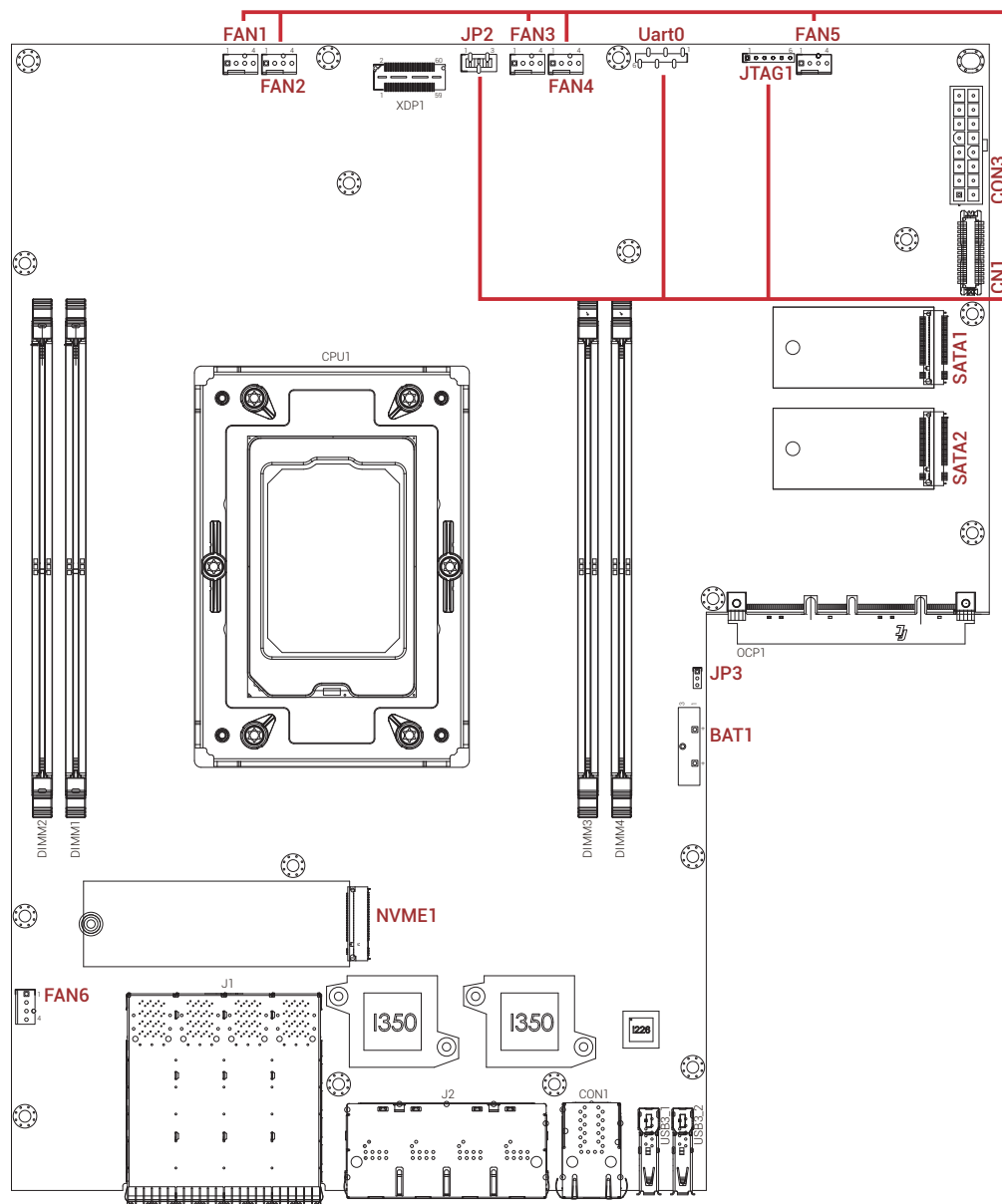


FTA 5190 Quick Reference Guide



FAN1, FAN2, FAN3, FAN4, FAN5: FAN Wafer Connector

Pin	Signal
1	GND
2	P12V
3	CPUFAN_TAC_R_1-5
4	CPUFAN_CTL_R_1-5

JP2: PWM SMB Header (For Debug)

Pin	Signal
1	SMB_CPU0_CLK
2	SMB_CPU0_DATA
3	GND

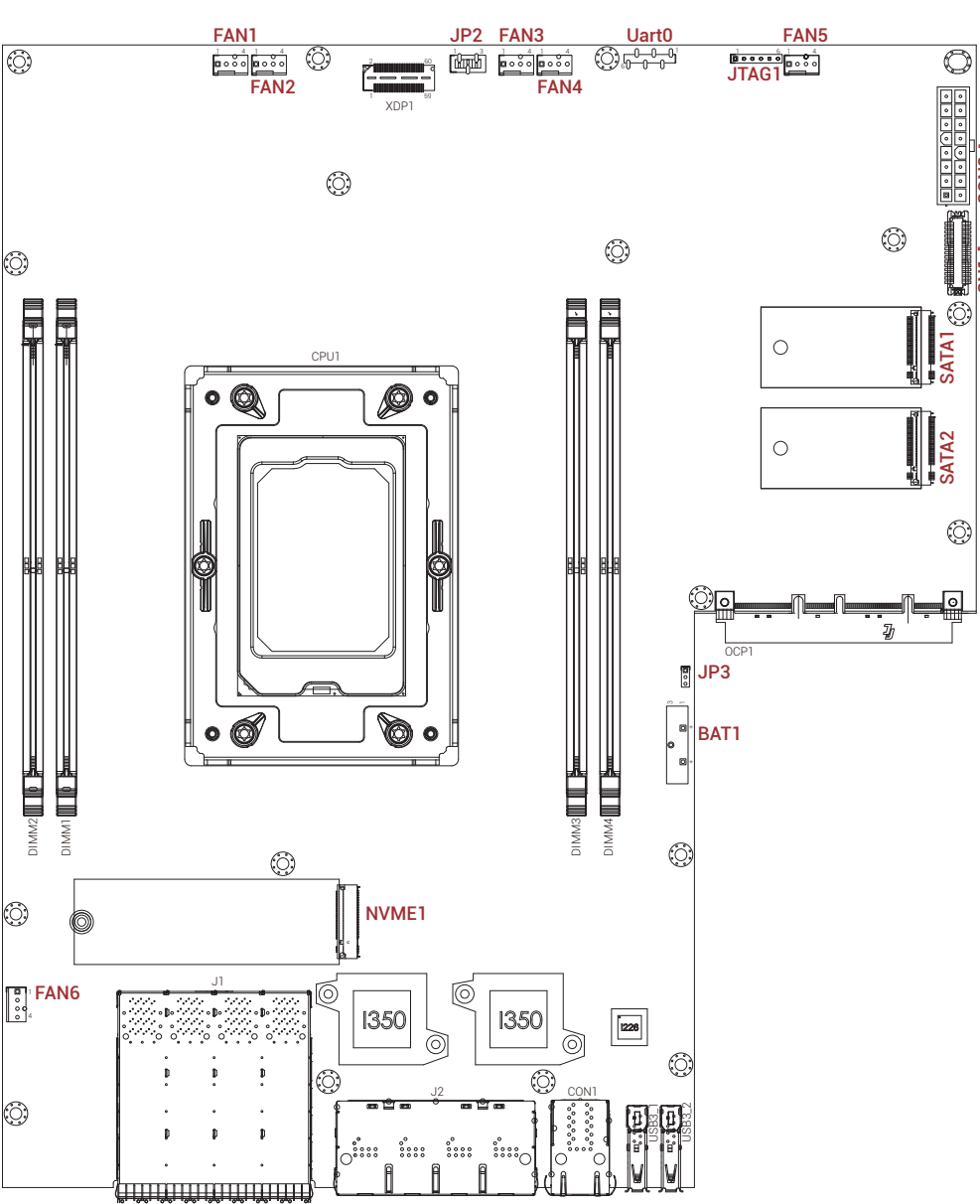
UART0: Uart Header (For S3M Debug)

Pin	Signal
1	P3V3_AUX
2	UART0_CPU0_RXD_LVC3
3	UART0_CPU0_TXD_LVC3
4	UART0_CPU0_RTS_LVC3
5	UART0_CPU0_CTS_LVC3
6	GND

JTAG1: CPLD JTAG

Pin	Signal
1	P3V3_CPLD
2	GND
3	JTAG_TCK_CPLD
4	JTAG_TDO_CPLD
5	JTAG_TDI_CPLD
6	JTAG_TMS_CPLD

FTA 5190 Quick Reference Guide



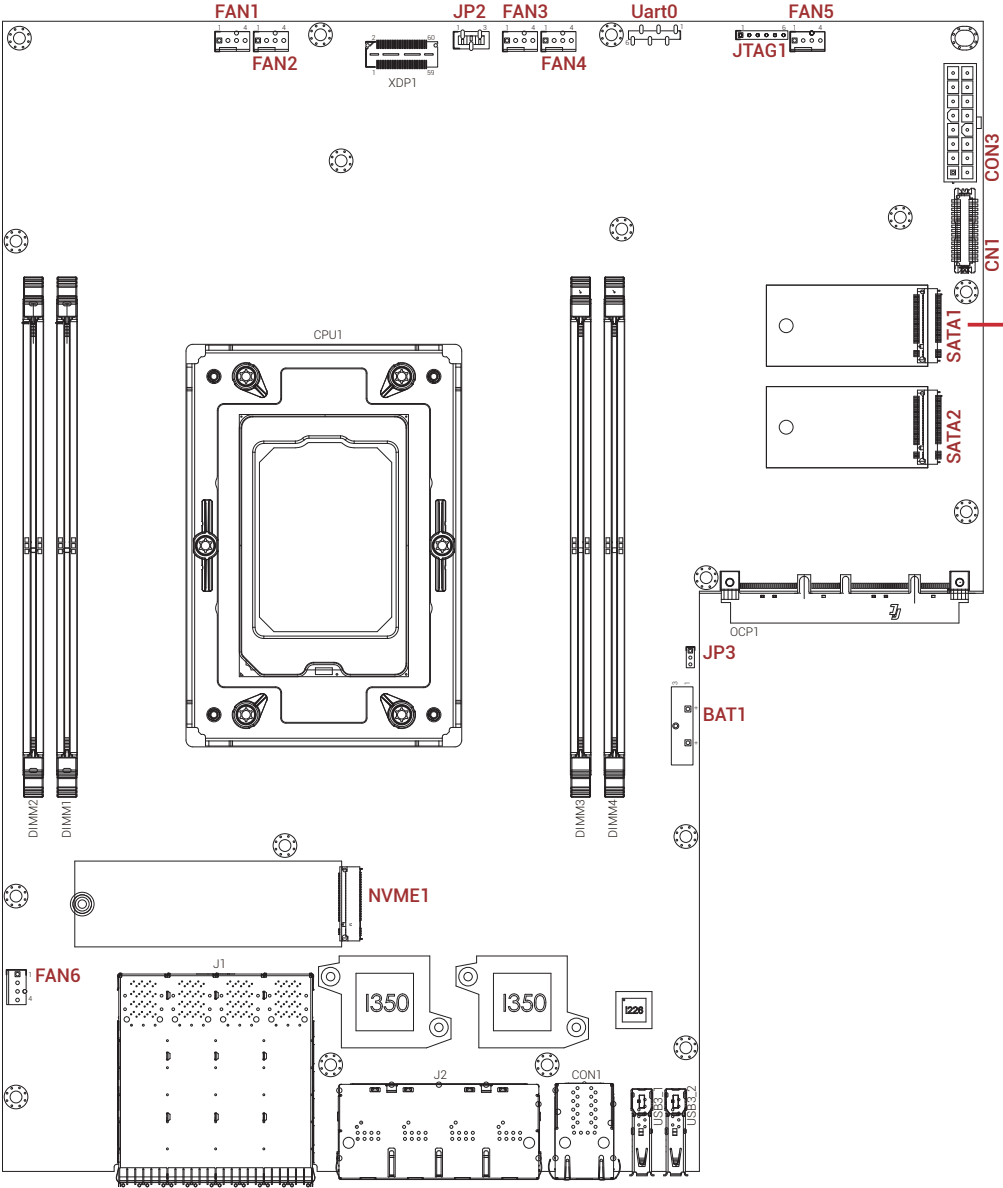
CON3: Power Connector

Pin	Signal	Pin	Signal
1	P5V_STBY	2	P12V_AUX
3	P12V_AUX	4	P12V_AUX
5	GND	6	GND
7	GND	8	GND
9	P12V_AUX	10	P12V_AUX
11	P12V_AUX	12	P12V_AUX
13	GND	14	GND
15	GND	16	GND

CN1: I/O Signal Connector (to I/O Board)

Pin	Signal	Pin	Signal
1	P3V3	2	P3V3_AUX
3	GND	4	P3V3_AUX
5	NA	6	GND
7	FP_PWR_BTN_LVC3_N	8	RST_RSTBTN_N
9	PS_ON_D	10	PRESENT_IN_A_CAB
11	PMBUS1_STBY_LVC3_R_SCL	12	PRESENT_IN_B_CAB
13	PMBUS1_STBY_LVC3_R_SDA	14	PMB-ALERT_A_CAB
15	PW_OK_A_CAB	16	PMB-ALERT_B_CAB
17	PW_OK_B_CAB	18	CPLD_STATUS_GLED
19	RST_PLTRST_LVC3	20	CPLD_STATUS_OLED
21	CPLD_MGNT_LED	22	CPLD_SYS_LED
23	CPLD_NVME_LED_PB_N	24	CPLD_PWR1_ON_GLED
25	CPLD_SATA_LED0	26	CPLD_PWR1_OFF_RLED
27	CPLD_SATA_LED1	28	CPLD_PWR2_ON_GLED
29	NA	30	CPLD_PWR2_OFF_RLED

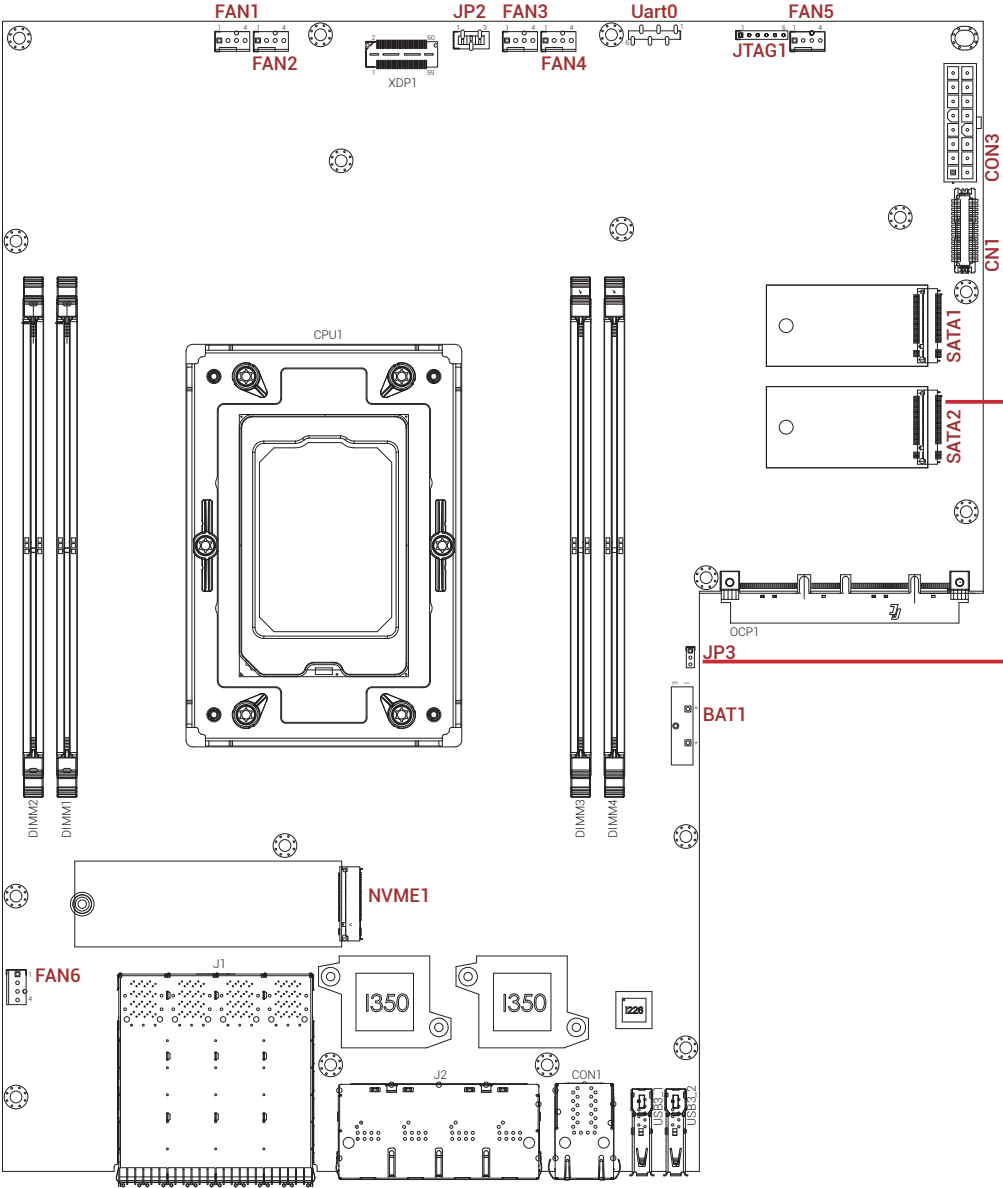
FTA 5190 Quick Reference Guide



SATA1: M.2 SATA1 Connector

Pin	Signal	Pin	Signal
75	NGFF1_CONFIG_2	-	-
73	GND	74	P3V3_SSD1
71	GND	72	P3V3_SSD1
69	NGFF1_CONFIG_1	70	P3V3_SSD1
67	N/A	68	SSD1_SUSCLK
57	GND	58	N/A
55	N/A	56	N/A
53	N/A	54	N/A
51	GND	52	N/A
49	SSD1_TXP_0_C	50	N/A
47	SSD1_TXN_0_C	48	N/A
45	GND	46	N/A
43	SSD1_RXN_0_C	44	N/A
41	SSD1_RXP_0_C	42	N/A
39	GND	40	N/A
37	N/A	38	NGFF1_DEVSLP
35	N/A	36	N/A
33	GND	34	N/A
31	N/A	32	N/A
29	N/A	30	N/A
27	GND	28	N/A
25	N/A	26	N/A
23	N/A	24	N/A
21	NGFF1_CONFIG_0	22	N/A
19	N/A	20	N/A
17	N/A	18	P3V3_SSD1
15	GND	16	P3V3_SSD1
13	NA	14	P3V3_SSD1
11	NA	12	P3V3_SSD1
9	GND	10	M.2_ACT_LED1
7	NA	8	NA
5	NA	6	NA
3	GND	4	P3V3_SSD1
1	NGFF1_CONFIG_3	2	P3V3_SSD1

FTA 5190 Quick Reference Guide



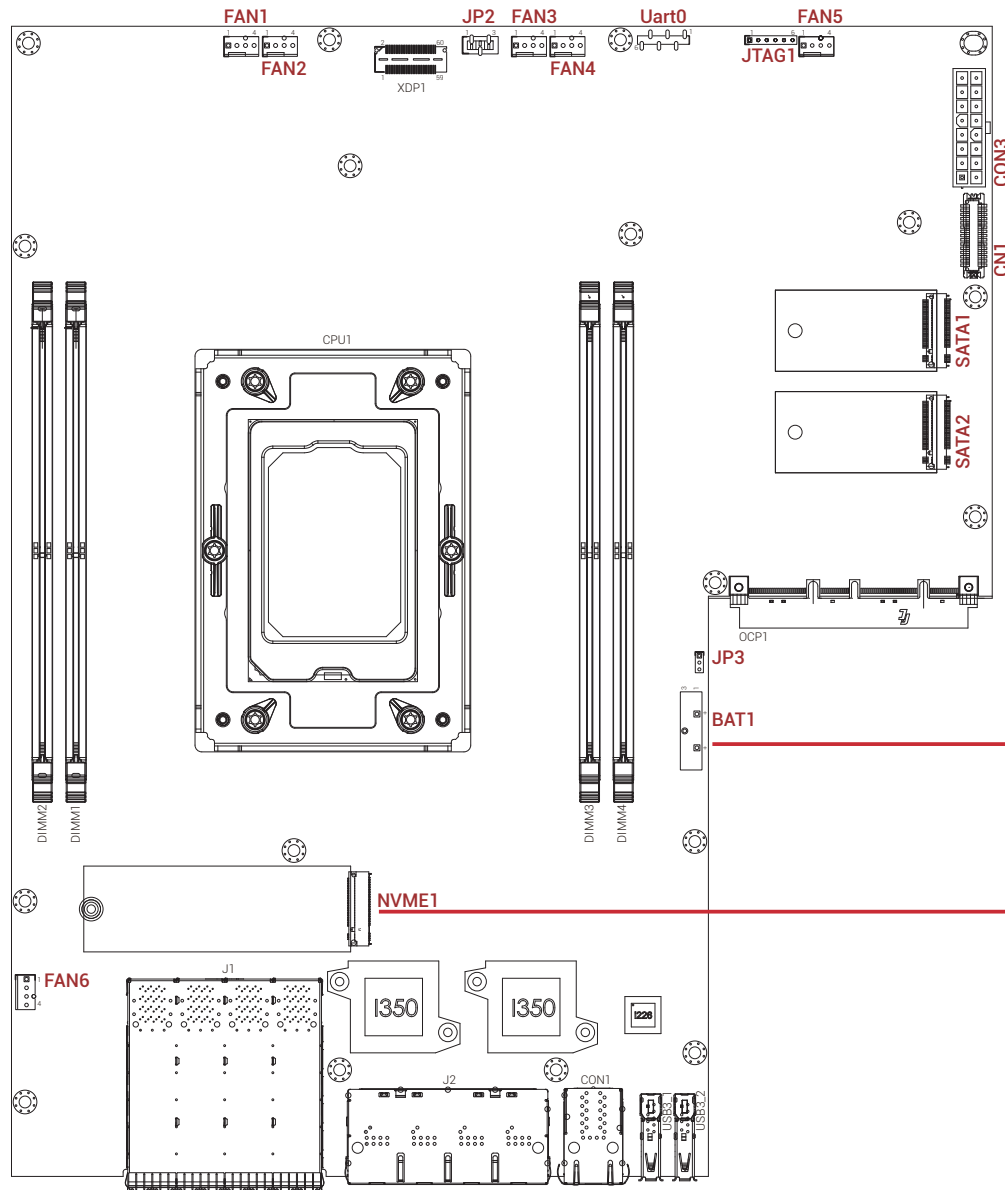
SATA2: M.2 SATA2 Connector

Pin	Signal	Pin	Signal
75	NGFF2_CONFIG_2	-	-
73	GND	74	P3V3_SSD2
71	GND	72	P3V3_SSD2
69	NGFF2_CONFIG_1	70	P3V3_SSD2
67	N/A	68	SSD2_SUSCLK
57	GND	58	N/A
55	N/A	56	N/A
53	N/A	54	N/A
51	GND	52	N/A
49	SSD2_TXP_0_C	50	N/A
47	SSD2_TXN_0_C	48	N/A
45	GND	46	N/A
43	SSD2_RXN_0_C	44	N/A
41	SSD2_RXP_0_C	42	N/A
39	GND	40	N/A
37	N/A	38	NGFF2_DEVSLP
35	N/A	36	N/A
33	GND	34	N/A
31	N/A	32	N/A
29	N/A	30	N/A
27	GND	28	N/A
25	N/A	26	N/A
23	N/A	24	N/A
21	NGFF2_CONFIG_0	22	N/A
19	N/A	20	N/A
17	N/A	18	P3V3_SSD2
15	GND	16	P3V3_SSD2
13	N/A	14	P3V3_SSD2
11	N/A	12	P3V3_SSD2
9	GND	10	M.2_ACT_LED2
7	N/A	8	N/A
5	N/A	6	N/A
3	GND	4	P3V3_SSD2
1	NGFF2_CONFIG_3	2	P3V3_SSD2

JP3: RTC Clear

Pin	Signal
1	N/A
2	RST_CPU0_RTCRST_N
3	PD_RST_RTCRST_N

FTA 5190 Quick Reference Guide



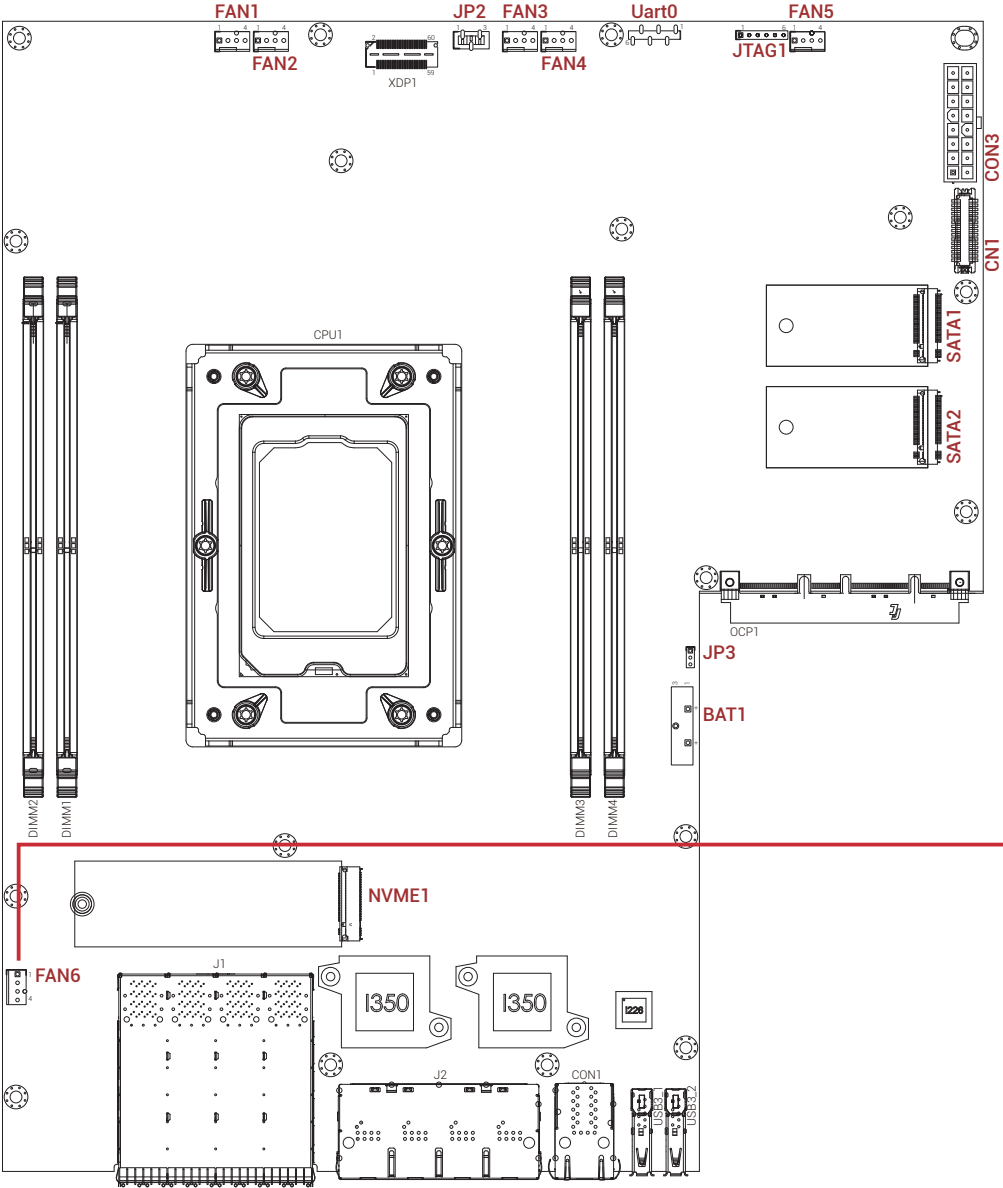
BAT1: SYS RTC Holder

Pin	Signal
1	RTC_BAT
2	RTC_BAT
3	GND

NVME1: NVMe Slot (PCIe 5.0)

Pin	Signal	Pin	Signal
75	GND	-	-
73	GND	74	P3V3
71	GND	72	P3V3
69	N/A	70	P3V3
67	N/A	68	SUSCLK
57	GND	58	N/A
55	CLK_NVME_P	56	N/A
53	CLK_NVME_N	54	NVME_WAKE_N
51	GND	52	CLKREQ_M.2_R_N
49	PCI_E_NVME_TXP0	50	CPLD_RST_M.2_R_N
47	PCI_E_NVME_TXN0	48	N/A
45	GND	46	N/A
43	PCI_E_NVME_RXP0	44	N/A
41	PCI_E_NVME_RXN0	42	N/A
39	GND	40	N/A
37	PCI_E_NVME_TXP1	38	NVME_DEVS_L_P
35	PCI_E_NVME_TXN1	36	N/A
33	GND	34	N/A
31	PCI_E_NVME_RXP1	32	N/A
29	PCI_E_NVME_RXN1	30	N/A
27	GND	28	N/A
25	PCI_E_NVME_TXP2	26	N/A
23	PCI_E_NVME_TXN2	24	N/A
21	GND	22	N/A
19	PCI_E_NVME_RXP2	20	N/A
17	PCI_E_NVME_RXN2	18	P3V3
15	GND	16	P3V3
13	PCI_E_NVME_TXP3	14	P3V3
11	PCI_E_NVME_TXN3	12	P3V3
9	GND	10	CPLD_NVME_LED_R_N
7	PCI_E_NVME_RXP3	8	N/A
5	PCI_E_NVME_RXN3	6	N/A
3	GND	4	P3V3
1	GND	2	P3V3

FTA 5190 Quick Reference Guide



FAN6: NVMe FAN Wafer Connector

	Pin	Signal
	1	GND
	2	P12V
	3	N/A
	4	N/A

11/11

	Pin	Signal	Pin	Signal
	1	P5V_STBY	9	P12V_PSU
	2	P12V_PSU	10	P12V_PSU
	3	P12V_PSU	11	P12V_PSU
	4	P12V_PSU	12	P12V_PSU
	5	GND	13	GND
	6	GND	14	GND
	7	GND	15	GND
	8	GND	16	GND

	Pin	Signal	Pin	Signal
	1	P3V3	2	P3V3_AUX
	3	GND	4	P3V3_AUX
	5	NA	6	GND
	7	FP_PWR_BTN_LVC3_N	8	RST_RSTBTN_N
	9	PS_ON_R	10	PRESENT_IN_A_CAB
	11	PMBUS1_STBY_LVC3_R_SCL	12	PRESENT_IN_B_CAB
	13	PMBUS1_STBY_LVC3_R_SDA	14	PMB-ALERT_A_CAB
	15	PW_OK_A_CAB	16	PMB-ALERT_B_CAB
	17	PW_OK_B_CAB	18	CPLD_STATUS_GLED
	19	RST_PLTRST_LVC3	20	CPLD_STATUS_OLED
	21	CPLD_MGNT_LED	22	CPLD_SYS_LED
	23	CPLD_NVME_LED_PB_N	24	CPLD_PWR1_ON_GLED
	25	CPLD_SATA_LED0	26	CPLD_PWR1_OFF_RLED
	27	CPLD_SATA_LED1	28	CPLD_PWR2_ON_GLED
29	NA	30	CPLD_PWR2_OFF_RLED	

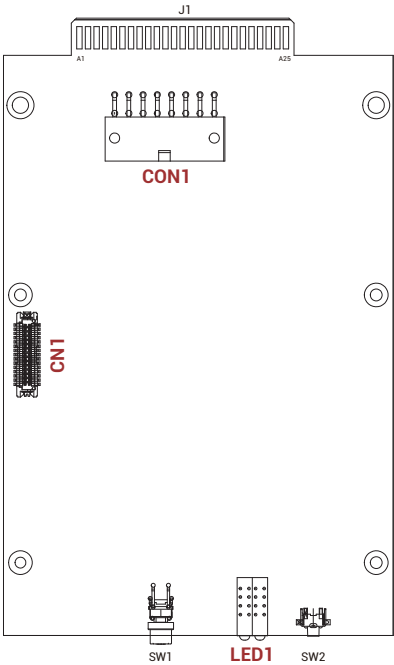
	Pin	Signal	Pin	Signal
	BC4	CPLD_STATUS_GLED	BA4	CPLD_STATUS_OLED
	BC3	CPLD_MGNT_LED	BA3	P3V3
	BC2	CPLD_SYS_LED	BA2	P3V3
	BC1	CPLD_PWR1_ON_GLED	BA1	CPLD_PWR1_OFF_RLED
	AC4	CPLD_SATA_LED1	AA4	P3V3
	AC3	CPLD_SATA_LED0	AA3	P3V3
	AC2	CPLD_NVME_LED_PB_N	AA2	P3V3
	AC1	CPLD_PWR2_ON_GLED	AA1	P3V3

The diagram shows a top-down view of the CN1 connector. It features two rows of pins: a top row labeled A25 to A1 and a bottom row labeled B25 to B1. The connector is labeled CN1 in red. There are also three circular mounting holes: one on the left, one in the center, and one on the right.

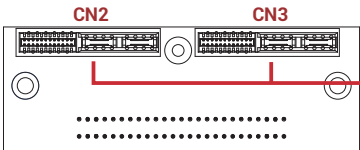
FTA 5190 Quick Reference Guide



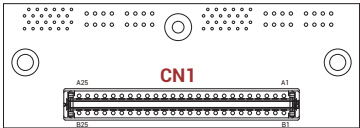
I/O Board



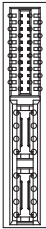
Power Board - Top Side



Power Board - Bottom Side



● CN2, CN3: Power Connector (to PSU)

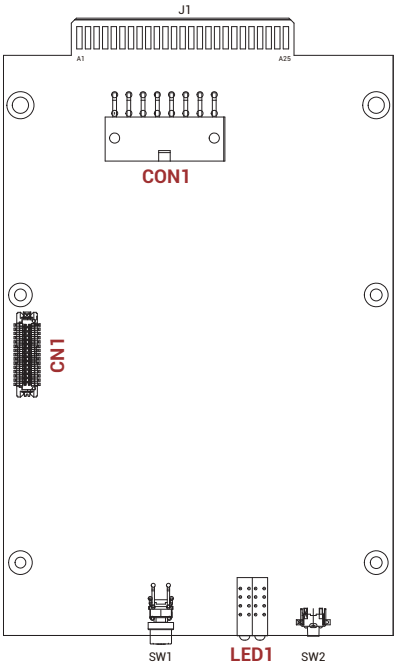


Pin	Signal	Pin	Signal
P1A1	P12V_PSU	P1B1	P12V_PSU
P1A2	P12V_PSU	P1B2	P12V_PSU
P1A3	P12V_PSU	P1B3	P12V_PSU
P1A4	P12V_PSU	P1B4	P12V_PSU
P2A1	GND	P2B1	GND
P2A2	GND	P2B2	GND
P2A3	GND	P2B3	GND
P2A4	GND	P2B4	GND
S1	P5V_STBY	S13	P5V_STBY
S2	P5V_STBY	S14	P5V_STBY
S3	PSU1_A1	S15	NA
S4	PW_OK_A_CAB	S16	PDB_FAIL
S5	PSU1_PSON#	S17	NA
S6	GND	S18	NA
S7	PMB_SCL1	S19	NA
S8	PMB_SDA1	S20	PSU_S17
S9	PMB-ALERT_A_CAB	S21	NA
S10	+MO_IS	S22	PSU1_A0
S11	NA	S23	PRESENT_IN_A_CAB
S12	NA	S24	NA

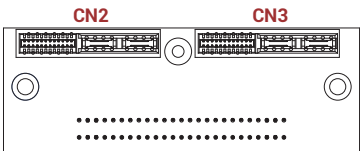
FTA 5190 Quick Reference Guide



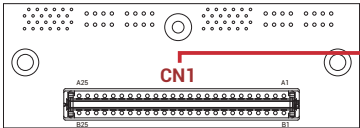
I/O Board



Power Board - Top Side



Power Board - Bottom Side



● CN1: Power Connector (to I/O Board)

Pin	Signal	Pin	Signal
A1	GND	B1	GND
A2	GND	B2	GND
A3	GND	B3	GND
A4	GND	B4	GND
A5	GND	B5	GND
A6	GND	B6	GND
A7	GND	B7	GND
A8	GND	B8	GND
A9	P12V_PSU	B9	P12V_PSU
A10	P12V_PSU	B10	P12V_PSU
A11	P12V_PSU	B11	P12V_PSU
A12	P12V_PSU	B12	P12V_PSU
A13	P12V_PSU	B13	P12V_PSU
A14	P12V_PSU	B14	P12V_PSU
A15	P12V_PSU	B15	P12V_PSU
A16	P12V_PSU	B16	P12V_PSU
A17	P12V_PSU	B17	P12V_PSU
A18	PMB-ALERT_A_CAB	B18	PMB_SDA
A19	PMB-ALERT_B_CAB	B19	PMB_SCL
A20	NA	B20	PS_ON_R
A21	NA	B21	PW_OK_A_CAB
A22	PRESENT_IN_A_CAB	B22	PW_OK_B_CAB
A23	PRESENT_IN_B_CAB	B23	NA
A24	P3V3	B24	NA
A25	P5V_STBY	B25	P5V_STBY