Перв. примен.

Справ. N°

Подп. и дата

Инв.N°дубл.

Взам.инв.N°

Подп. и дата

Инв.N°подл.

Схема внешних соединений

CPU

File: CPU.sch
Memory

File: Memory.sch
Power_CPU

File: Power_CPU.sch
eMMC

File: eMMC.sch
LCD_DSI

File: LCD_DSI.sch
Video_Camera

File: Video_Camera.sch
CPU_Blocking_Capacitors

File: CPU_Blocking_Capacitors.sch
CPU_GND

File: CPU_GND.sch
QSPI

File: QSPI.sch
Audio

File: Audio.sch
Touch_Panel

File: Touch_Panel.sch
Unused_Blocks_CPU

File: Unused_Blocks_CPU.sch

1892BA018, CPU Sheet
- UDM0_N — BC12/DM0 — Y109
- UDP0_P — BD12/DP0 — Y110
- UDM1_N — BC19/DM1 — Y105
- UDP1_P — BD10/DP1 — Y106
- L1 330R/1.2A — HPCOM — Y102
- GND

Audio Sheet
- HPL_OUT — PIN 27/OUT_L — Y104
- HPR_OUT — PIN 30/OUT_R — Y103

Touch Panel Sheet
- LRADC0 — PIN 11/VBAT — Y100
- LRADC1 — PIN 12/AUX — Y101
- TPX1 — PIN 6/X+ — Y94
- TPX2 — PIN 8/X− — Y92
- TPY1 — PIN 7/Y+ — Y96
- TPY2 — PIN 9/Y− — Y95

Audio Sheet
- VMIC — PIN12 — Y99
- MIC2_IN — PIN 13 — Y98
- MIC1_IN — PIN 14 — Y97

PWRGD_RST — BD31/NRST_PON — Y19

LAN78XX, CPU Sheet
- RGMII0_RXD3 — BA8/RXD3 — Y50
- RGMII0_RXD2 — BB8/RXD2 — Y51
- RGMII0_RXD1 — BC8/RXD1 — Y52
- RGMII0_RXD0 — BD8/RXD0 — Y53
- RGMII0_TXD3 — BA9/TXD3 — Y57
- RGMII0_TXD2 — BB9/TXD2 — Y56
- RGMII0_TXD1 — BC9/TXD1 — Y55
- RGMII0_TXD0 — BD9/TXD0 — Y54
- RGMII0_RXCTL — AW8/RXCTL — Y48
- RGMII0_RXC — AY8/RXC — Y49
- RGMII0_TXCTL — AW9/TXEN — Y59
- RGMII0_TXC — AY9/TXC — Y58
- RGMII0_MDC — BB5/MDC — Y46
- RGMII0_MDIO — BC5/MDIO — Y47

1892BA018, CPU Sheet
- I2C0_SDA — BD32/I2C0_SDA — Y22
- I2C0_SCK — BA33/I2C0_SCK — Y23
- I2C1_SDA — BB19/I2C1_SDA — Y24
- I2C1_SCK — BB16/I2C1_SCK — Y25
- I2C2_SDA — BC19/I2C2_SDA — Y26
- I2C2_SCK — BB17/I2C2_SCK — Y27
- UART0_TX — AY18/UART0_TX — Y28
- UART0_RX — BD17/UART0_RX — Y29

LCD DISPLAY, LCD DSI Sheet
- LCD_D0 — C24/LCD_B0 — Y90
- LCD_D1 — A21/LCD_B1 — Y89
- LCD_D2 — D21/LCD_B2 — Y88
- LCD_D3 — A22/LCD_B3 — Y87
- LCD_D4 — F22/LCD_B4 — Y86
- LCD_D5 — B21/LCD_B5 — Y85
- LCD_D6 — D22/LCD_B6 — Y84
- LCD_D7 — A23/LCD_B7 — Y83
- LCD_D8 — D23/LCD_G0 — Y82
- LCD_D9 — B22/LCD_G1 — Y81
- LCD_D10 — D24/LCD_G2 — Y80
- LCD_D11 — C21/LCD_G3 — Y79
- LCD_D12 — E22/LCD_G4 — Y78
- LCD_D13 — B23/LCD_G5 — Y77
- LCD_D14 — F23/LCD_G6 — Y76
- LCD_D15 — A24/LCD_G7 — Y75
- LCD_D16 — E23/LCD_R0 — Y74
- LCD_D17 — C23/LCD_R1 — Y73
- LCD_D18 — E24/LCD_R2 — Y72
- LCD_D19 — C22/LCD_R3 — Y71
- LCD_D20 — F24/LCD_R4 — Y70
- LCD_D21 — E25/LCD_R5 — Y69
- LCD_D22 — F25/LCD_R6 — Y68
- LCD_D23 — B24/LCD_R7 — Y67
- LCD_CLK — D25/LCD_CLK — Y66
- LCD_HSYNC — A25/LCD_HSYNC — Y65
- LCD_VSYNC — C25/LCD_VSYNC — Y64
- LCD_DE — B25/LCD_DE — Y63
- TCP_INT — AW36/TCP_INT — Y62
- LCD_PWM — BC15/PWM0_A — Y11

GPIO9 — Y91
GPIO10 — Y61
GPIO11 — Y45
GPIO12 — Y44
GPIO13 — Y43
GPIO14 — Y42
GPIO15 — Y41
GPIO16 — Y31

VIDEO CAMERA
- MIPI_CSI_CLK — A19/CMOS0_CLK — Y118
- MIPI_CSI_FSYNC — B19/CMOS0_FSYNC — Y119
- MIPI_CSI_RX_CLK_N — E29/MIPI_RX0_CLKN — Y2
- MIPI_CSI_RX_CLK_P — F29/MIPI_RX0_CLKP — Y1
- MIPI_CSI_RX_DATA0_N — C29/MIPI_RX0_DATAP0 — Y9
- MIPI_CSI_RX_DATA0_P — B29/MIPI_RX0_DATAN0 — Y10
- MIPI_CSI_RX_DATA1_N — B30/MIPI_RX0_DATAP1 — Y8
- MIPI_CSI_RX_DATA1_P — A30/MIPI_RX0_DATAN1 — Y7
- MIPI_CSI_RX_DATA2_N — C31/MIPI_RX0_DATAP2 — Y5
- MIPI_CSI_RX_DATA2_P — B31/MIPI_RX0_DATAN2 — Y6
- MIPI_CSI_RX_DATA3_N — F31/MIPI_RX0_DATAP3 — Y4
- MIPI_CSI_RX_DATA3_P — E31/MIPI_RX0_DATAN3 — Y3

SD CARD
- SDCO_D1 — AW3/D1 — Y112
- SDCO_D0 — AW4/D0 — Y111
- SDCO_CLK — AY2/CLK — Y116
- SDCO_CMD — AY1/CMD — Y115
- SDCO_D3 — AV2/D3 — Y114
- SDCO_D2 — AW1/D2 — Y113
- SDCO_DET — AU3/DET — Y117
- SD_CARD_ON — AU1/CARD_ON

1892BA018, CPU Sheet
- UART1_RX — BD35/UART1_RX — Y21
- UART1_TX — AW35/UART1_TX — Y20
- UART2_RX — AY35/UART2_RX — Y12
- UART2_TX — BD33/UART2_TX — Y13

1892BA018, CPU Sheet
- CAN0_RX — BB23/CAN0_RX — Y108
- CAN0_TX — AY23/CAN0_TX — Y107

1892BA018, CPU Sheet
- USB0_IDDET — AY13/USB0_IDDET — Y30
- USB0_VBUSDET — AY15/USB0_VBUSDET — Y16
- USB0_DRV — AW12/USB0_DRV — Y124

1892BA018, CPU Sheet
- GPIO1 — BB36/GPIO1 — Y32
- GPIO2 — BB37/GPIO2 — Y34
- GPIO3 — AW37/GPIO3 — Y35
- GPIO4 — AY37/GPIO4 — Y36
- GPIO5 — BC35/GPIO5 — Y37
- GPIO6 — BB35/GPIO6 — Y38
- GPIO7 — AY36/GPIO7 — Y39
- GPIO8 — BA36/GPIO8 — Y40

+5V0_IN — Y15
+5V0_IN — Y14

Y93 Y33 Y120 Y60 → GND GND GND GND

REF1 REF_Point_Top

REF2 REF_Point_Top

MIPI_DSI_TX_CLK_N — E28/MIPI_CLKN — Y166
MIPI_DSI_TX_CLK_P — D28/MIPI_CLKP — Y167
MIPI_DSI_TX_DATA0_N — A28/MIPI_TX_DATAN0 — Y162
MIPI_DSI_TX_DATA0_P — B28/MIPI_TX_DATAP0 — Y163
MIPI_DSI_TX_DATA1_N — B27/MIPI_TX_DATAN1 — Y165
MIPI_DSI_TX_DATA1_P — C27/MIPI_TX_DATAP1 — Y164
MIPI_DSI_TX_DATA2_N — A26/MIPI_TX_DATAN2 — Y158
MIPI_DSI_TX_DATA2_P — B26/MIPI_TX_DATAP2 — Y157
MIPI_DSI_TX_DATA3_N — E26/MIPI_TX_DATAN3 — Y160
MIPI_DSI_TX_DATA3_P — D26/MIPI_TX_DATAP3 — Y159

1892BA018, CPU Sheet
- PCI0_RX0N — B13/PCI0_RXN0 — Y138
- PCI0_RX0P — C13/PCI0_PXP0 — Y139
- PCI0_RX1N — A12/PCI0_PXN1 — Y136
- PCI0_RX1P — B12/PCI0_PXP1 — Y135
- PCI0_TX0N — B11/PCI0_TXN0 — Y130
- PCI0_TX0P — C11/PCI0_TXP0 — Y129
- PCI0_TX1N — A10/PCI0_TXN1 — Y133
- PCI0_TX1P — B10/PCI0_TXP1 — Y132
- PCI0_CLKN — A14/PCI0_REF_CLK_M — Y141
- PCI0_CLKP — B14/PCI0_REF_CLK_PX — Y142
- PCI0_CLKREQ — G13/PCI0_CLKREQ — Y127
- PCI0_PERSTN — H12/PCI0_PERSTN — Y123
- PCI0_WAKE — G12/PCI0_WAKE — Y125
- PCI0_APP — G14/PCI0_APP_LTSSM_EN — Y126
- PCI0_PHY — A9/PCI0_PHY_RESREF — Y128

1892BA018, CPU Sheet
- JESD0_CKL — B4/JESD0_CLK — Y149
- JESD0_CLKX — A4/JESD0_CLKX — Y148
- JESD0_SYSREF — A6/JESD0_SYSREF — Y150
- JESD0_SYSREFX — B6/JESD0_SYSREFX — Y151

- SPARE_LVDS_RX — F4/SPARE_LVDS_RX — Y153
- SPARE_LVDS_RXX — E4/SPARE_LVDS_RXX — Y154
- JESD_SYNCB_0 — C3/JESD_SYNCB_0 — Y147
- JESD_SYNCB_0X — D3/JESD_SYNCB_0X — Y152

+3V3 — EXTEN — Y122

IPS_OUT — Y17

BAT_VDDO — Y18

Y168 Y156 Y145 Y131 Y155 Y146 → GND GND GND GND GND GND

Y134 Y143 Y140 → GND GND GND

Y144 Y121 Y137 Y161 → GND GND GND GND

- TP1 JTAD_TRSTn
- JTAG_TRSTn — BC27/JTAG_TRSTn — TP2 JTAG_TMS
- JTAG_TMS — BB27/JTAG_TMS — TP3 JTAG_TDO
- JTAG_TDO — AY27/JTAG_TDO — TP4 JTAD_TDI
- JTAG_TDI — BA27/JTAG_TDI — TP5 JTAG_TCK
- JTAG_TCK — BD27/JTAG_TCK — TP6 JMODE0
- JMODE0 — BB28/JMODE0 — TP7 JMODE1
- JMODE1 — BA28/JMODE1 — TP8 Test Mode
- TEST_MODE — AY28/TESTMODE — TP9 24MHz
- X24M0 — TP10 32KHz
- X32K0

Изм.	Лист	N°докум.	Подп.	Дата
Разраб.		Еланчинцев Е.С.		
Пров.		Залата Р.Н.		
Т.контр.				
Н.контр.				
Утв.		Залата Р.Н.		

Процессорный модуль RanetkaPC

Лит.	Масса	Масштаб

Лист 1 | Листов 13

ООО ''Фабмикро''

Копировал

Формат А3