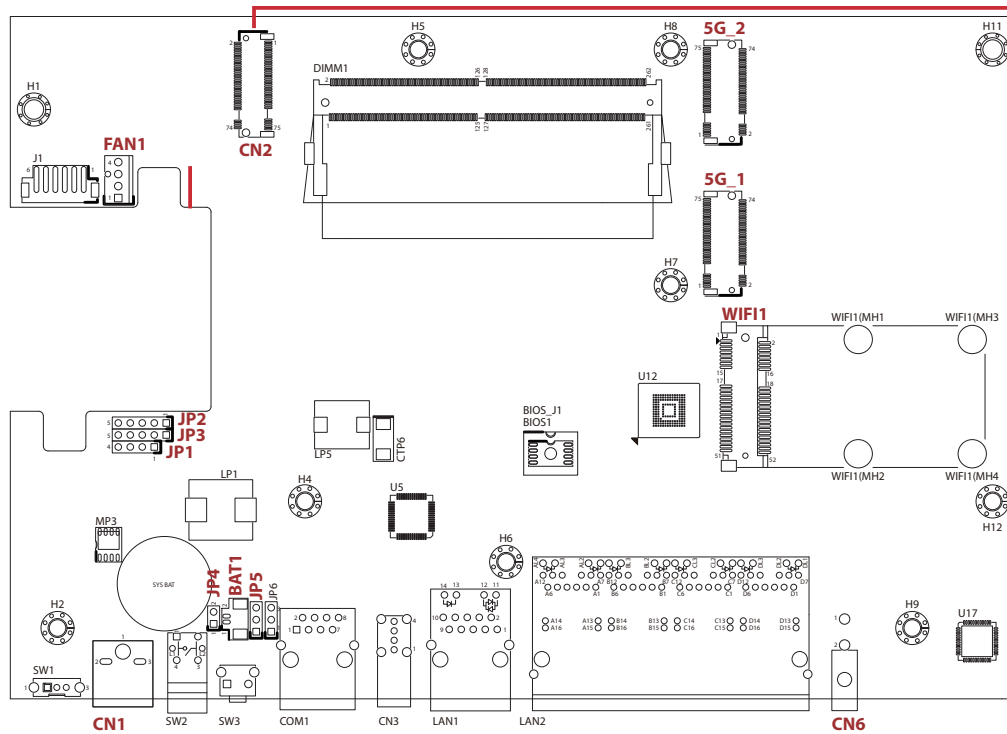
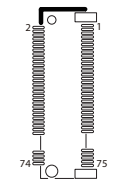


DNA 140 Quick Reference Guide



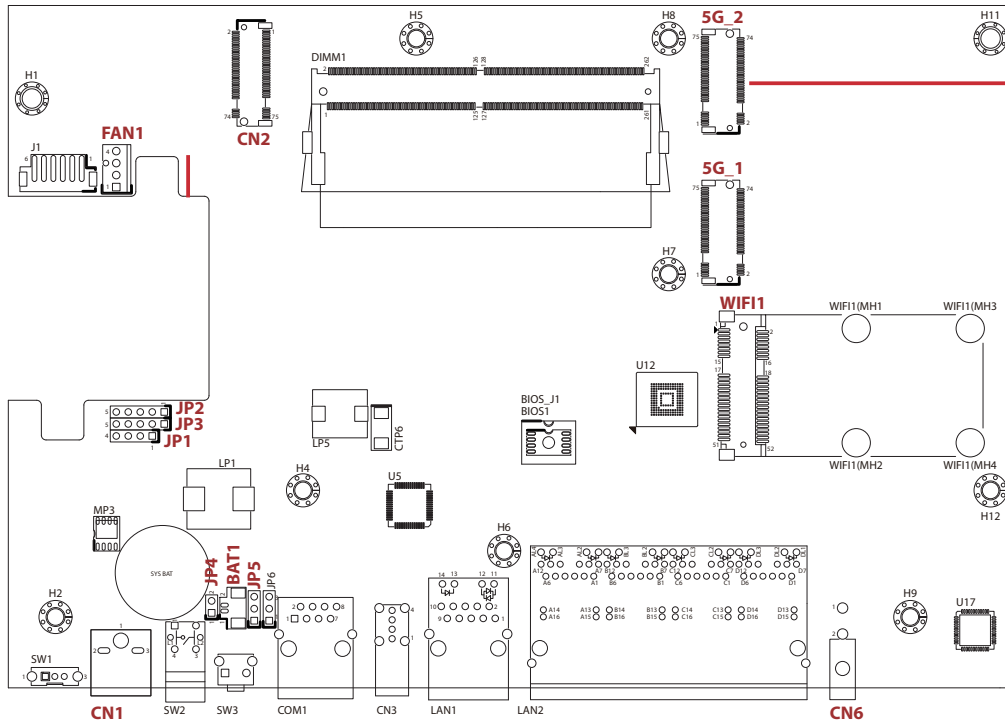
CN2: M.2 Key M SSD



Pin.	Signal	Pin.	Signal
1	GND	2	+P3V3
3	GND	4	+P3V3
5	NC	6	NC
7	NC	8	NC
9	GND	10	NC
11	NC	12	NC
13	NC	14	NC
15	GND	16	NC
17	NC	18	NC
19	NC	20	NC
21	GND	22	NC
23	NC	24	NC
25	NC	26	NC
27	GND	28	NC
29	NC	30	NC
31	NC	32	NC
33	GND	34	NC
35	NC	36	NC
37	NC	38	M.2_SSD_DEVSLP
39	GND	40	NC
41	SATA_P0_M.2_RXP	42	NC
43	SATA_P0_M.2_RXN	44	NC
45	GND	46	NC
47	SATA_P0_M.2_C_TXN	48	NC
49	SATA_P0_M.2_C_TXP	50	NC
51	GND	52	NC
53	NC	54	NC
55	NC	56	NC
57	GND	58	NC
59	-	60	-
61	-	62	-
63	-	64	-
65	-	66	-
67	NC	68	NC
69	NC	70	+P3V3
71	GND	72	+P3V3
73	GND	74	+P3V3
75	GND		



DNA 140 Quick Reference Guide

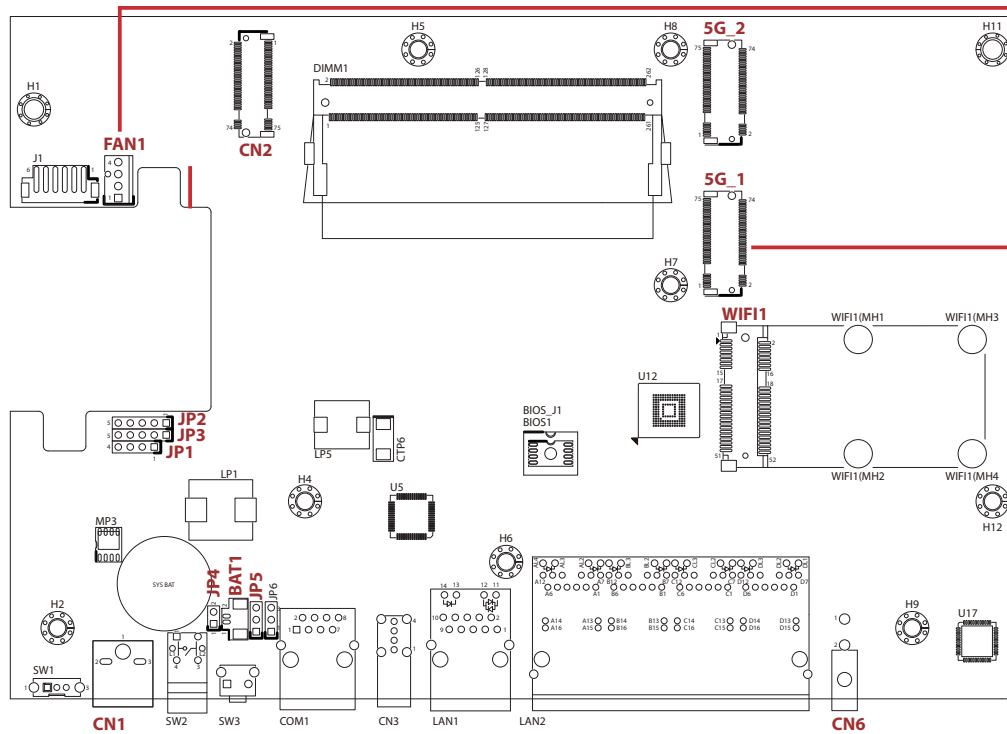


5G_2: M.2 5G Module#2 Key B

Pin.	Signal	Pin.	Signal
1	5G_2_CONFIG_3	2	+P3V3_5G
3	GND	4	+P3V3_5G
5	GND	6	5G_2_POWER_OFF_R_N
7	USB2_P5_5G_C_DP	8	5G_2_WWAN_DIS_N
9	USB2_P5_5G_C_DN	10	NC
11	GND	12	-
13	-	14	-
15	-	16	-
17	-	18	-
19	-	20	NC
21	5G_2_CONFIG_0	22	NC
23	5G_2_WAKE_N	24	NC
25	NC	26	5G_2_GNSS_DIS_N
27	GND	28	NC
29	USB32_P2_5G_RXN	30	5G_2_SIM1_RST
31	USB32_P2_5G_RXP	32	5G_2_SIM1_CLK
33	GND	34	5G_2_SIM1_DATA
35	USB32_P2_5G_TXN	36	5G_2_SIM1_VDD_F
37	USB32_P2_5G_TXP	38	NC
39	GND	40	5G_2_SIM2_DET
41	NC	42	5G_2_SIM2_DATA
43	NC	44	5G_2_SIM2_CLK
45	GND	46	5G_2_SIM2_RST
47	NC	48	5G_2_SIM2_VDD_F
49	NC	50	NC
51	GND	52	NC
53	NC	54	NC
55	NC	56	NC
57	GND	58	NC
59	NC	60	NC
61	NC	62	NC
63	NC	64	NC
65	NC	66	5G_2_SIM1_DET
67	5G_2_OD_RST_N	68	NC
69	5G_2_CONFIG_1	70	+P3V3_5G
71	GND	72	+P3V3_5G
73	GND	74	+P3V3_5G
75	5G_2_CONFIG_2		



DNA 140 Quick Reference Guide



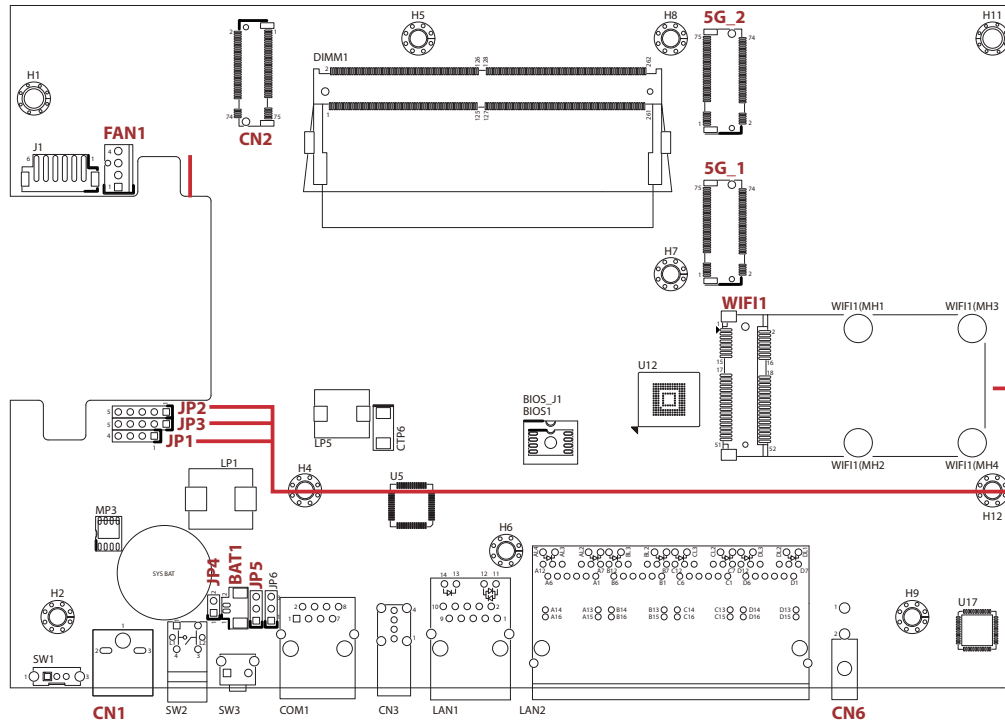
FAN1: Fan Connector

Pin	Description
1	GND
2	+P12V
3	SIO_FAN_TACH_R
4	SIO_FAN_PWM_R

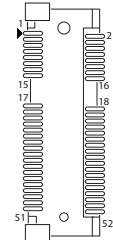
5G_1: M.2 5G Module#1 Key B

Pin.	Signal	Pin.	Signal
1	5G_1_CONFIG_3	2	+P3V3_5G
3	GND	4	+P3V3_5G
5	GND	6	5G_1_POWER_OFF_R_N
7	USB2_P7_5G_C_DP	8	5G_1_WWAN_DIS_N
9	USB2_P7_5G_C_DN	10	NC
11	GND	12	-
13	-	14	-
15	-	16	-
17	-	18	-
19	-	20	NC
21	5G_1_CONFIG_0	22	NC
23	5G_1_WAKE_N	24	NC
25	NC	26	5G_1_GNSS_DIS_N
27	GND	28	NC
29	USB32_P1_5G_RXN	30	5G_1_SIM1_RST
31	USB32_P1_5G_RXP	32	5G_1_SIM1_CLK
33	GND	34	5G_1_SIM1_DATA
35	USB32_P1_5G_TXN	36	5G_1_SIM1_VDD_F
37	USB32_P1_5G_TXP	38	NC
39	GND	40	5G_1_SIM2_DET
41	NC	42	5G_1_SIM2_DATA
43	NC	44	5G_1_SIM2_CLK
45	GND	46	5G_1_SIM2_RST
47	NC	48	5G_1_SIM2_VDD_F
49	NC	50	NC
51	GND	52	NC
53	NC	54	NC
55	NC	56	NC
57	GND	58	NC
59	PIN59	60	NC
61	NC	62	NC
63	NC	64	NC
65	PIN65	66	5G_1_SIM1_DET
67	5G_1_OD_RST_N	68	NC
69	5G_1_CONFIG_1	70	+P3V3_5G
71	GND	72	+P3V3_5G
73	GND	74	+P3V3_5G
75	5G_1_CONFIG_2		

DNA 140 Quick Reference Guide

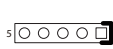


WIFI1: mini-PCIe Wi-Fi




Pin.	Signal	Pin.	Signal
1	WLAN_WAKE_N	2	+P3V3
3	NA	4	GND
5	NA	6	NA
7	CLKREQ2_WIFI_R_N	8	NA
9	GND	10	NA
11	CLK2_WIFI_DN	12	NA
13	CLK2_WIFI_DP	14	NA
15	GND	16	NA
17	NA	18	GND
19	NA	20	WLAN_DIS_R_N
21	GND	22	WIFI_RST_N
23	PCIE3_WIFI_RXN	24	+P3V3
25	PCIE3_WIFI_RXP	26	GND
27	GND	28	NA
29	GND	30	NA
31	PCIE3_WIFI_C_TXN	32	NA
33	PCIE3_WIFI_C_TXP	34	GND
35	GND	36	USB2_P1_WIFI_R_DN
37	GND	38	USB2_P1_WIFI_R_DP
39	+P3V3	40	GND
41	+P3V3	42	NA
43	GND	44	NA
45	NA	46	NA
47	NA	48	NA
49	NA	50	GND
51	NA	52	+P3V3

JP2: 2xFM MCU Programm Header



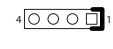
Pin.	Signal	Pin.	Signal
1	+P3V3_AUX	2	SWCLK
3	GND	4	SWDIO_2xFM
5	2xFM_MCU_RST_B		

JP3: MCU Programm Header



Pin.	Signal	Pin.	Signal
1	+P3V3_AUX	2	SWCLK
3	GND	4	SWDIO
5	MCU_RST_B		

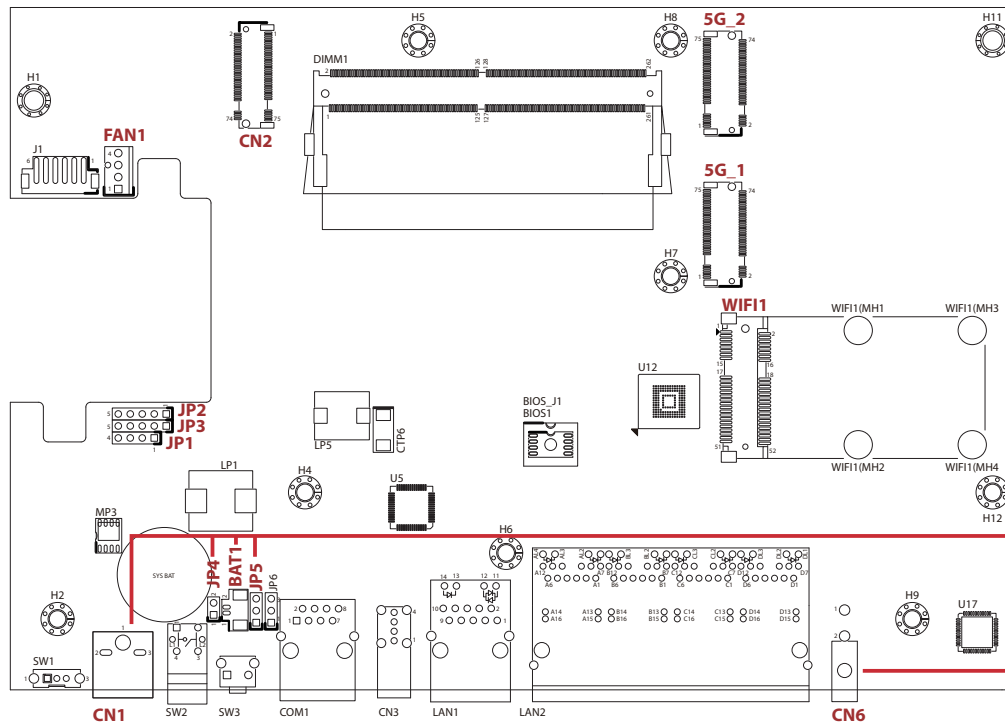
JP1: MCU UART Header



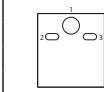
Pin.	Signal	Pin.	Signal
1	+P3V3_AUX	2	MCU_UART2_TX
3	MCU_UART2_RX	4	GND




DNA 140 Quick Reference Guide




CN1: P12V Power Connector

	Pin.	Signal
	1	DC_IN
	2	PGND
	3	PGND


JP4: Power Button header (for debug)

	Pin.	Signal
	1	FP_PWRBTN_N_R
	2	GND


BAT1: Battery Connector

	Pin.	Signal
	1	GND
	2	BATT

JP5: Clear CMOS

	Pin.	Signal
	1	RTC_RST_N
	2	GND
	3	NC

CN6: P54V Power Connector

	Pin.	Signal
	1	POE_AGND
	2	P54V_POE

