

NET_PLUS

IO Board

Quick Installation Guide

REVISION HISTORY

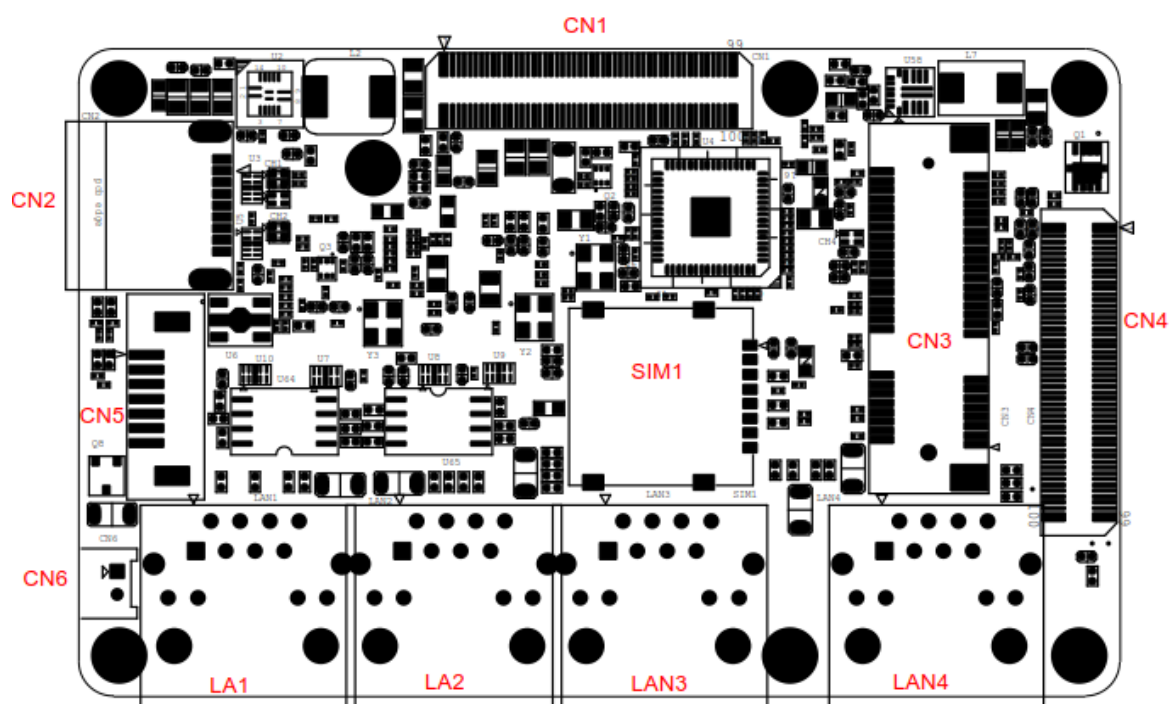
Revision	Date	Comments
A0.1	2018/04/17	Initial Version
A1.0	2019/07/12	1.Change Board Layout. 2.Change pin define to match PCB A1.0. 3.Delete jumper setting page.

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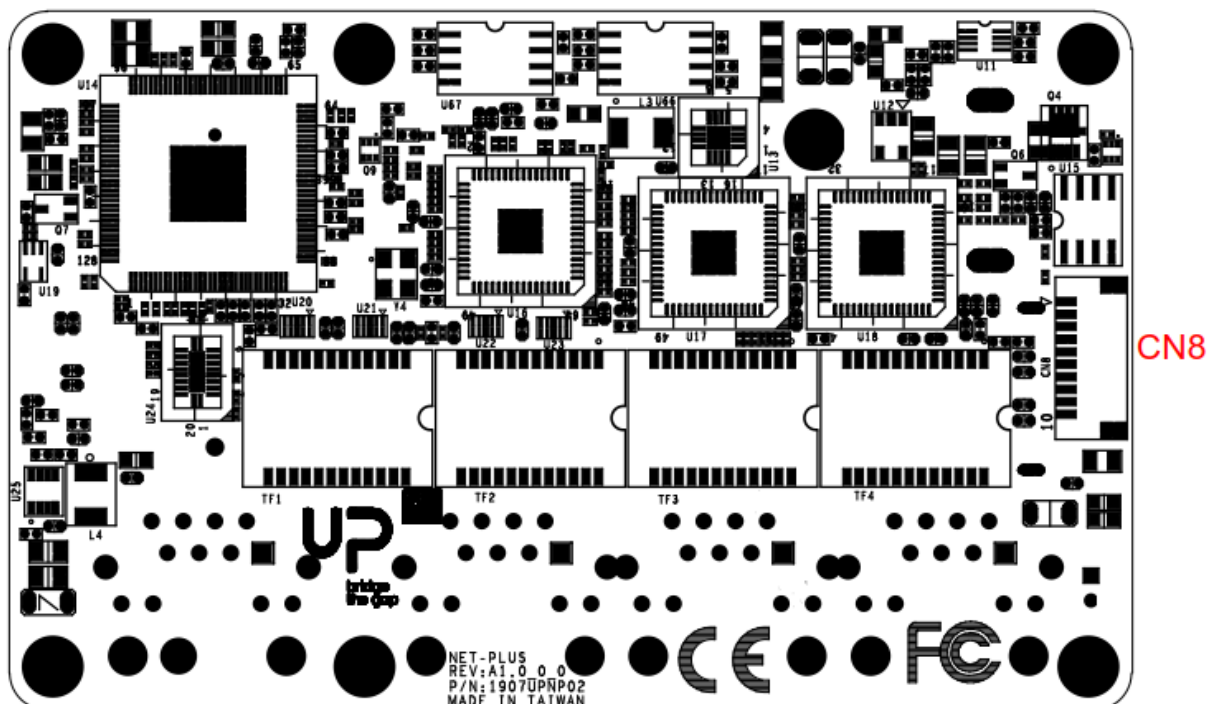
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1. NET-PLUS Board Layout

Top side



Bottom side



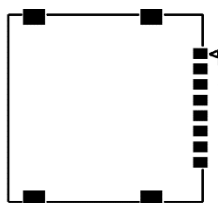
2. Connector References

Connector Index

Reference Designation	Functional Description	Connector Type
SIM1	SIM CARD	(TF)Micro SIM Socket.8P.SMD.Hinge Type.REGO.80440GIH-081T-12CL
CN1	DOCKING I	(TF)Board-Board Connector.100P.180D(F).SMD.Pitch=0.5mm.H=6.05mm.Panasonic.AXK5S0034 7YG
CN2	USB3.0	(TF)USB3.0 Connector.Single Port.Type A.9P.90D(F).SMD.Trontek.930-00406- A91-22
CN3	MINI PCIE	(TF)MiniCard SLOT.52P.90D.(F).SMD.FOXCONN.AS0B226-S68Q-7H
CN4	DOCKING II	(TF)Board-Board Connector.100P.180D(F).SMD.Pitch=0.5mm.H=6.05mm.Panasonic.AXK5S0034 7YG
CN5	SATA PORT	(TF)SATA CONNECTOR.7P.180D(M).SMT.TechBest.007-01-00757
CN6	SATA POWER	(TF)WAFER BOX.2P.180D(M).DIP.2.0mm.w/LOCK.PINREX.721-81-02TW00
CN8	Expend IO	(TF)Wafer Box.10P.90D(M).SMD.1.0mm.PINREX.710-74-10TWR6

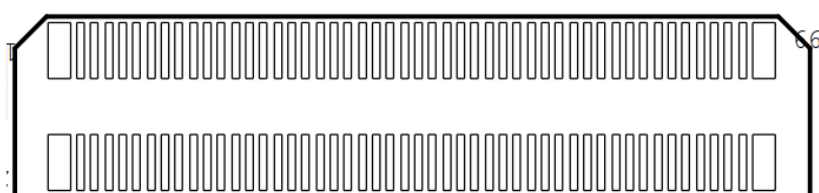
3. Connector Pin Assignments

SIM1: SIM CARD



Pin	Signal Description	Pin	Signal Description	Pin	Signal Description
1	P_UIM_PWRF	2	GND_UIM	3	P_UIM_RSTC
4	P_UIM_VPPC	5	P_UIM_CLKC	6	P_UIM_DATC
7	NC	8	NC		

CN1: DOCKING I

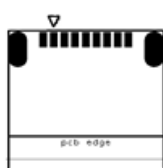


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Pin	Signal Description	Pin	Signal Description	Pin	Signal Description
1	+V5A_CON	2	+V5A_CON	3	+V5A_CON
4	+V5A_CON	5	+V5A_CON	6	+V5A_CON
7	+V5A_CON	8	+V5A_CON	9	GND
10	GND	11	PMU_RSTBTN_N	12	NC
13	NC	14	NC	15	PM_SLP_S3#_3P3
16	NC	17	PCIE_CLKREQ3#	18	NC
19	NC	20	GND	21	GND
22	NC	23	NC	24	NC
25	NC	26	NC	27	NC
28	NC	29	NC	30	NC
31	NC	32	NC	33	GND
34	NC	35	LPC_R_AD0	36	NC
37	LPC_R_AD1	38	NC	39	LPC_R_AD2

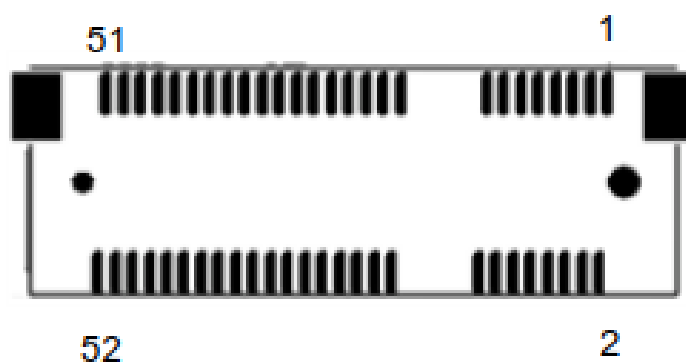
40	NC	41	LPC_R_AD3	42	NC
43	GND	44	NC	45	NC
46	NC	47	NC	48	NC
49	NC	50	GND	51	NC
52	NC	53	GND	54	NC
55	NC	56	GND	57	NC
58	NC	59	GND	60	NC
61	NC	62	GND	63	NC
64	NC	65	GND	66	NC
67	NC	68	GND	69	NC
70	NC	71	GND	72	GND
73	I2C_SDA0	74	NC	75	I2C_SCL0
76	NC	77	GND	78	NC
79	NC	80	NC	81	NC
82	NC	83	GND	84	NC
85	NC	86	ISH_GPIO_13	87	NC
88	ISH_GPIO_14	89	GND	90	NC
91	LPC_FRAME_R	92	NC	93	LPC_R_CLKOUT0
94	GND	95	NC	96	NC
97	INT_SERIRQ_R	98	NC	99	NC
100	NC				

CN2: USB3.0



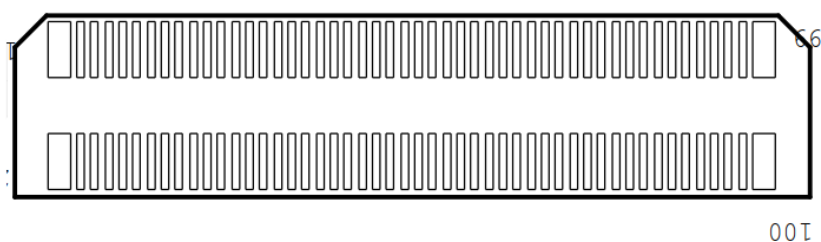
Pin	Signal Description	Pin	Signal Description
1	+5V	2	USB2_C_DN2
3	USB2_C_DP2	4	GND
5	USB3_RXN_CON_P2	6	USB3_RXP_CON_P2
7	GND	8	USB3_TXN_CON_P2
9	USB3_TXP_CON_P2		

CN3: MINI PCIE



Pin	Signal Description	Pin	Signal Description
1	WAKE_MINI_N	2	+3.3V
3	NC	4	GND
5	NC	6	+1.5V
7	NC	8	P_UIM_PWR
9	GND	10	P_UIM_DAT
11	CLK_PCIE_N	12	P_UIM_CLK
13	CLK_PCIE_P	14	P_UIM_RST
15	GND	16	P_UIM_VPP
17	NC	18	GND
19	NC	20	3GPW_EN
21	GND	22	PLTRST_N
23	PERn0_mSATA_R+	24	+3.3V
25	PERn0_mSATA_R-	26	GND
27	GND	28	+1.5V
29	GND	39	NC
31	PETn0_mSATA_T-	32	NC
33	PETn0_mSATA_T+	34	GND
35	GND	36	USB2_DN
37	GND	38	USB2_DP
39	+3.3V	40	GND
41	+3.3V	42	NC
43	mSATA_PCIE_SEL_C	44	NC
45	NC	46	NC
47	NC	48	+1.5V
49	NC	50	GND
51	NC	52	+3.3V

CN4: DOCKING II



Pin	Signal Description	Pin	Signal Description
1	+12V	2	+12V
3	+12V	4	+12V
5	+12V	6	+12V
7	+12V	8	+12V
9	NC	10	NC
11	NC	12	GND
13	NC	14	NC
15	NC	16	NC
17	GND	18	GND
19	NC	20	NC
21	NC	22	NC
23	GND	24	GND
25	NC	26	NC
27	NC	28	NC
29	GND	30	GND
31	PCIE_REFCLK0_P	32	PCIE_REFCLK1_P
33	PCIE_REFCLK0_N	34	PCIE_REFCLK1_N
35	GND	36	GND
37	PCIE_RXP0	38	PCIE_RXP1
39	PCIE_RXN0	40	PCIE_RXN1
41	GND	42	GND
43	PCIE_TXP0	44	PCIE_TXP1
45	PCIE_TXN0	46	PCIE_TXN1
47	GND	48	GND
49	PCIE_REFCLK2_P	50	PCIE_P3_USB3_P4_TXP
51	PCIE_REFCLK2_N	52	PCIE_P3_USB3_P4_TXN
53	GND	54	GND
55	PCIE_TXP2	56	PCIE_P3_USB3_P4_RXP
57	PCIE_TXN2	58	PCIE_P3_USB3_P4_RXN
59	GND	60	GND

61	PCIE_RXP2	62	SATA_P1_USB3_P5_RXN
63	PCIE_RXN2	64	SATA_P1_USB3_P5_RXP
65	GND	66	GND
67	NC	68	SATA_P1_USB3_P5_TXN
69	NC	70	SATA_P1_USB3_P5_TXP
71	GND	72	GND
73	NC	74	SATA_RXN0
75	NC	76	SATA_RXP0
77	GND	78	GND
79	USB2_DP3	80	SATA_TXP0
81	USB2_DN3	82	SATA_TXN0
83	GND	84	GND
85	USB2_DP4	86	NC
87	USB2_DN4	88	NC
89	GND	90	GND
91	NC	92	NC
93	NC	94	NC
95	PCIE_WAKE0_N	96	PCIE_CLKREQ0#
97	PCIE_WAKE1_N	98	PCIE_CLKREQ1#
99	PCIE_WAKE2_N	100	PCIE_CLKREQ2#

CN5: SATA PORT



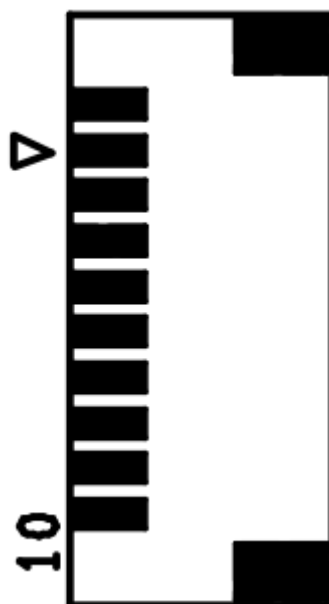
Pin	Signal Description	Pin	Signal Description
1	GND	2	SATA_TXP0_C
3	SATA_TXN0_C	4	GND
5	SATA_RXN0_C	6	SATA_RXP0_C
7	GND		

CN6: SATA POWER



Pin	Signal Description	Pin	Signal Description
1	+V5S	2	GND

CN8: Expend IO



Pin	Signal Description	Pin	Signal Description
1	NC	2	I2C_SCL0
3	I2C_SDA0	4	GND
5	PM_SLP_S3#_3P3	6	PCIE_CLKREQ3#
7	NC	8	ISH_GPIO_13
9	ISH_GPIO_14	10	NC