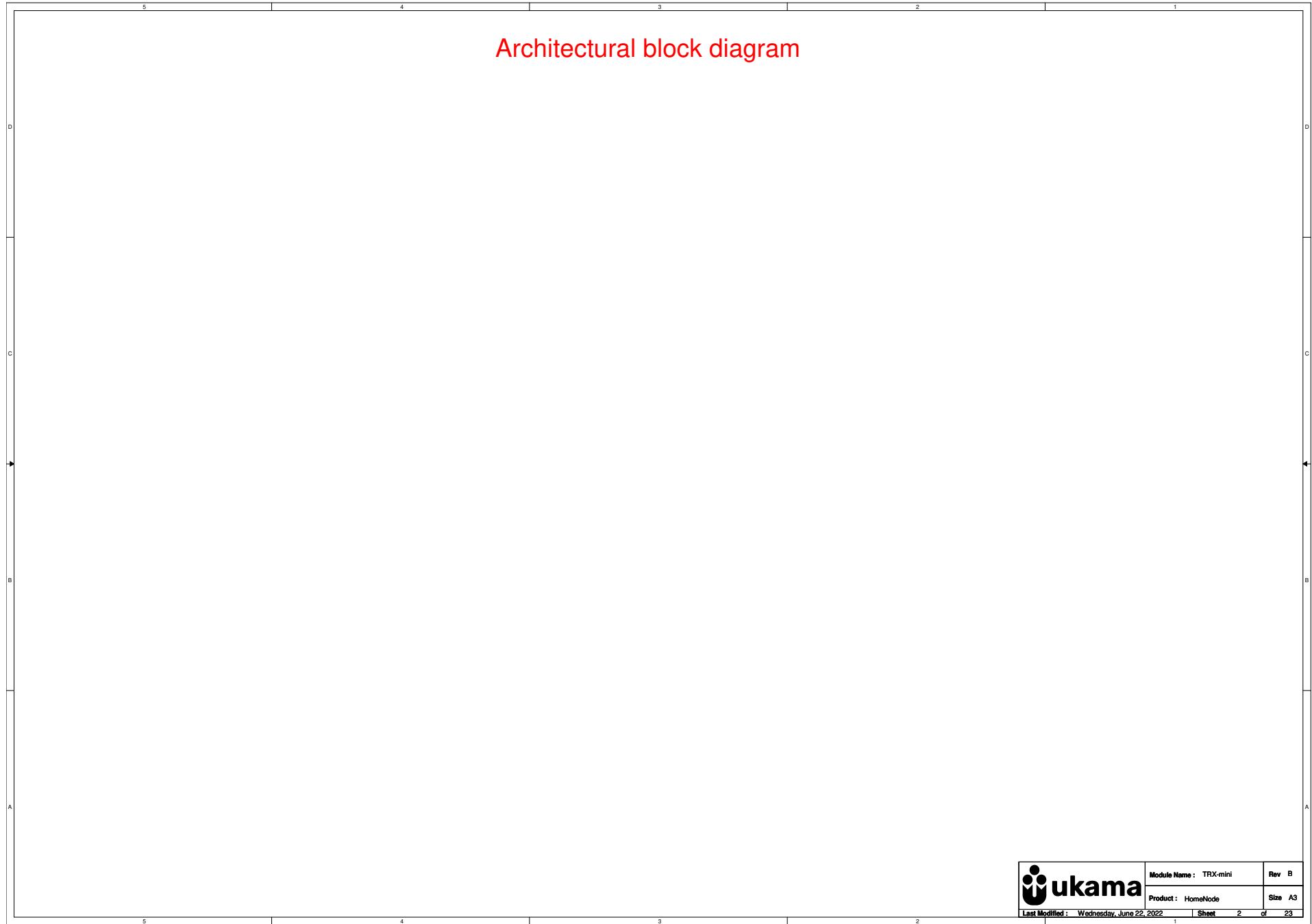
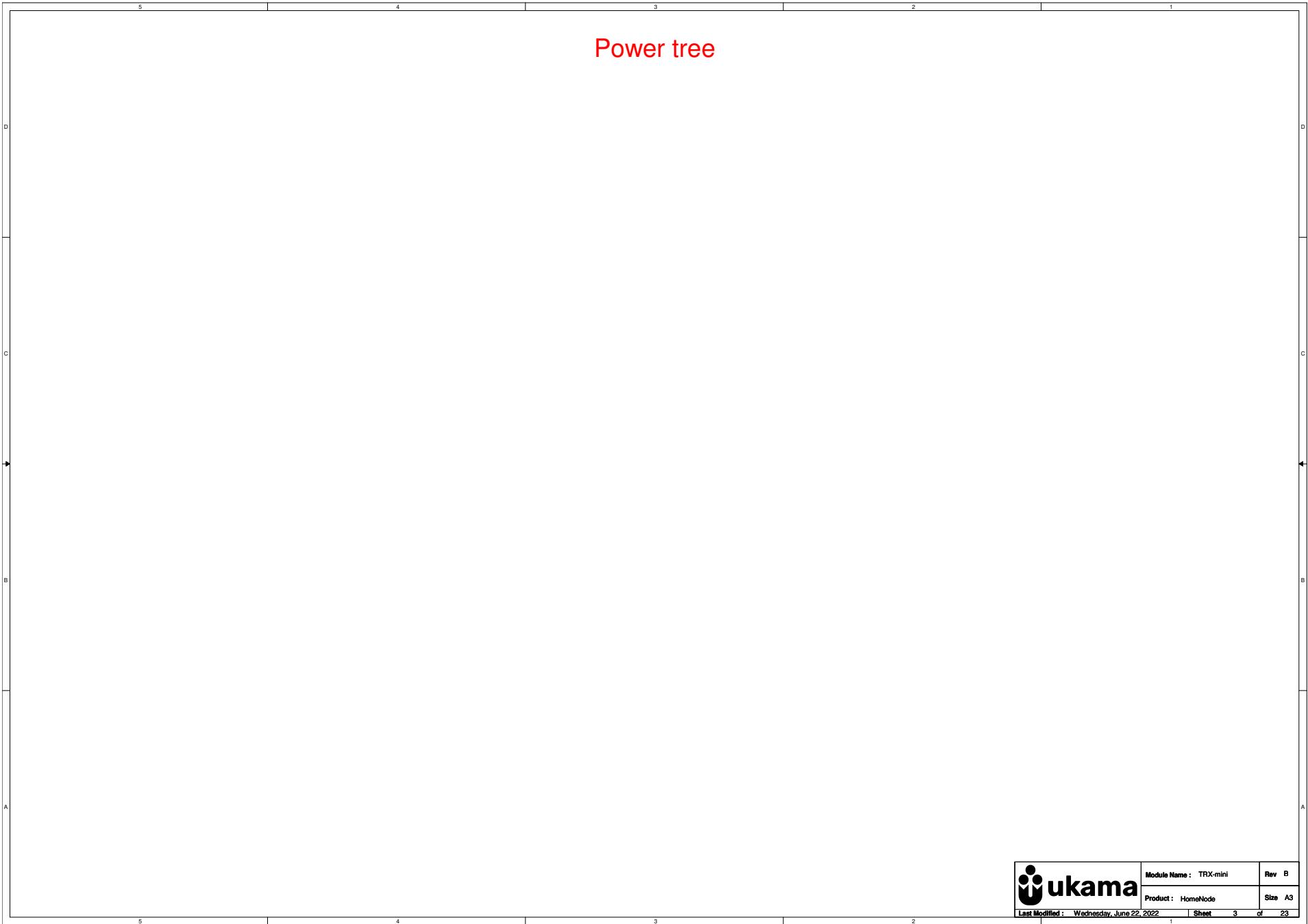


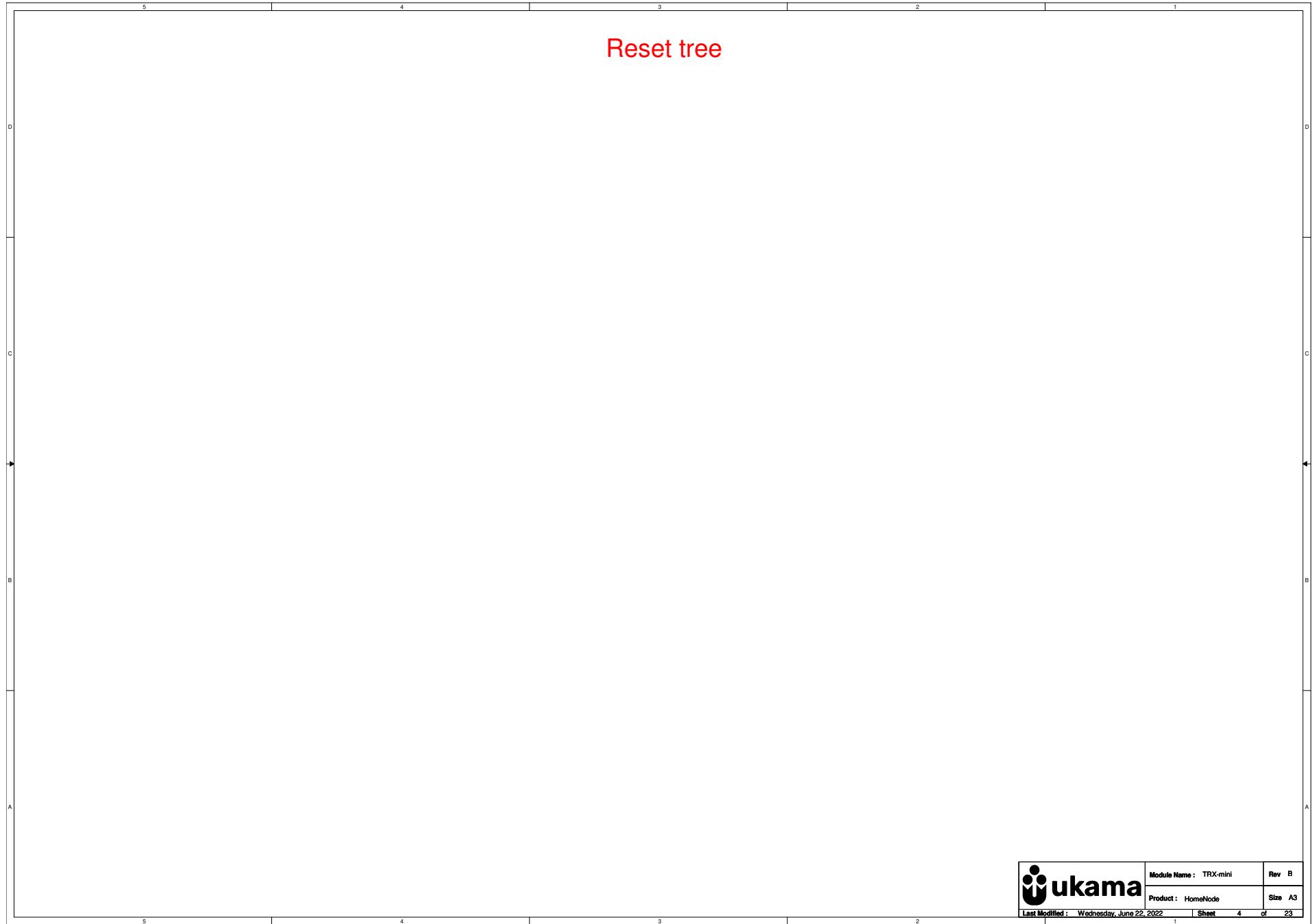
Product name: HomeNode
Module name: mini-TRX
R E V I S I O N B

PAGE	DESCRIPTION
1	Table of Contents
2	Architectural Block Diagram
3	Power tree
4	Reset tree
5	Input power protection
6	System Power supplies
7	SoC Power Enable & Clock
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9	Reset
10	SoC Config & JTAG
11	SoC Boot, GPIO, UART & Flash
12	SoC DDR
13	SoC SERDES & RF Interface
14	SoC Decoupling
15	Ethernet Switch
16	Ethernet Switch Power Supplies
17	Temperature Sensor & EEPROMs
18	eMMC
19	RFIC Interface & Power
20	RGB LED Driver
21	RJ45 Connector
20	FE board connector

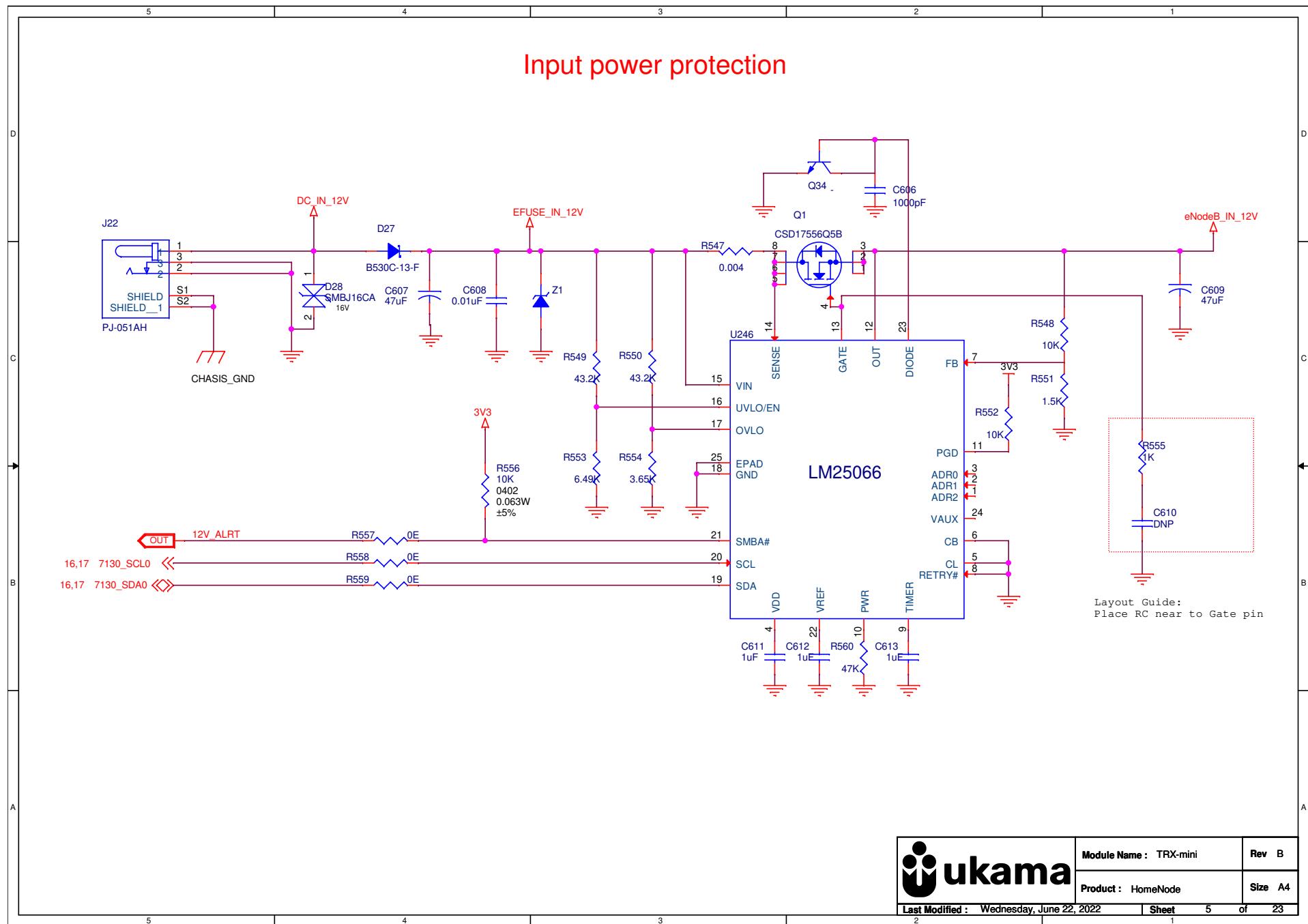








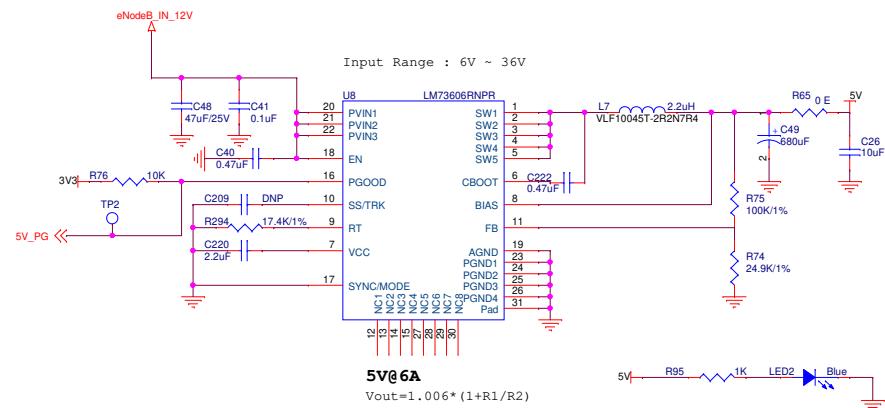
Input power protection



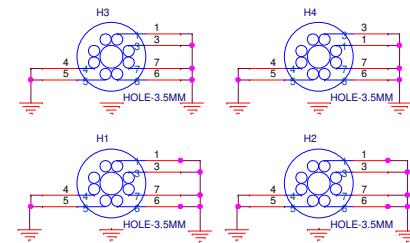
 ukama	Module Name : TRX-mini	Rev B
	Product : HomeNode	Size A4
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System power supplies

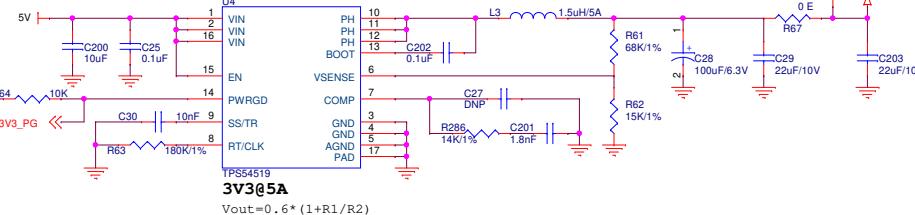
5V Buck converter



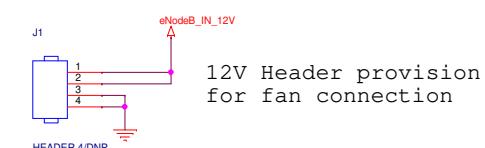
Mounting holes



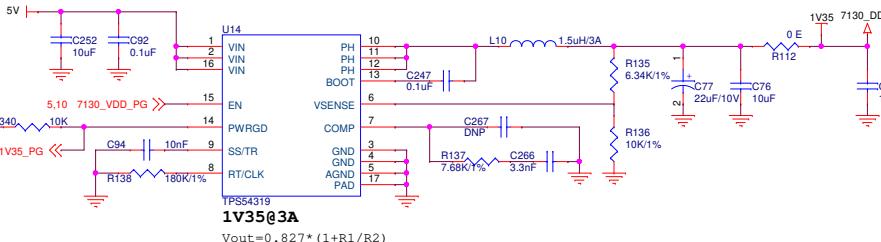
3.3V Buck converter



Fan connector

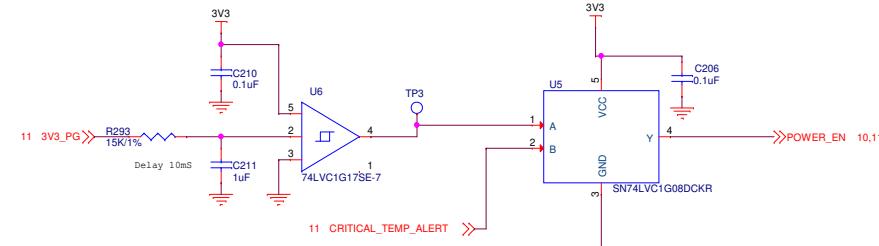


1.35V Buck converter

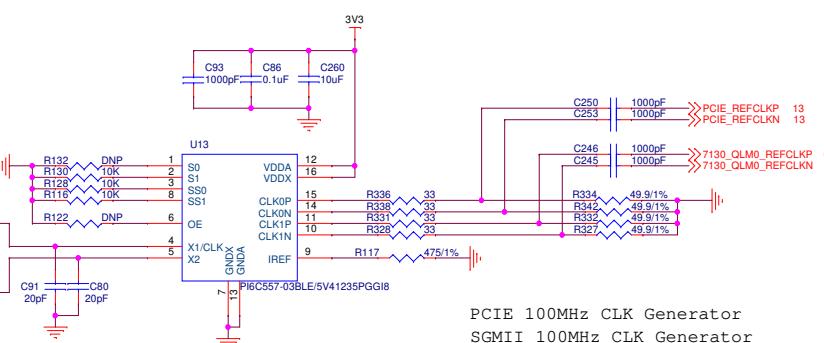


SoC Power enable & Clock

SoC Power enable



SERDES/PCIe Clock generator

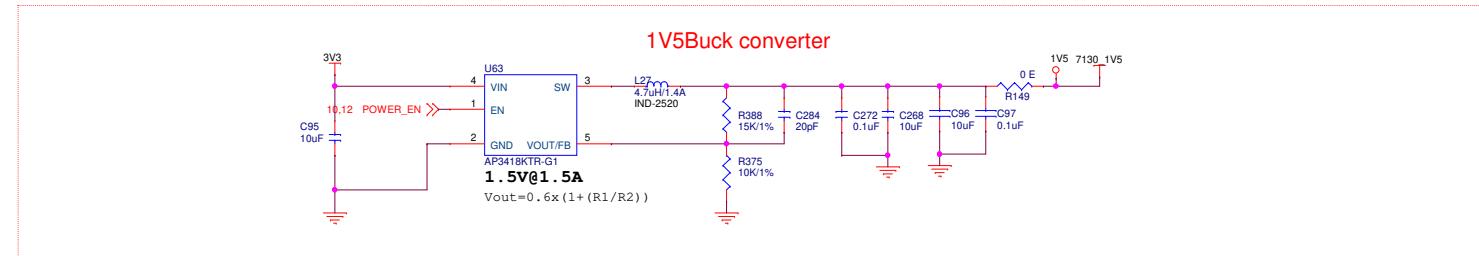
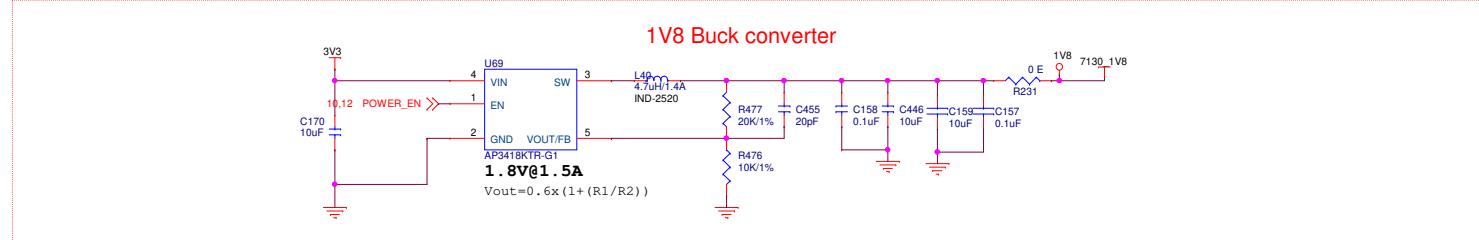
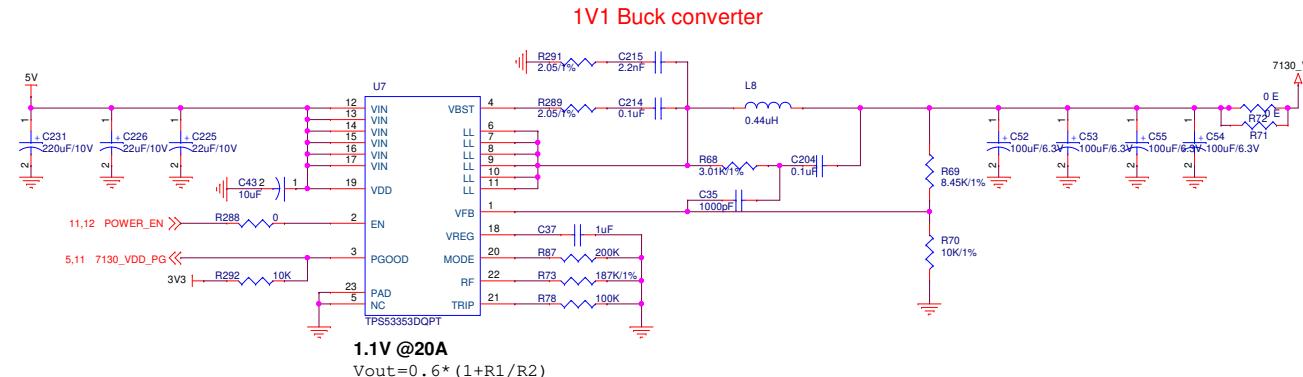


PCIE 100MHz CLK Generator
SGMII 100MHz CLK Generator

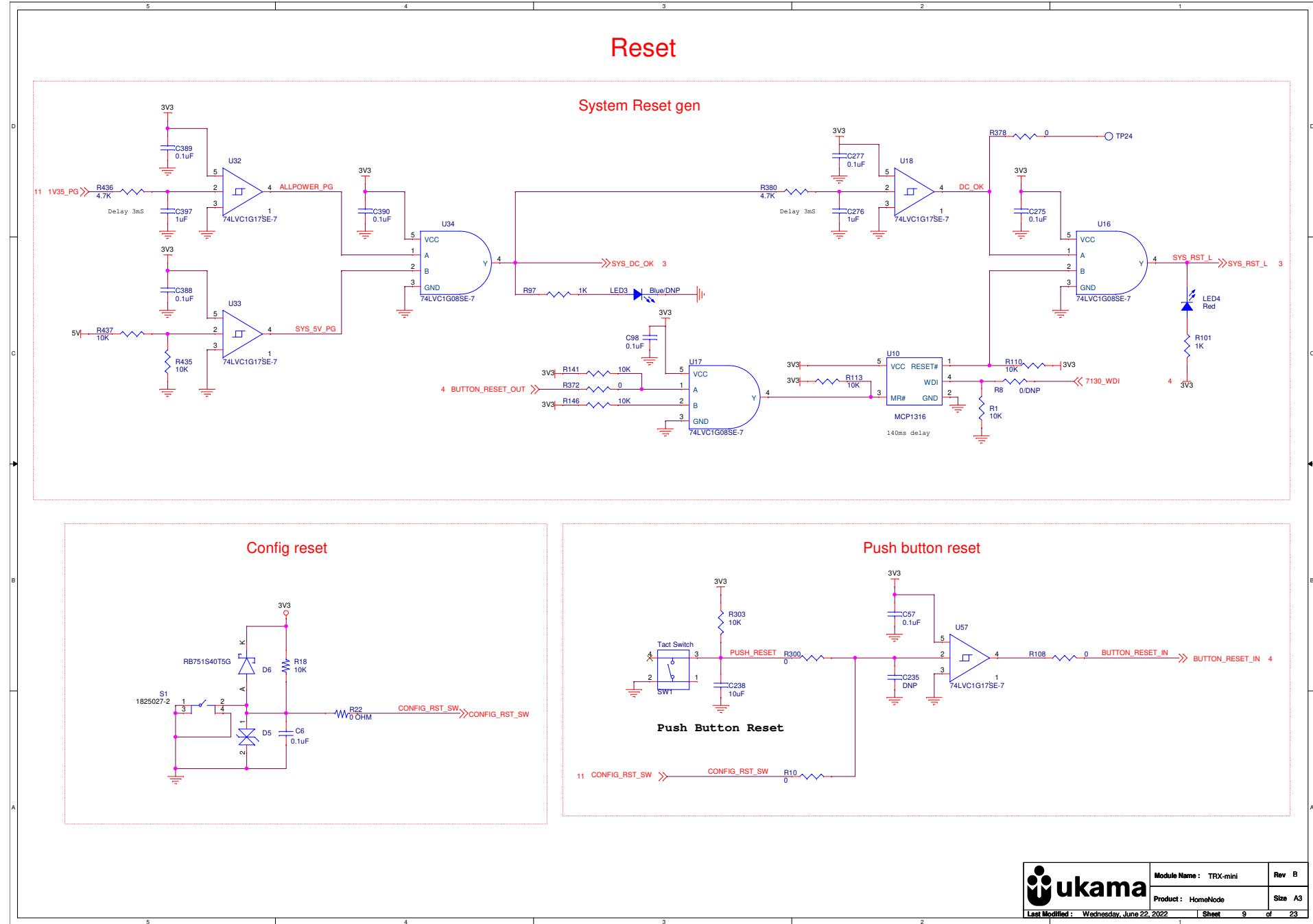
S1	S0	CLK
0	0	25
0	1	100
1	0	125
1	1	200

SS1	SS0	Spread
0	0	No Spread
0	1	Down-0.5
1	0	Down-0.75
1	1	No Spread

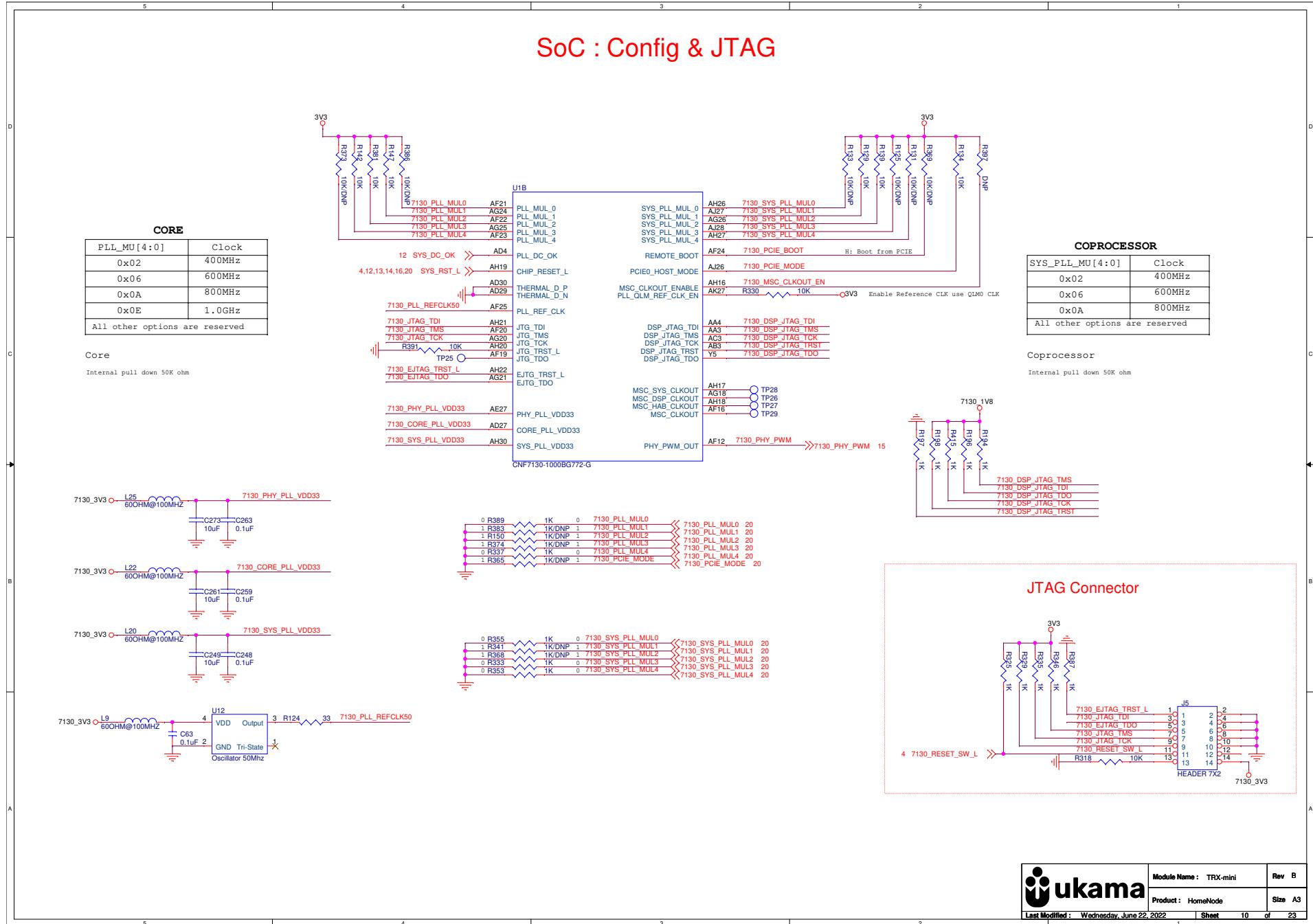
SoC Power



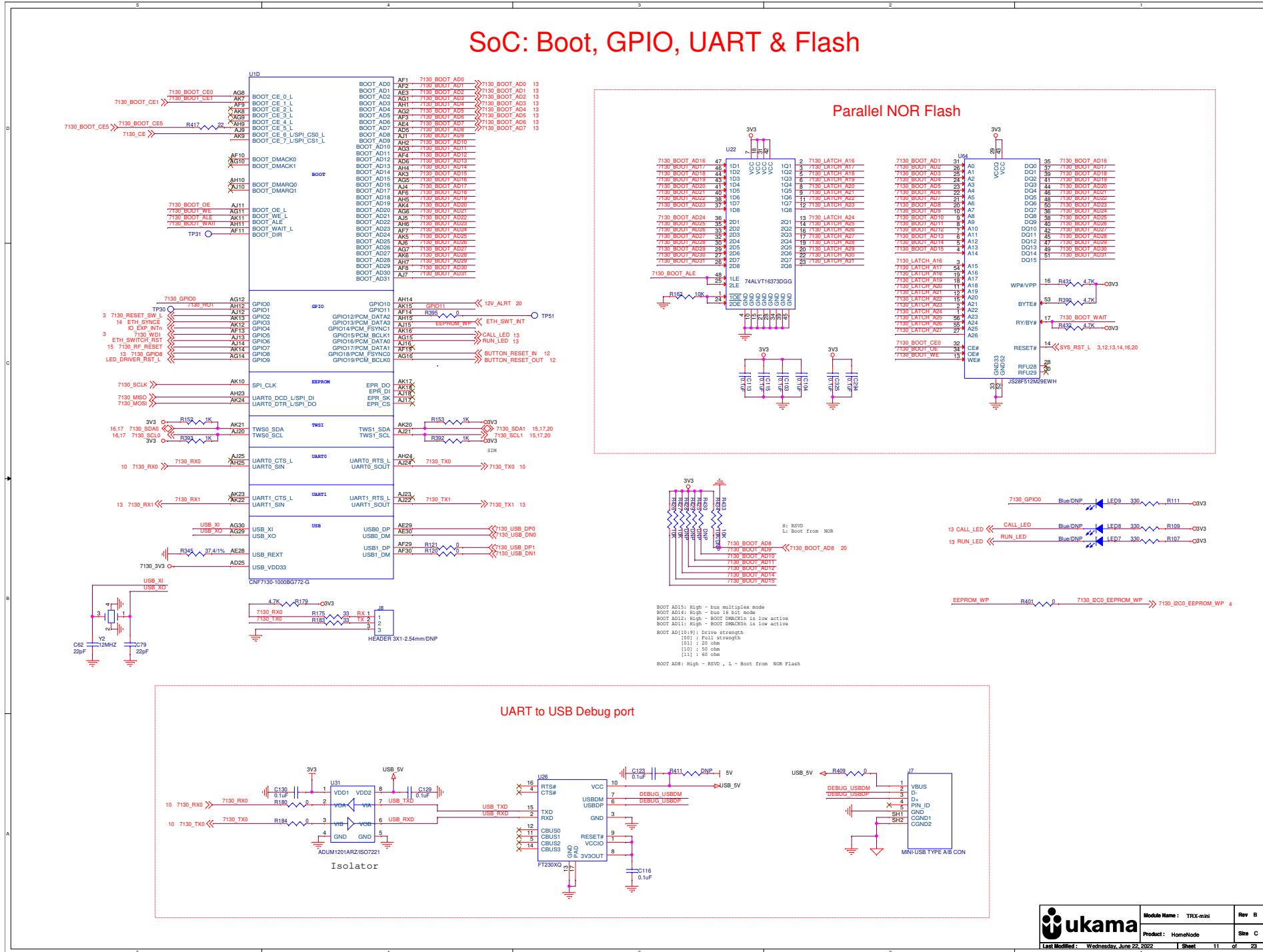
Reset



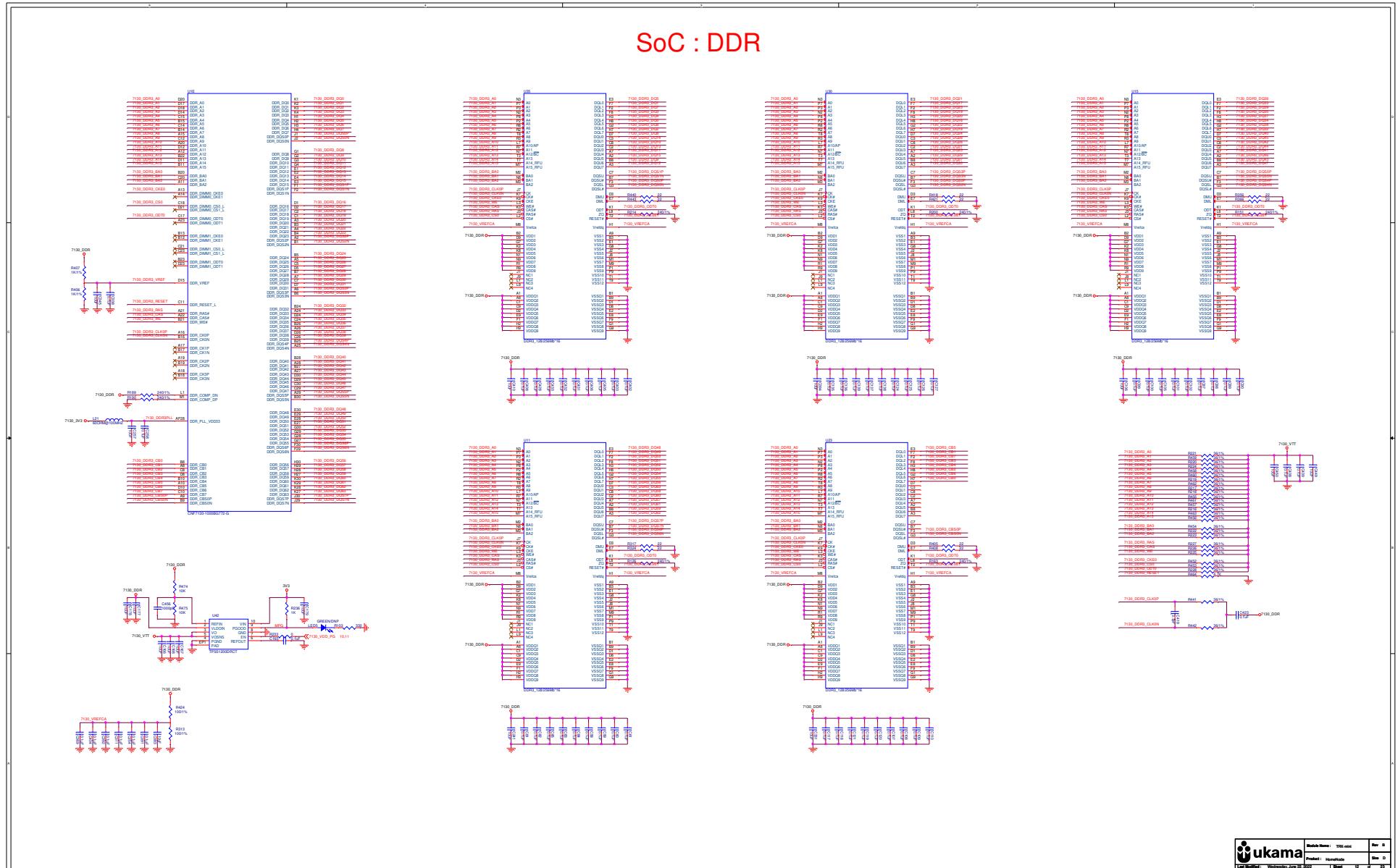
SoC : Config & JTAG



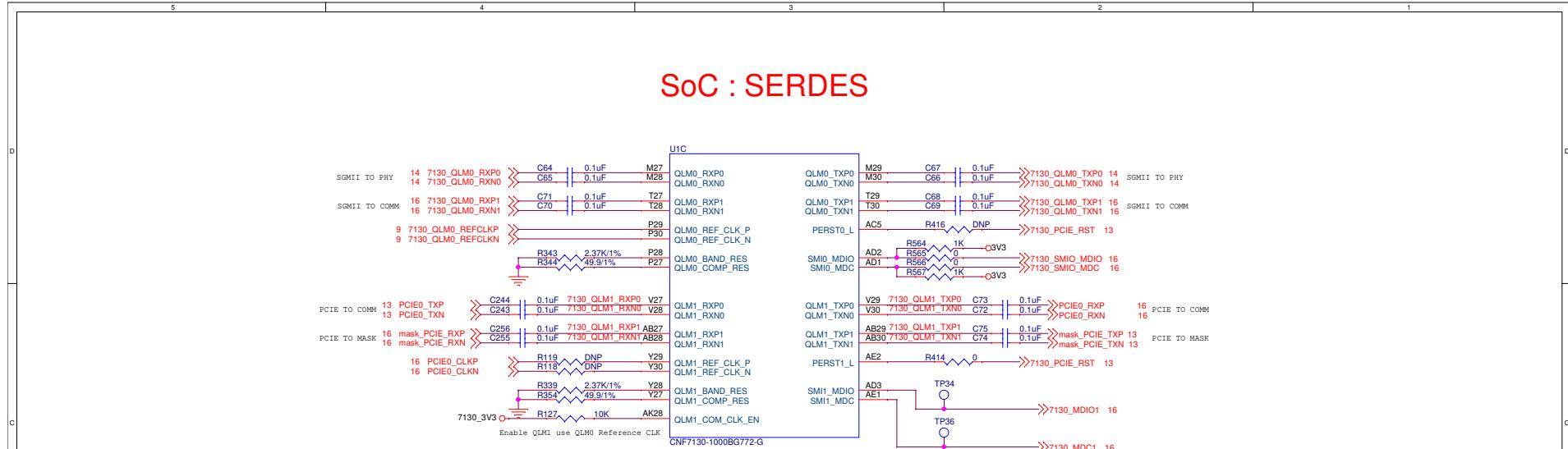
SoC: Boot, GPIO, UART & Flash



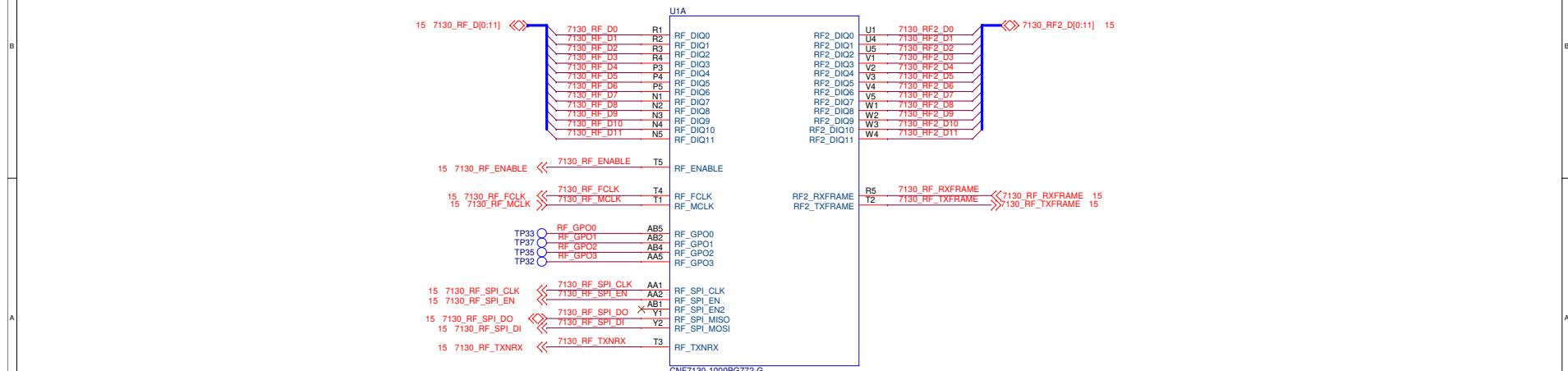
SoC : DDR



SoC : SERDES

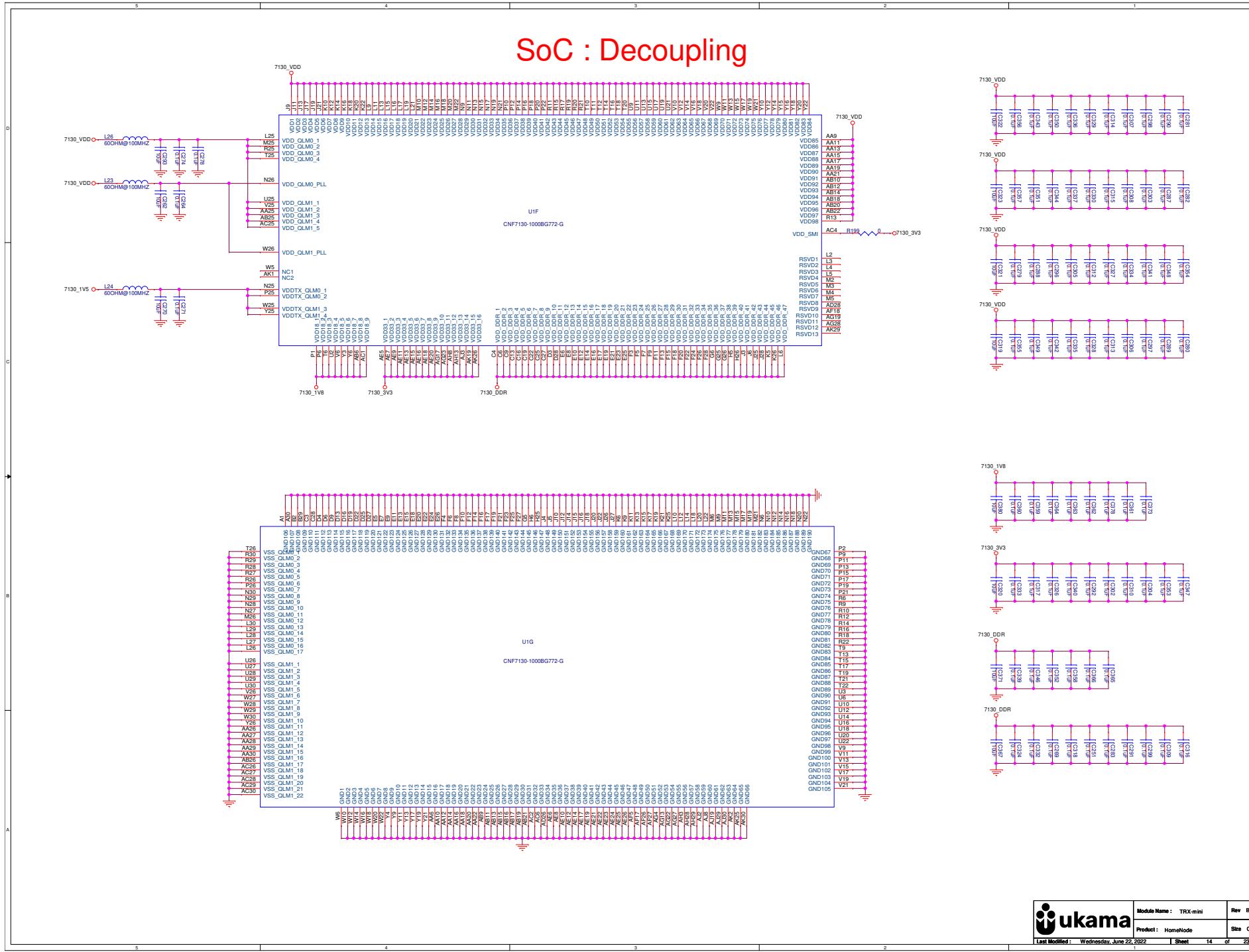


SoC : RF Interface

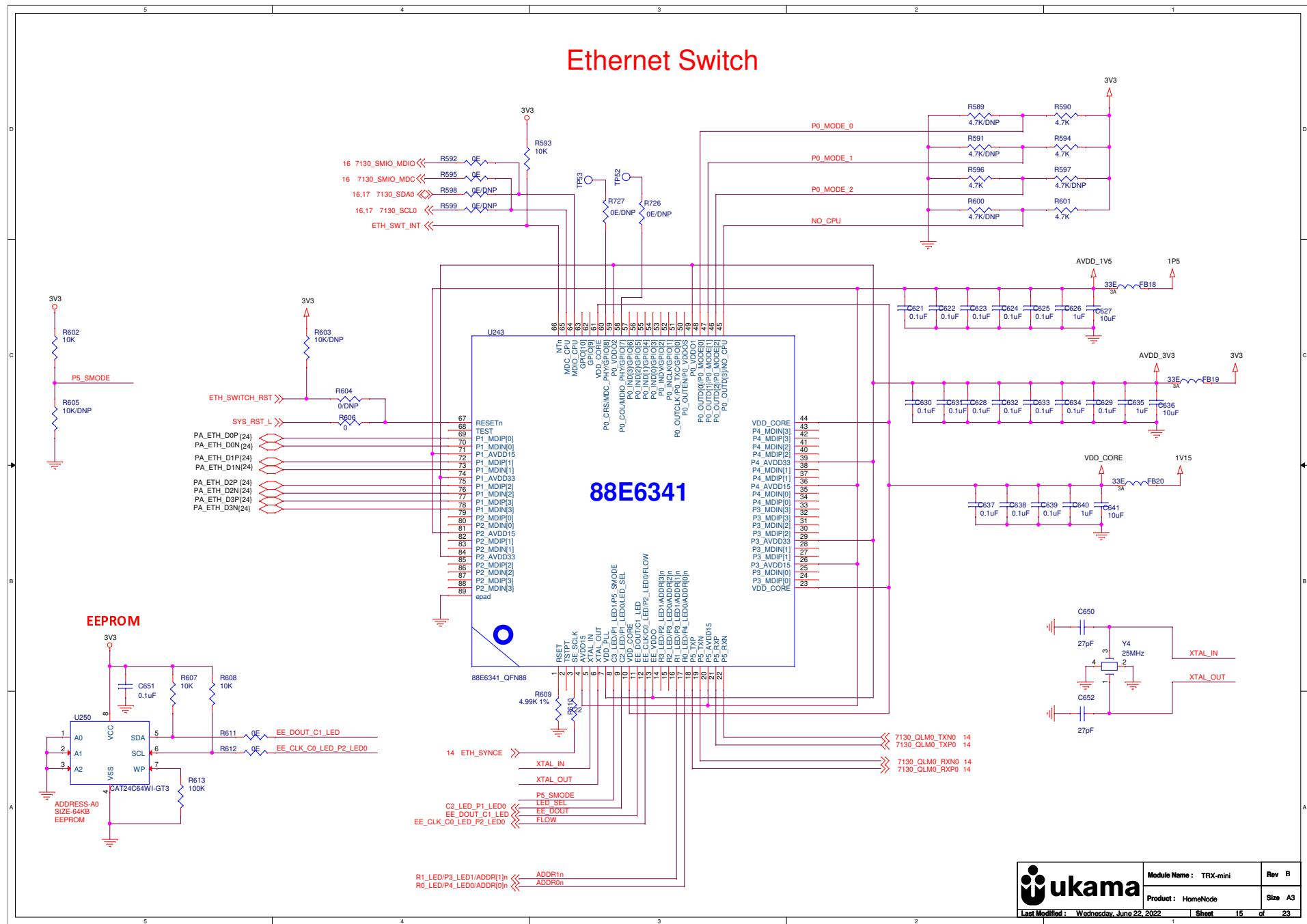


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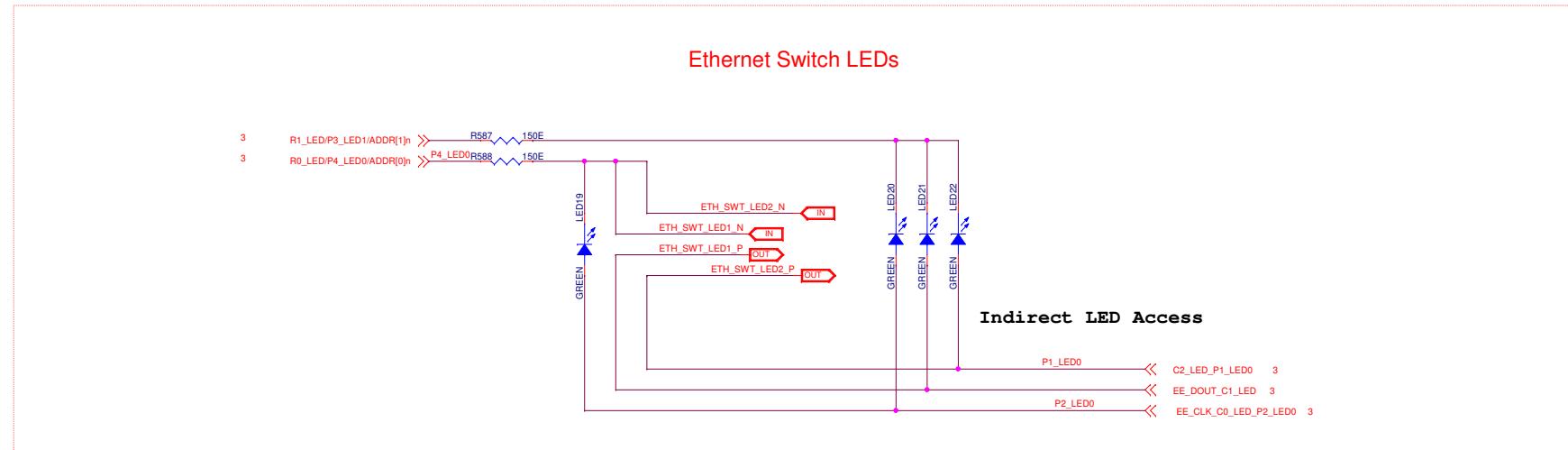
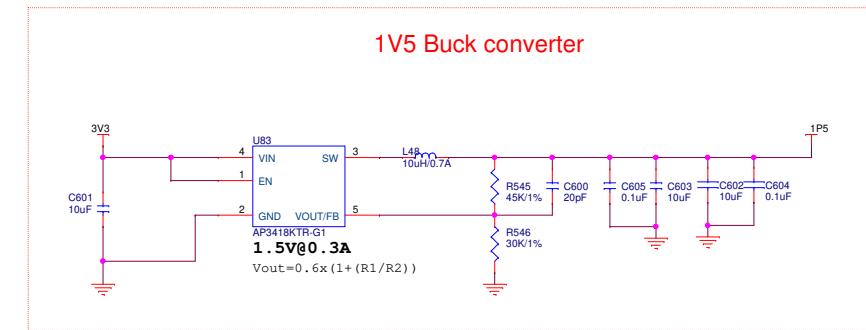
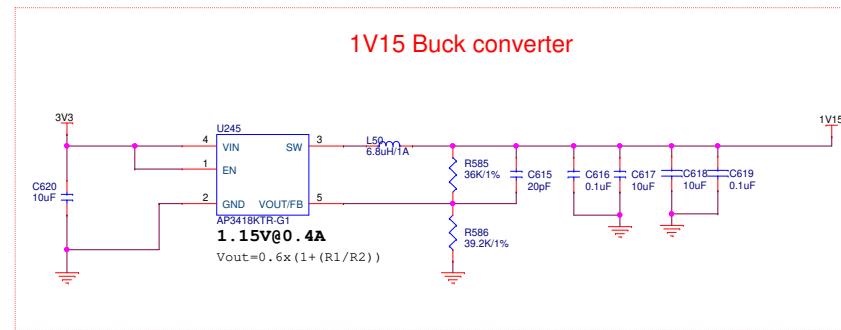
SoC : Decoupling



Ethernet Switch

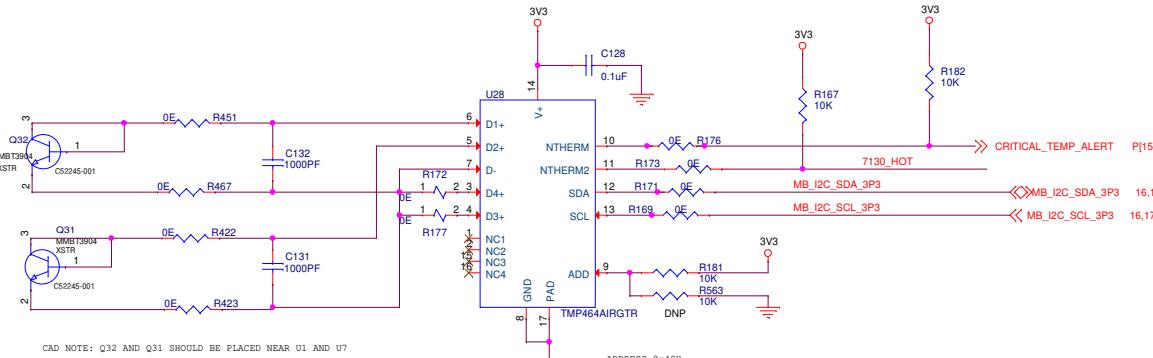


Ethernet Switch Power supplies & LEDs

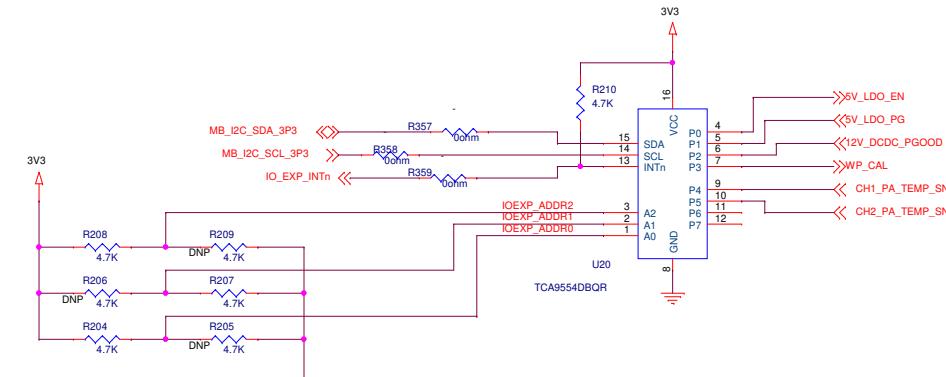


Temperature Sensor, EEPROM & I/O Expander

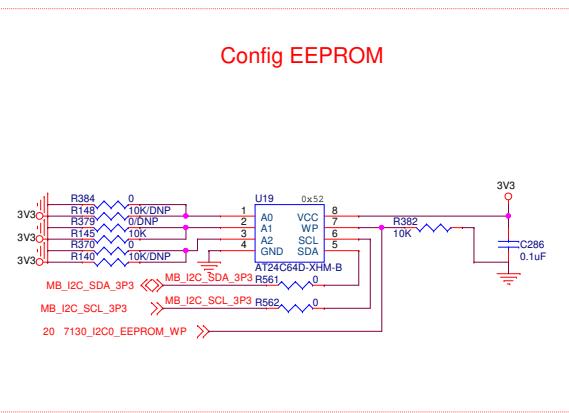
Temperature sensor



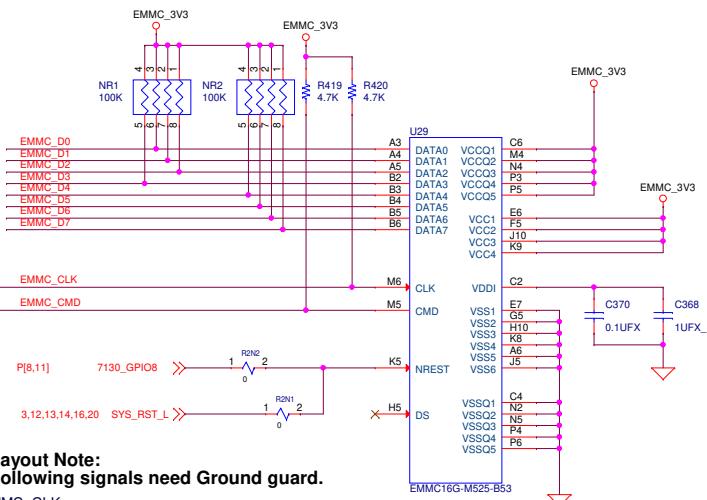
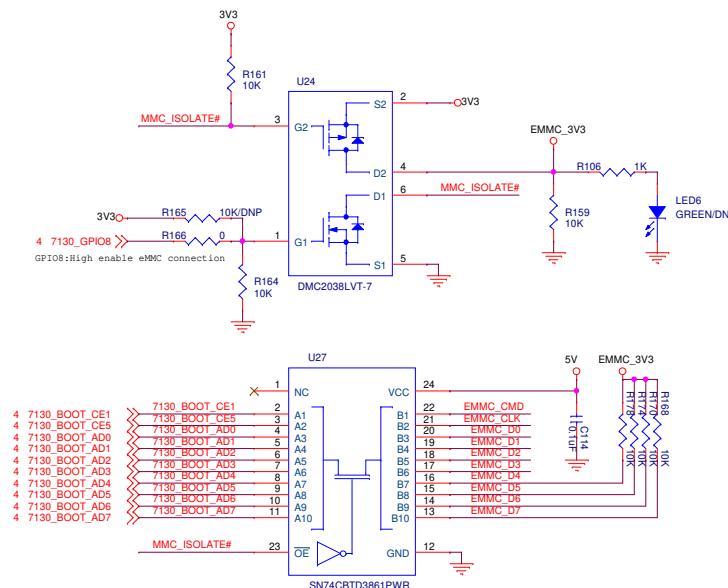
I/O Expander



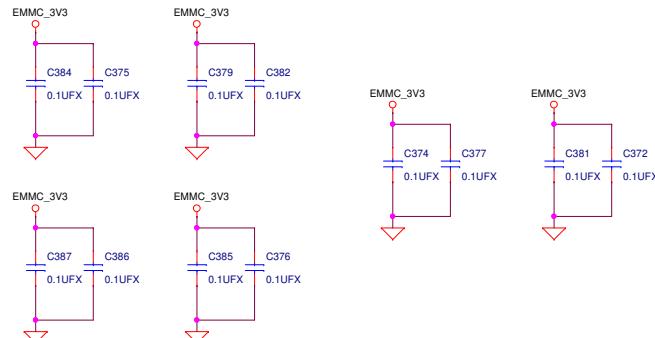
Config EEPROM



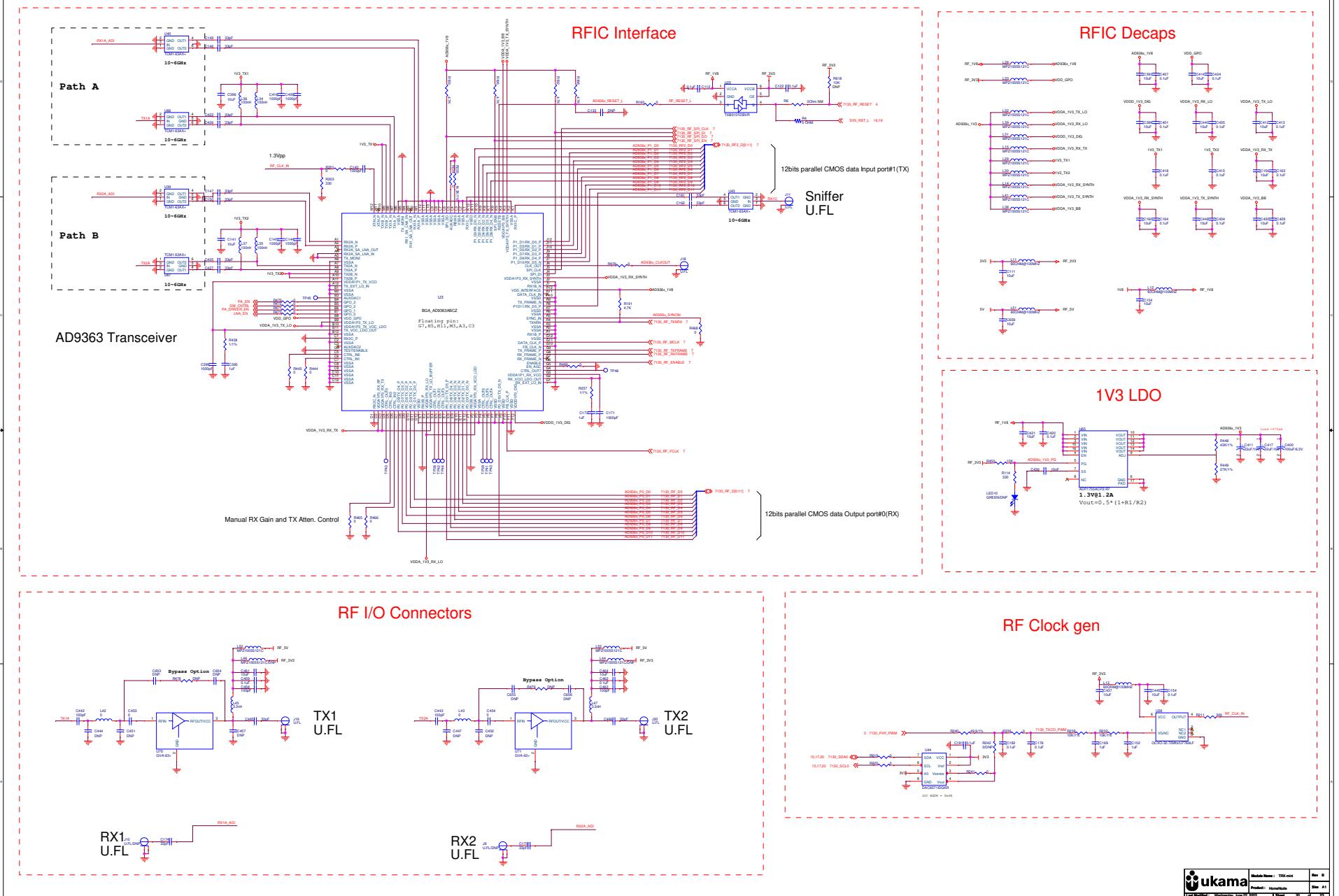
eMMC



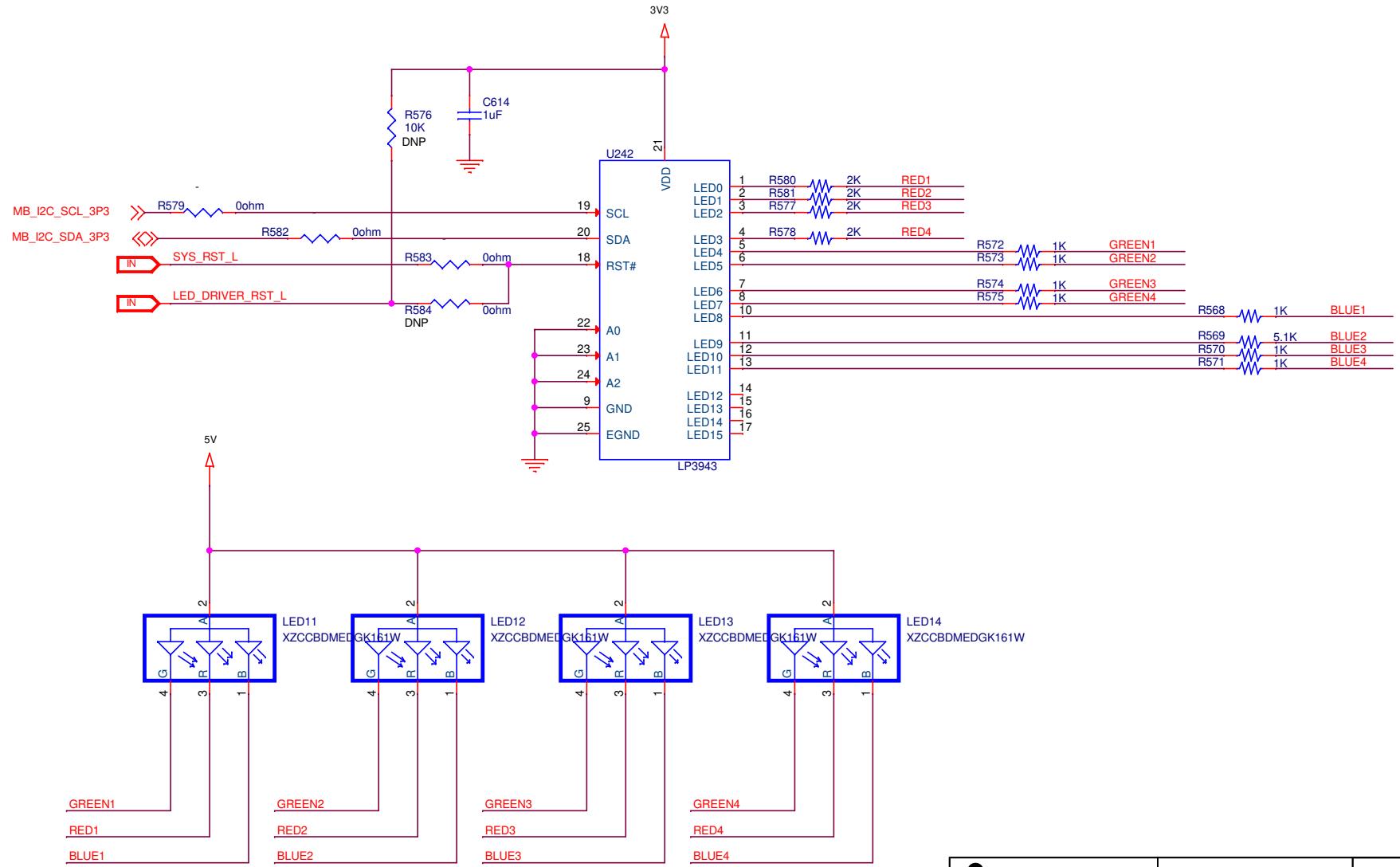
Layout Note:
Following signals need Ground guard.



RFIC Interface & Power



RGB LEDs



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RJ45 Connector

