

UP-CORE

Quick Installation Guide

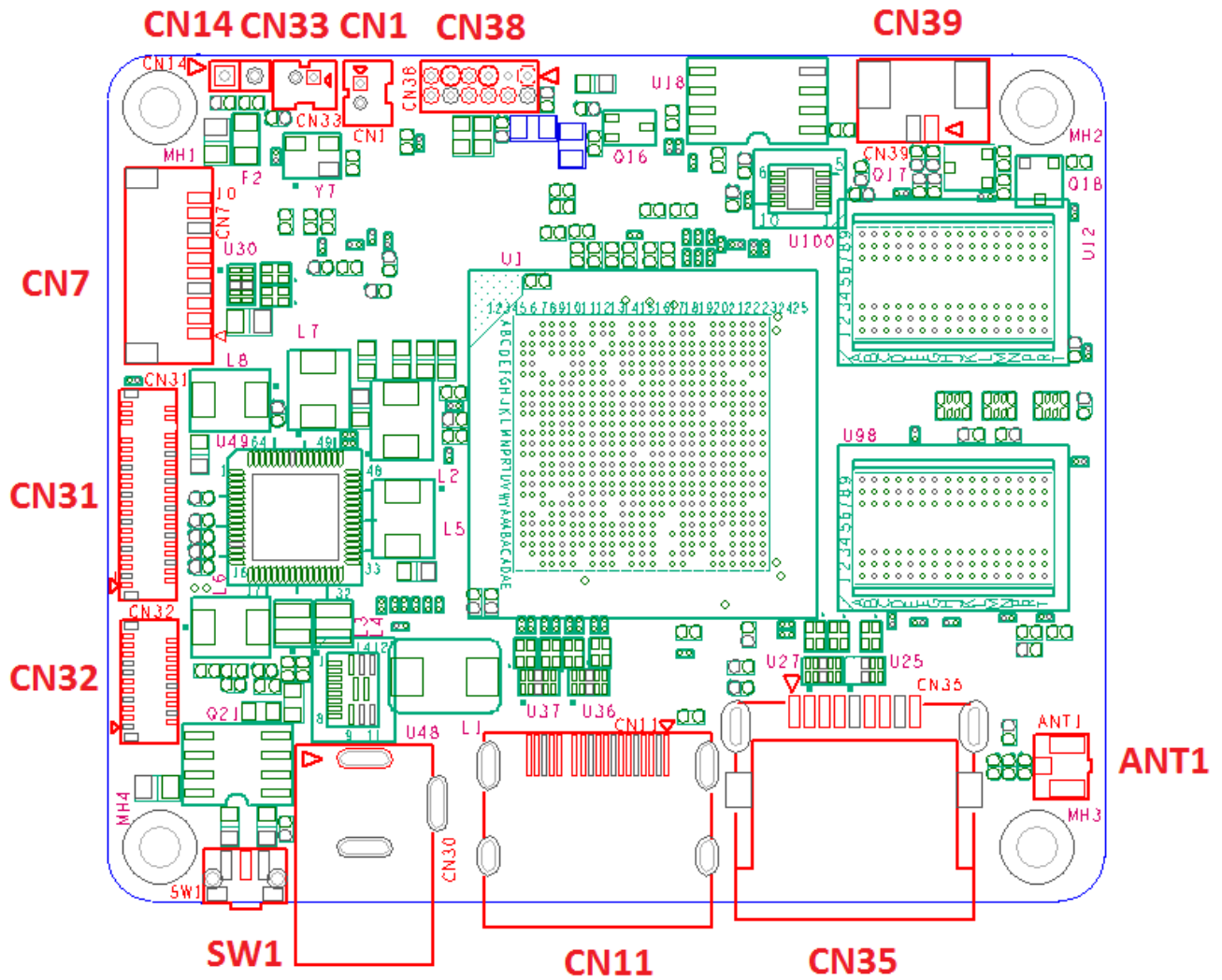
REVISION HISTORY

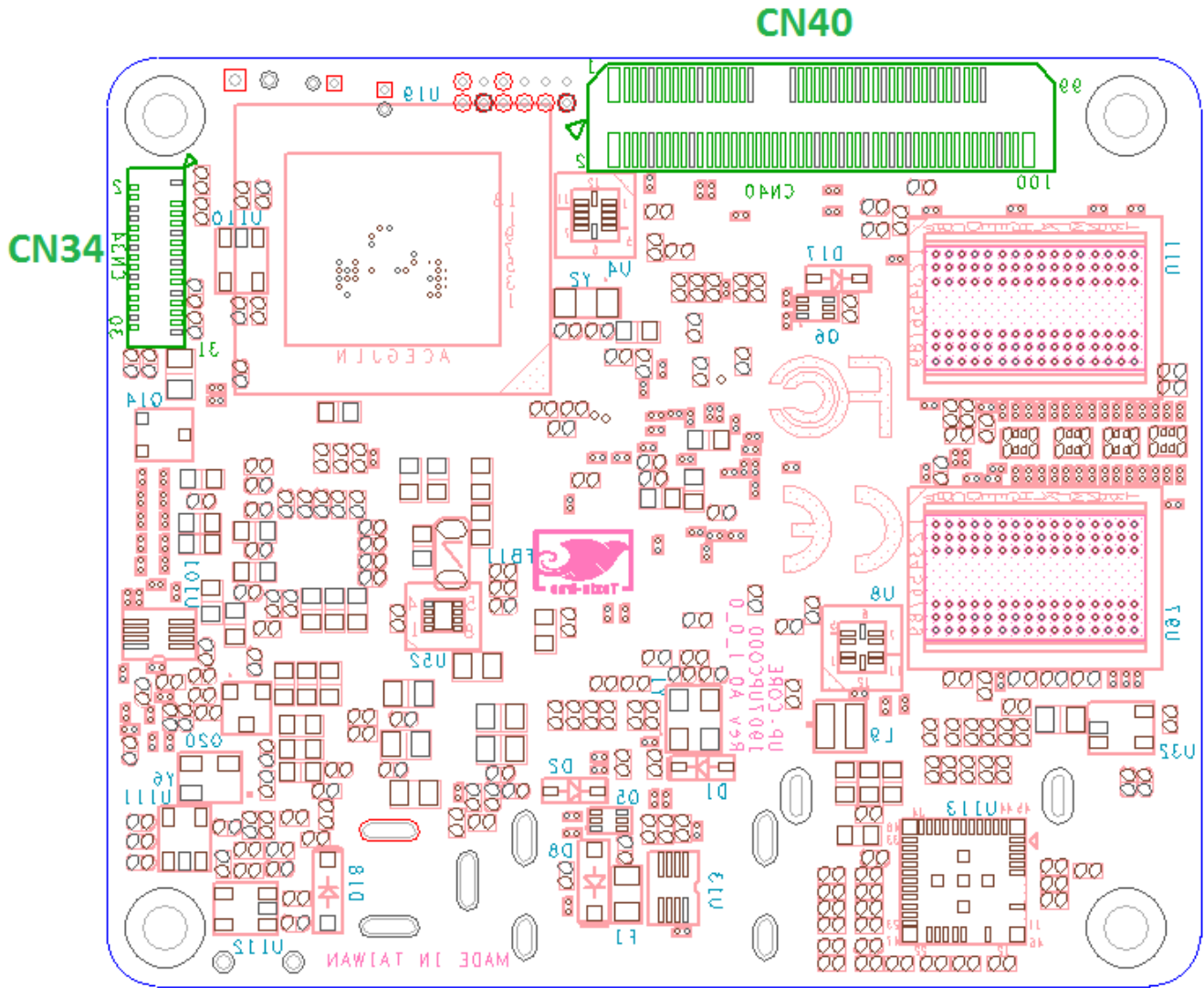
Revision	Date	Comments
R.0.1	2016/12/26	Initial version

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1. UP-CORE Board Layout





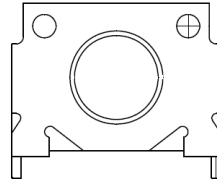
2. Connector, Switch References

2.1 Connector Index

Reference Designation	Functional Description	Connector Type
SW1	Power Button	(TF) Push Button Switch.HCH.PTS-099
CN1	RTC Battery Wafer	(TF) WAFER BOX 2P.180D.1.25mm.CATCH.1201-700-02S
CN31	MIPI DSI Connector	(TF)FPC/FFC Conn.41P.90D(F).0.6mm.Hirose.FH35C-41S-0.3SHW(50)
CN32	MIPI CSI Connector	(TF)FPC/FFC Conn.21P.90D(F).0.6mm.Hirose.FH35C-21S-0.3SHW(50)
CN35	USB 3.0 Connector	(TF)USB3.0 CONN..9P.90D(F).Sinking.SMD.Single Port.TRONTEK.930-00153-A91-21
CN7	USB 2.0 1x10P Wafer	(TF)Wafer Box.10P.90D.1.0mm.CATCH.1204-700-10RM
CN11	HDMI Connector	(TF)HDMI CONN.19P.90D(F).A TYPE.FOXCONN.QJ51191-LFB4-7F
CN14	Reset Pin Header	(TF) PIN HEADER.2*1P.180D.(M).2.0mm.DIP
CN30	DC Jack	(TF)DC Power Jack.3P.90D(M).DIP.2.0mm.COXOC.416AEWTJ02004PA
CN38	Update CPLD Header	(TF)PIN HEADER.6*2P.180D(M).1.27mm.Astron.C27-4112-206-1G-R
CN33	Power Button Wafer	(TF)WAFER BOX.2P.180D.(M).1.25mm.CATCH.1201-700-02S
CN39	FAN Wafer	(TF)WAFER.2P.180D(M).SMD.1.25mm.W/Cap.PINREX.712-73-02TWE0
CN34	MIPI CSI CONNECTOR	(TF)FPC/FFC Conn..31P.90D(F).SMD.0.3mm.Dual Contact.Panasonic.AYF333135
CN40	EXHAT-100.Header	(TF)Board-Board Connector.100P.180D(M).SMD.Pitch=0.5mm.Header.Panasonic.AXK6S00 547YG
ANT1	WIFI Antenna CONNECTOR	(TF)Antenna Conn..3P.90D(M).SMD.I-PEX1.I-PEX.20279-001E

3. Switch Settings

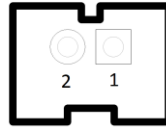
3.1 SW1: Power Button



Switch Position	Functional Description
SW1 1	(default)
SW1 0	Power ON

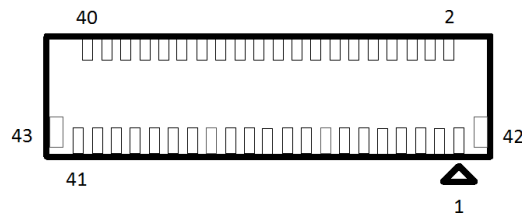
4. Connector Pin Assignments

4.1 CN1: RTC Battery Wafer



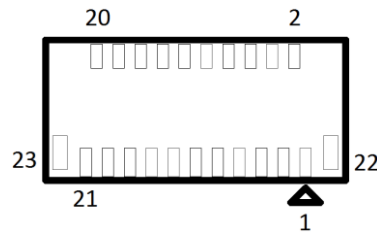
Pin	Signal Description
1	+V_COIN_BAT
2	GND

4.2 CN31: MIPI DSI Connector



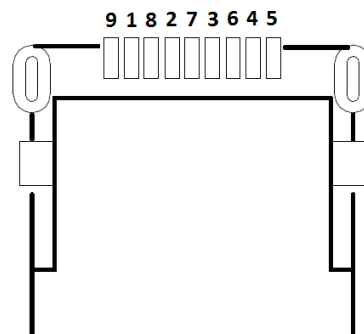
Pin	Signal Description	Pin	Signal Description	Pin	Signal Description
1	MDSI_A_DATA1_DN	16	DDI0_TX0_DP	31	DDI0_HPD_CONN
2	MDSI_A_DATA1_DP	17	DDI0_TX0_DN	32	DDI0_BKLT_R_CTRL
3	GND	18	GND	33	DDI0_VDD_EN
4	MDSI_A_CLK_DN	19	DDI0_TX1_DP	34	DDI0_BKLT_EN
5	MDSI_A_CLK_DP	20	DDI0_TX1_DN	35	NC
6	GND	21	GND	36	NC
7	MDSI_A_DATA0_DN	22	DDI0_TX2_DP	37	+3.3V
8	MDSI_A_DATA0_DP	23	DDI0_TX2_DN	38	+3.3V
9	GND	24	GND	39	+3.3V
10	I2C2_3P3_SCL	25	DDI0_TX3_DP	40	+3.3V
11	I2C2_3P3_SDA	26	DDI0_TX3_DN	41	+3.3V
12	GND	27	GND	42	GND
13	DDI1_DDC_C_CLK	28	DDI0_AUX_DP	43	GND
14	DDI1_DDC_C_DAT	29	DDI0_AUX_DN		
15	GND	30	GND		

4.3 CN32: MIPI CSI Connector



Pin	Signal Description	Pin	Signal Description
1	GND	13	GND
2	MCSI_1_DATA1_DN	14	CAM_MCLK
3	MCSI_1_DATA1_DP	15	GND
4	GND	16	I2C2_SOC_SCL
5	MCSI_1_CLK_DN	17	I2C2_SOC_SDA
6	MCSI_1_CLK_DP	18	CAM_RST_N
7	GND	19	FLASH_RESET_N
8	MCSI_1_DATA0_DN	20	+2.8V
9	MCSI_1_DATA0_DP	21	GND_CAM
10	GND	22	GND
11	+1.2V	23	GND
12	+1.8V		

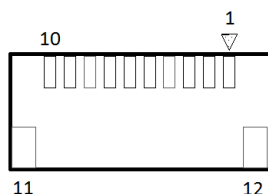
4.4 CN35: USB 3.0 Connector



Pin	Signal Description	Pin	Signal Description
1	+5V	6	CROSSBAR_RX1_P
2	USB2_P1_DN_L	7	GND
3	USB2_P1_DP_L	8	CROSSBAR_TX1_N
4	GND	9	CROSSBAR_TX1_P

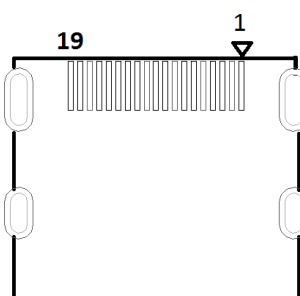
5	CROSSBAR_RX1_N		
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4.5 CN7: USB 2.0 1x10P Wafer



Pin	Signal Description	Pin	Signal Description
1	+5V	7	USB2_P2_DP_L
2	USB2_P3_DN_L	8	GND
3	USB2_P3_DP_L	9	UART0_RXD
4	GND	10	UART0_TXD
5	+5V	11	GND
6	USB2_P2_DN_L	12	GND

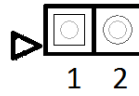
4.6 CN11: HDMI Connector



Pin	Signal Description	Pin	Signal Description
1	DDI2_TX0_HDMI_DP+	11	GND
2	GND	12	DDI2_CLK_HDMI_DN-
3	DDI2_TX0_HDMI_DN-	13	HDMI_CEC_D
4	DDI2_TX1_HDMI_DP+	14	NC
5	GND	15	DDI2_DDC_CLK
6	DDI2_TX1_HDMI_DN-	16	DDI2_DDC_DAT
7	DDI2_TX2_HDMI_DP+	17	GND
8	GND	18	+5V_HDMI
9	DDI2_TX2_HDMI_DN-	19	DDI2_TYPE_C_HPD

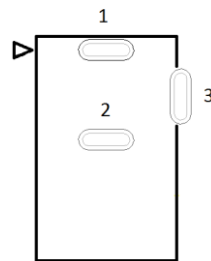
10	DDI2_CLK_HDMI_DP+		
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4.7 CN14: Reset Pin Header



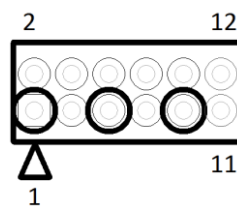
Pin	Signal Description
1	PMU_RSTBTN_N
2	GND

4.8 CN30: DC Jack



Pin	Signal Description
1	+V5
2	GND
3	GND

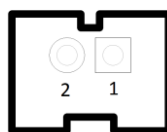
4.9 CN38: Update CPLD Header



Pin	Signal Description	Pin	Signal Description
1	NC	2	GND
3	NC	4	3.3V
5	NC	6	FST_SPI_CS0_N
7	FST_SPI_CLK	8	FST_SPI_D1
9	NC	10	GND

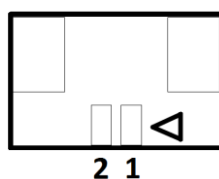
11	FST_SPI_D0	12	SPI SOCK_HOLD_N
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4.10 CN33: Power Button Wafer



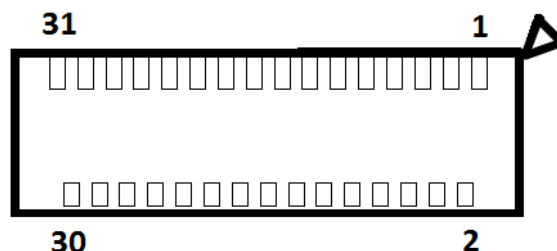
Pin	Signal Description
1	PWR_SW#_CTL_R
2	GND

4.11 CN39: FAN Wafer



Pin	Signal Description
1	FAN_PWR
2	GND

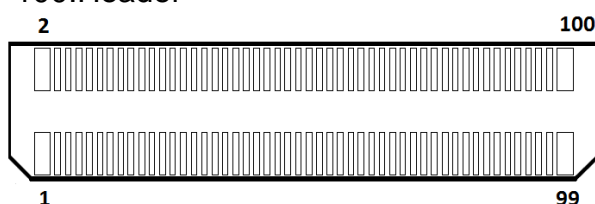
4.12 CN34: MIPI CSI CONNECTOR



Pin	Signal Description	Pin	Signal Description
1	GND	2	CAM1_RST_N
3	NC	4	I2C5_SOC_SDA
5	I2C5_SOC_SCL	6	GND
7	CAM1_MCLK	8	GND
9	MCSI_0_DATA0_DN	10	MCSI_0_DATA0_DP
11	GND	12	MCSI_0_DATA1_DN
13	MCSI_0_DATA1_DP	14	GND

15	MCSI_0_CLK_DN	16	MCSI_0_CLK_DP
17	GND	18	MCSI_0_DATA2_DN
19	MCSI_0_DATA2_DP	20	GND
21	MCSI_0_DATA3_DN	22	MCSI_0_DATA3_DP
23	GND	24	+AVDD_CAM
25	GND	26	+1.2V
27	+1.8V	28	GND
29	+2.8V	30	+2.8V

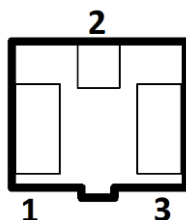
4.13 CN40: EXHAT-100.Header



Pin	Signal Description	Pin	Signal Description	Pin	Signal Description
1	+5V	35	NA	69	PCIE_REFCLK0_DN
2	+5V	36	ISH_GPIO2	70	USB_OTG_R_ID
3	+5V	37	NA	71	GND
4	+5V	38	ISH_GPIO3	72	GND
5	+5V	39	NA	73	I2C0_SOC_SDA
6	+5V	40	ISH_GPIO4	74	SD3_CD
7	+5V	41	NA	75	I2C0_SOC_SCL
8	+5V	42	ISH_GPIO7	76	SD3_CMD
9	GND	43	GND	77	GND
10	GND	44	ISH_GPIO9	78	SD3_1P8_EN
11	PLTRST_BUF_3P3_N	45	LPE_I2S2_CLK	79	I2C1_SOC_SDA
12	UART1_RTS	46	SOC_PWM0	80	SD3_PWREN
13	PMU_PWRBTN_3P3_N	47	LPE_I2S2_FRM	81	I2C1_SOC_SCL
14	UART1_CTS	48	SOC_PWM1	82	SD3_WP
15	PMU_SLP_S0IX_N_3P3	49	LPE_I2S2_RX	83	GND
16	UART1_TXD	50	GND	84	SD3_CLK
17	PCIE_CLKREQ0	51	LPE_I2S2_TX	85	ISH_I2C1_DATA

18	UART1_RXD	52	USB_HSIC_1_DATA	86	SD3_SD0
19	PMC_SUSCLK0	53	GND	87	ISH_I2C1_CLK
20	GND	54	USB_HSIC_1_STROBE	88	SD3_SD1
21	GND	55	PCIE_TX0_DP	89	GND
22	DDI2_DDC_CLK	56	GND	90	SD3_SD2
23	SPI2_MOSI	57	PCIE_TX0_DN	91	NA
24	DDI2_DDC_DAT	58	USB_HSIC_2_DATA	92	SD3_SD3
25	SPI2_MISO	59	GND	93	NA
26	HDMI_CEC_D	60	USB_HSIC_2_STROBE	94	GND
27	SPI2_CLK	61	PCIE_RX0_DP	95	NA
28	HDMI_CEC_R	62	GND	96	CPLD_OE
29	SPI2_CS0	63	PCIE_RX0_DN	97	NA
30	DDI2_TYPE_C_HPD	64	USB2_P0_DP	98	CPLD_RST
31	SPI2_CS1	65	GND	99	NA
32	ISH_GPIO0	66	USB2_P0_DN	100	CPLD_STROBE
33	GND	67	PCIE_REFCLK0_DP		
34	ISH_GPIO1	68	GND		

4.14 ANT1: WIFI Antenna CONNECTOR



Pin	Signal Description
1	GND
2	RF trace
3	GND