CZ DOMAIN REGISTRY

Router TURRIS

Description of connectors and DIP switches

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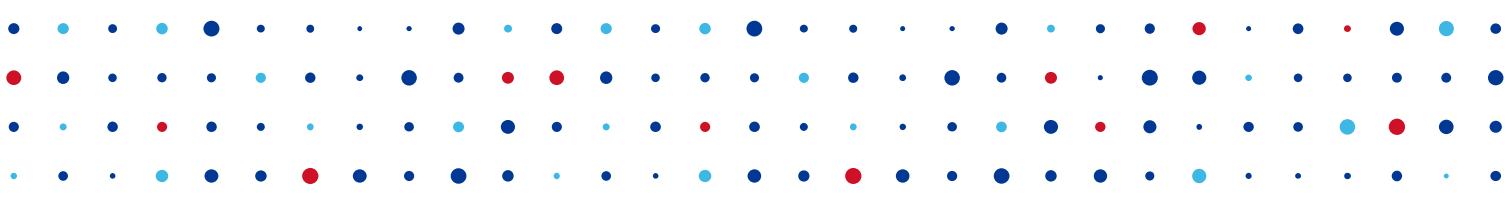
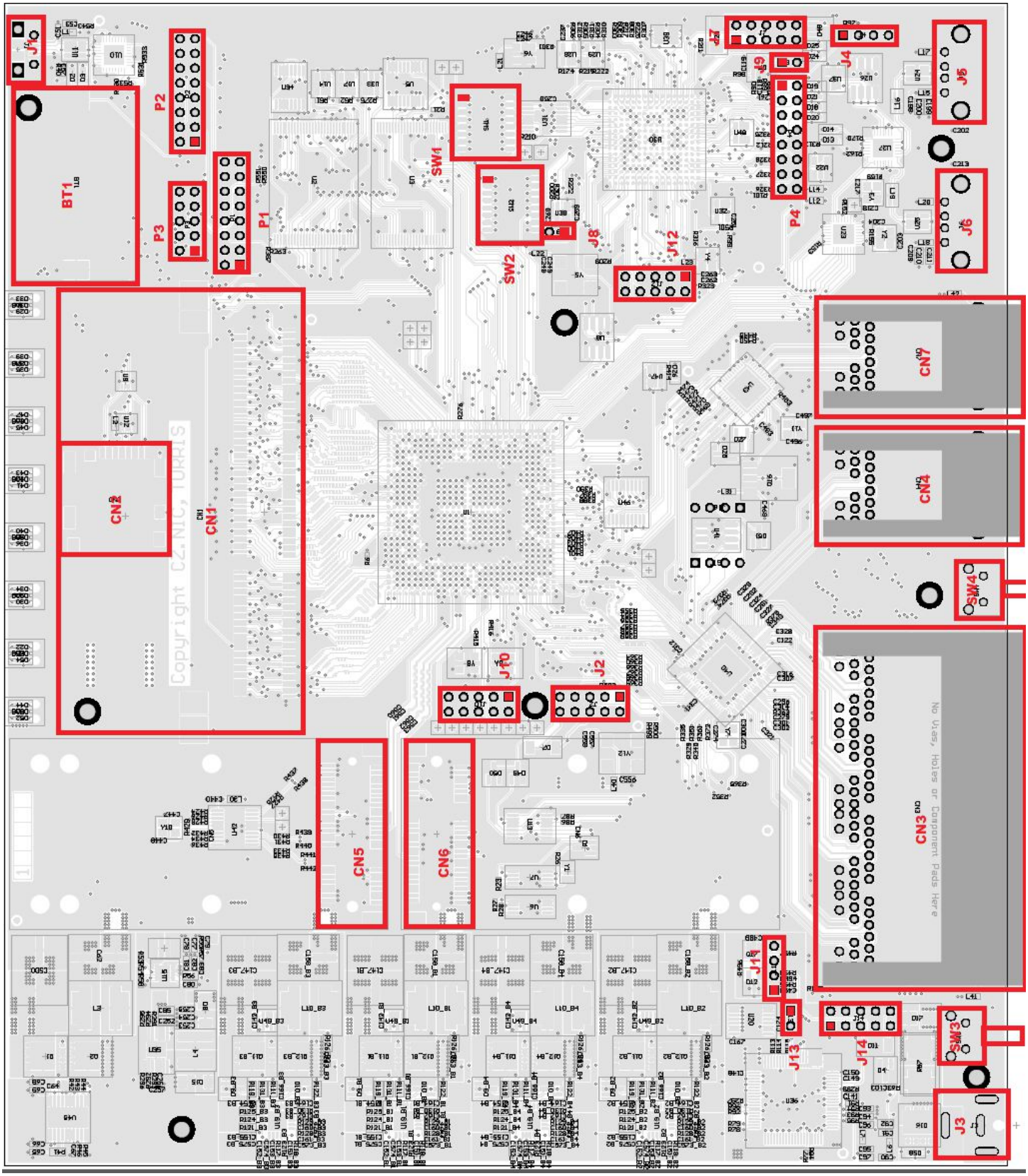
v1.2 9.6.2014



1. PCB layout


J1
BT1
P2
P3
P1
SW1
SW2
J8
J12
J7
J9
P4
J4
J5
J6
CN7
CN4
SW4
CN2
CN1
J10
J2
CN5
CN6
CN3
J11
J13
J14
SW3
J3

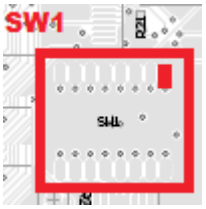
2. Connectors and DIP switches

BT1	battery holder CR2032
CN1	DDR3 SODIMM
CN2	micro SD card
CN3	Ethernet LAN ports 2 to 5
CN4	Ethernet LAN port 1
CN5	mini PCIe
CN6	mini PCIe
CN7	Ethernet WAN port
J1	micro USB debug console
J3	Power supply 7,5V

J5	USB2

J6	USB1

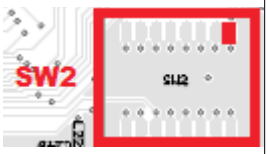
SW1 — FREQUENCY AND BOOT LOCATION



SW1[1:6]	CPU FREQ.	PLATFORM FREQ.	DDR FREQ.	BOOT
011110	800	400	667	NOR
101110	800	400	800	NOR
001110	1000	500	667	NOR
110110	1000	500	800	NOR
100110	1200	600	667	NOR
000110	1200	600	667	SD/MMC
111010	1200	600	800	NAND
011010	1200	600	800	SD/MMC
101010	1200	600	800	PCIE2
001010	1200	600	800	SPI
110010	1200	600	800	NOR

SW1[7]	LGPL (CFG_BOOT_SEQ[1])	Indicates wheather the boot sequencer is enabled during boot=up	OFF: Enables boot sequencer and information loaded from I2C ROM ON: Disables boot sequencer
SW1[8]	FBANK_SELECT	Indicates which NOR bank is selected	OFF: Uses upper 4 sectors for booting ON: Uses middle 4 sectors for booting

SW2	Configuration options

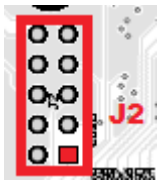


SW2[1]	CFG_WIDTH	Not used	
SW2[2]	LA18 (cfg_host_agt[1])	Controls the setting of the cfg_host_agt[1] pin	ON: cfg_host_agt[1] = 1 OFF: cfg_host_agt[1] = 0
SW2[3]	DMA1_DACK_N		Must be set ON for P2020
SW2[4]	LA19 (cfg_host_agt[2])	Controls the setting of the cfg_host_agt[2] pin	ON: cfg_host_agt[2] = 1 OFF: cfg_host_agt[2] = 0
SW2[5]	USB1_STP		Must be set ON for P2020
SW2[6]	TEST_SEL	TEST mode selection	ON: Normal operation OFF: TEST mode
SW2[7]	PCIE_SEL	Not used	
SW2[8]	LWE1_N (cfg_host_agt[0])	Controls the setting of the cfg_host_agt[0] pin	ON: cfg_host_agt[0] = 1 OFF: cfg_host_agt[0] = 0

SW3	RESET push button

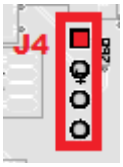
SW4	LED INTENSITY push button

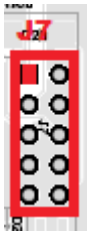
J2	I2C1 PROGRAMMING CONNECTOR



1 I2C1_SCL
2 GND
3 PMB_CNTRL
4 GND
5 I2C1_SDA
6 3V30 CPLD
7 GPIO9/PMB_ALERTn
8 GND
9 EXTERNAL I2C1 DISCONNECT

	10 3V30 CPLD DIODE

J4	CPU FAN
	1 Power supply (7,5V) 2 TACHO 3 PWM 4 GND

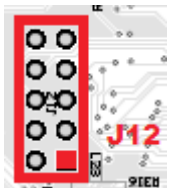
J7	CPLD JTAG interface
	1 TCK 2 GND 3 TMS 4 GND 5 TDI 6 3V30_CPLD 7 TDO 8 GND 9 - 10 3V30_CPLD DIODE

J8	RESET BUTTON JUMPER
	1 GND 2 RESET

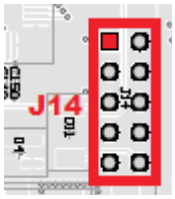
J9	Bypass
	1 C_P_BPS_OUT0 2 C_BPS_OUT0

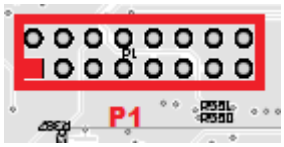
J10	CPU 1588
	1 - 2 GND 3 CPU_1588_CLK_IN 4 CPU_1588_PULSE_OUT2 5 CPU_1588_PULSE_OUT1 6 CPU_1588_CLK_OUT 7 CPU_1588_TRIGIN2 8 CPU_1588_ALARM_OUT1 9 CPU_1588_TRIGIN1 10 CPU_1588_ALARM_OUT2

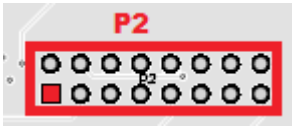
J11	POWER SUPPLY FAN
	1 POWER SUPPLY (7,5V) 2 TACHO 3 PWM 4 GND

J12	CPLD not used signals
	1 3V30 CPLD 2 X2JTAG TCK 3 CFG_STROBE2 4 X2JTAG TMS 5 CFG_STROBE2A 6 X2JTAG TRST 7 X2JTAG TDI 8 XRESET# 9 X2JTAG TDO 10 GND

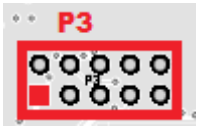
J13	POWER SUPPLY JTAG ENABLE
	1 GND 2 PM_ADDSENS0

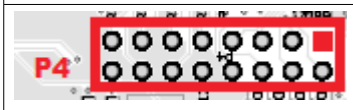
J14	POWER SUPPLY JTAG
	1 TCK 2 GND 3 TMS 4 GND 5 TDI 6 3V30 PMB 7 TDO 8 GND 9 TRCK 10 3V30 PMB DIODE

P1	UART1, SPI, I2C2
	1 3V30 PE 2 CPU_SPI_MOSI 3 CPU_UART1_SIN 4 CPU_SPI_MISO 5 CPU_UART1_SOUT 6 CPU_SPI_CLK 7 CPU_UART1_CTSn 8 CPU_SPI_CSN0_N 9 CPU_UART1_RTSn 10 CPU_SPI_CSN1_N 11 CPU_I2C2_SDA 12 CPU_SPI_CSN2_N 13 CPU_I2C2_SCL 14 CPU_SPI_CSN3_N 15 SDWIDTH 16 GND

P2	CPU JTAG
	1 CPU_TDO 2 3 CPU_TDI 4 COP_TRST_N 5 PE_COP_RUNSTOP 6 PE_COP_VSENSE 7 CPU_TCLK 8 CKSTP_IN_N

	9 CPU_TMS 10 - 11 COP_SRST_N 12 GND 13 COP_HRST_N 14 - 15 CKSTPOUT_N 16 GND

P3	GPIO SIGNALS
	1 3V30 PE 2 GPIO15 3 GPIO0 4 GPIO6 5 GPIO1 6 GPIO5 7 GPIO2 resistor 8 GPIO4 9 GPIO3 10 GND

P4	CPLD not used signals
	1 3V30 CPLD 2 C_TDM_CLK_SLIC1 3 C_TDM_LA# 4 C_TDM_CLK_SLIC2 5 C_CFG_CPU_VDD0

	6 C_PCIE_SEL 7 C_CFG_CPU_VDD1 8 C_RGMII_RST# 9 C_IIC2CTL1 10 C_BPSOUT0 11 C_IIC2CTL2 12 C_QESPI IIC2# 13 C_IIC2CTL3 14 C_TDM0 UART1# 15 C_IIC2CTL4 16 GND