

MILBOARD-THR USER MANUAL

UM-MLBD-THR-01
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Forecr
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Preface

Disclaimer

Forecr emphasizes that the information contained in this user manual is continuously updated in line with the technical modifications and enhancements made by Forecr to its MILBOARD-THR. Therefore, this manual only represents the technical status of Forecr MILBOARD-THR at the time of publishing.

Forecr shall not be held responsible for any damages that may occur directly or indirectly as a result of any technical or typographical errors or omissions found in this document or for any discrepancies between the product and the user's manual.

Customer Support

In case you encounter any challenges after reading the user manual and/or using the MILBOARD-THR, please reach out to the Forecr reseller from which you purchased the MILBOARD-THR.

See the contact information section below for more information on how to contact us directly.

Contact Information

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Symbols

	<p>ElectroStatic Discharge (ESD) Sensitive Device!</p> <p>Electronic boards and their components are sensitive to static electricity. When handling any circuit board assemblies, it is recommended that ESD safety precautions be observed.</p> <p>ESD safe best practices include, but are not limited to:</p> <ul style="list-style-type: none"> • Do not handle the carrier board out of its antistatic packaging while it is not used for operational purposes unless it is otherwise protected. • Whenever possible, unpack or pack this product only at ESD safe work stations. • Where a safe work station is not guaranteed, it is important for the user to be electrically discharged before touching the product with his/her hands or tools. • Try to handle the board by the edges, avoiding contact with components.
	<p>HOT Surface!</p> <p>Do not touch. Contact may cause burns. Allow to cool before servicing.</p>
	<p>Waste Electrical and Electronic Equipment (WEEE)!</p> <p>The carrier board should not be discarded as unsorted waste but must be sent to separate collection facilities for recovery and recycling.</p>
	<p>Restriction of Hazardous Substances (RoHS)!</p> <p>The carrier board complies with the regulations and restrictions established by the ROHS Directive and does not contain hazardous substances in concentrations that may be harmful to health or the environment.</p>

Limited Product Warranty

Forecr provides a 1-year Warranty for the MILBOARD-THR. This warranty period is valid from the original purchase date of the MILBOARD-THR. In order to maintain warranty, the MILBOARD-THR must not be altered or modified in any way. Changes or modifications to the MILBOARD-THR that are not explicitly approved by Forecr and described in this user manual or received from Forecr Support as a special handling instruction, will void your warranty.

To receive warranty service, the MILBOARD-THR must be delivered to Forecr within the warranty period together with the original invoice or proof of purchase.

Revision History

Revision No	Revision Date	Revision Description
rev 1.0	06.05.2026	Preliminary Release

1. Introduction

MILBOARD-THR redefines ruggedized AI computing, bringing data-center class intelligence directly to the tactical edge. Purpose-built for the rigorous demands of the defense and aerospace sectors, this powerhouse is powered by the formidable NVIDIA Jetson T5000 and T4000 modules. It unleashes a staggering 2070 TFLOPS of compute capability, effortlessly crushing the most complex AI inference and sensor fusion workloads.

The system seamlessly orchestrates massive data throughput via a superior connectivity suite, featuring quad 10GBASE-T Ethernet ports and mission-critical 3G-SDI video interfaces. Built to withstand the unforgiving realities of the field, the MILBOARD-THR is constructed exclusively with industrial-grade components and premium X7R capacitors, ensuring zero-failure operation.

It combines this hardened physical architecture with next-generation expandability through triple PCIe Gen5 slots and rock-solid security via TPM 2.0. Optimized for tactical power grids, the system operates with unwavering stability within a precise 18–36 VDC input range, delivering uncompromising performance where others fail.

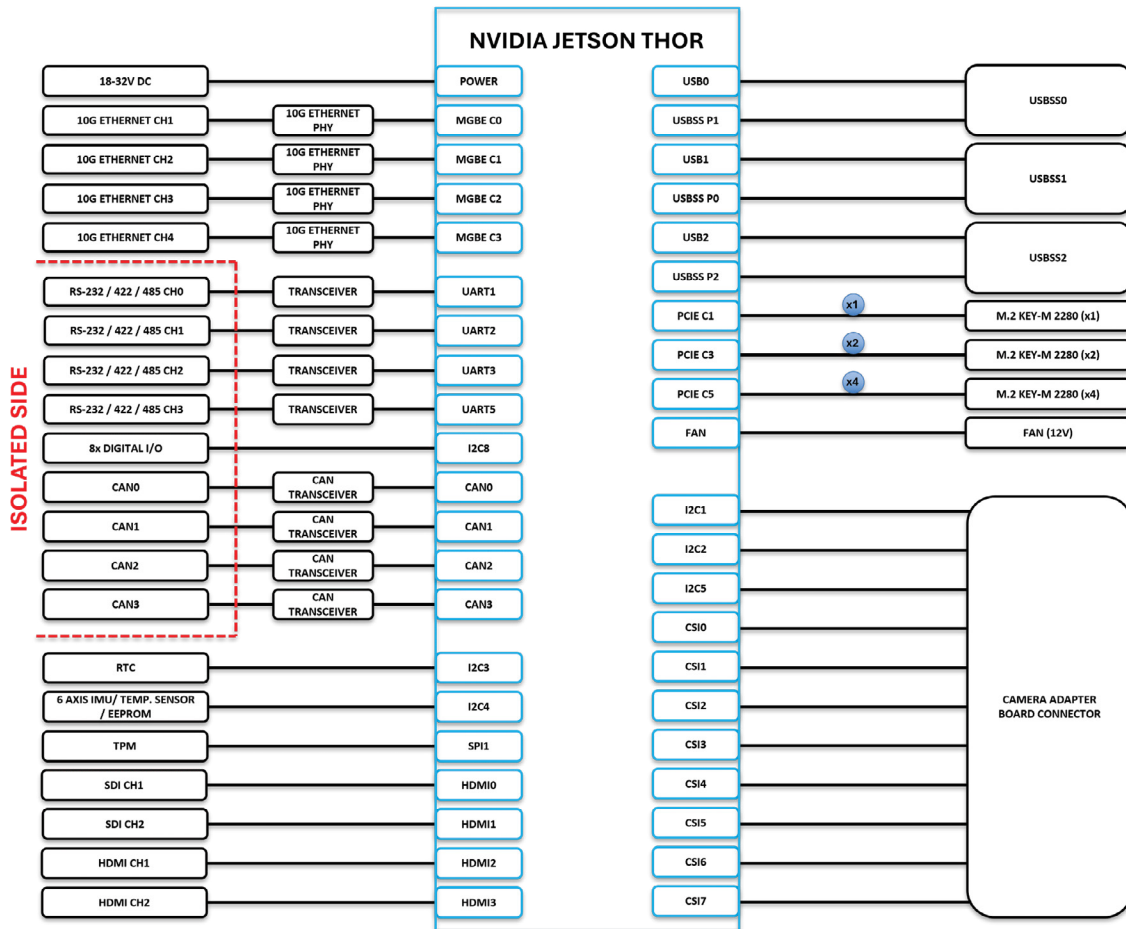
Latest revision of this user manual, datasheet, and 3D model can be downloaded from [Forecr Web Page](#).

2. Product Specification

2.1 Technical Specification

Supported Modules	NVIDIA Jetson T5000 NVIDIA Jetson T4000
Memory	128 GB 256-bit LPDDR5X 64 GB 256-bit LPDDR5X
Video Output	2× HDMI 2.1 2× 3G-SDI (Optional via Expansion Slots)
Interfaces	4× 10GBASE-T Ethernet 3× USB 3.2 4× CAN FD (Isolated) 4× RS-232/422/485 (Isolated) 8× Digital I/O (3.3V, Isolated)
Other Features	TPM 2.0 Chipset for Enhanced Security 6-Axis IMU & Temperature Sensor EEPROM External RTC IC for 10+ years lifetime
Power Supply	18–36 VDC Input
Extension Sockets	1× M.2 Key-M 2280 (PCIe Gen5 x4) 1× M.2 Key-M 2280 (PCIe Gen5 x2) 1× M.2 Key-M 2280 (PCIe Gen5 x1) 1× Camera Expansion Slot (Optional Analog Video / GMSL2) 1x Expansion Header (PCIe x1, USB2.0, I2C, I2S, SPI, GPIO)
Mass Storage	Up to three NVMe SSD support
Ambient Conditions	-40°C to +85°C (Carrier Board)
Form Factor / Dimensions	150 mm x 140 mm
Operating Systems	Ubuntu Linux 24.04
JetPack Support	JetPack 7.x

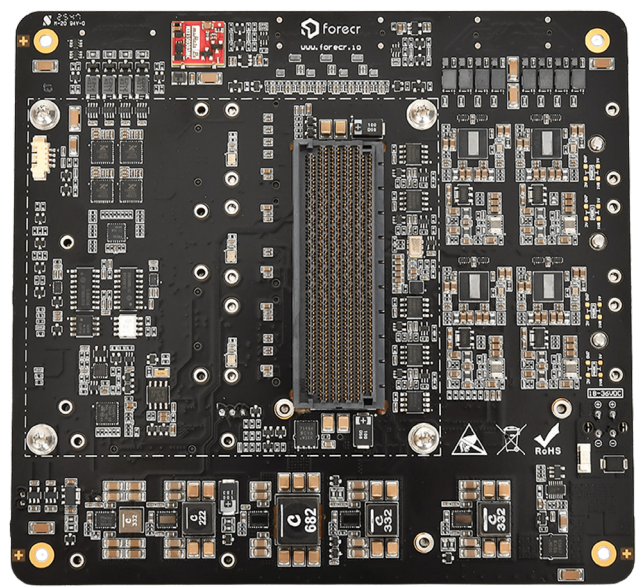
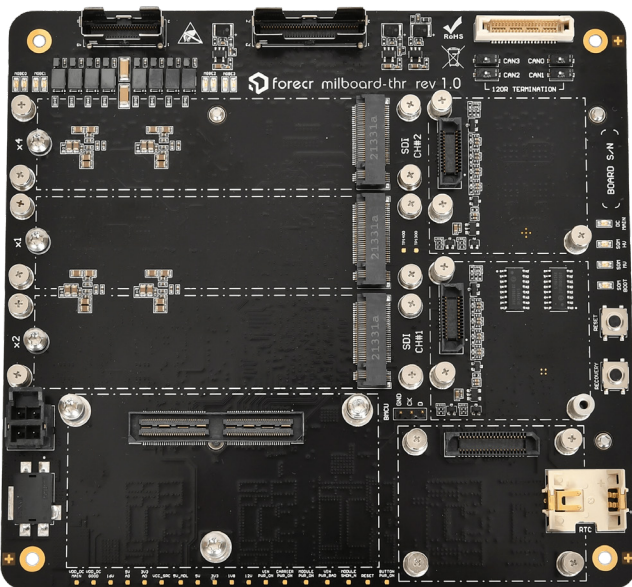
2.2 Block Diagram



2.3 Board Visuals

Top Side

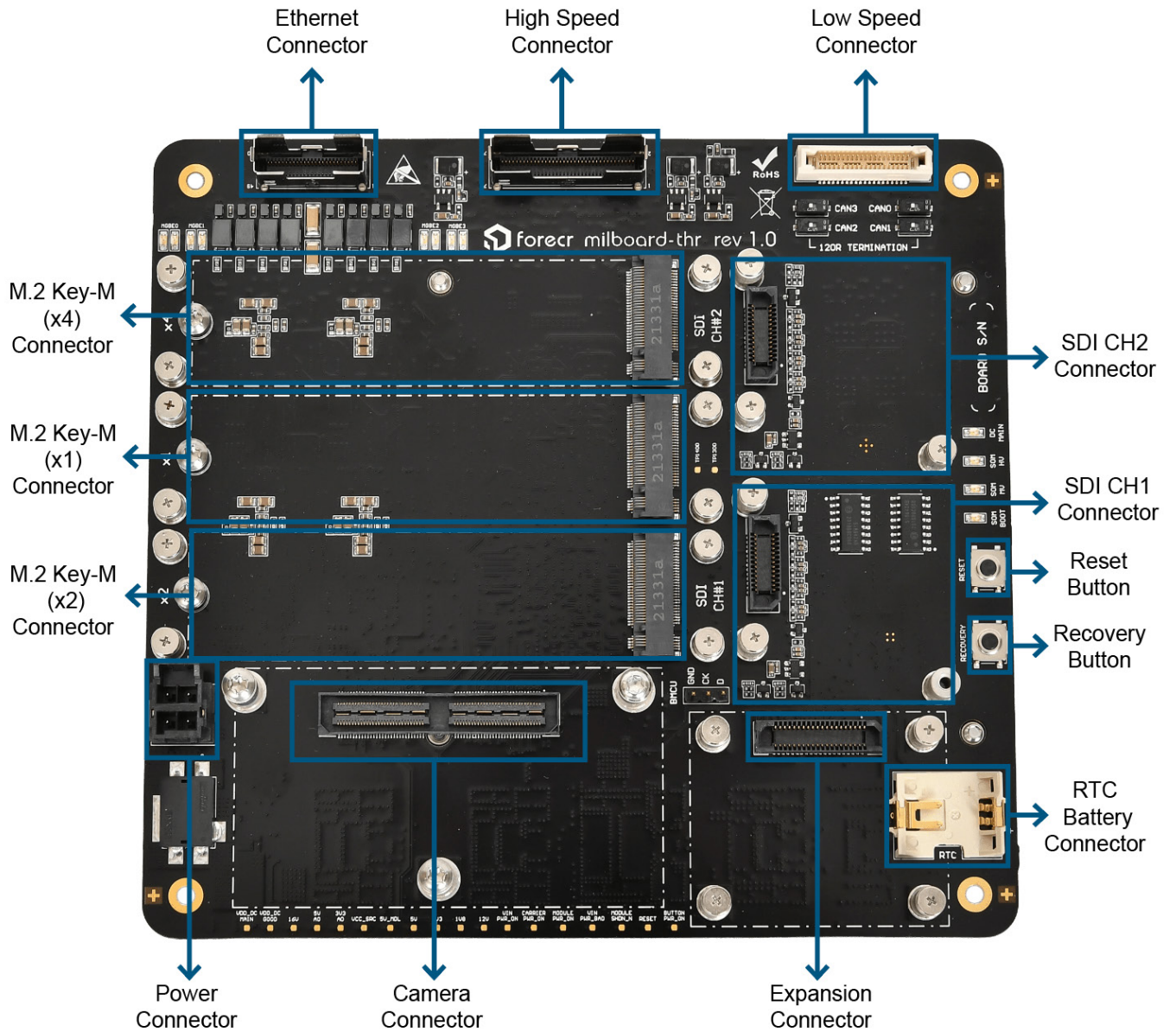
Bottom Side



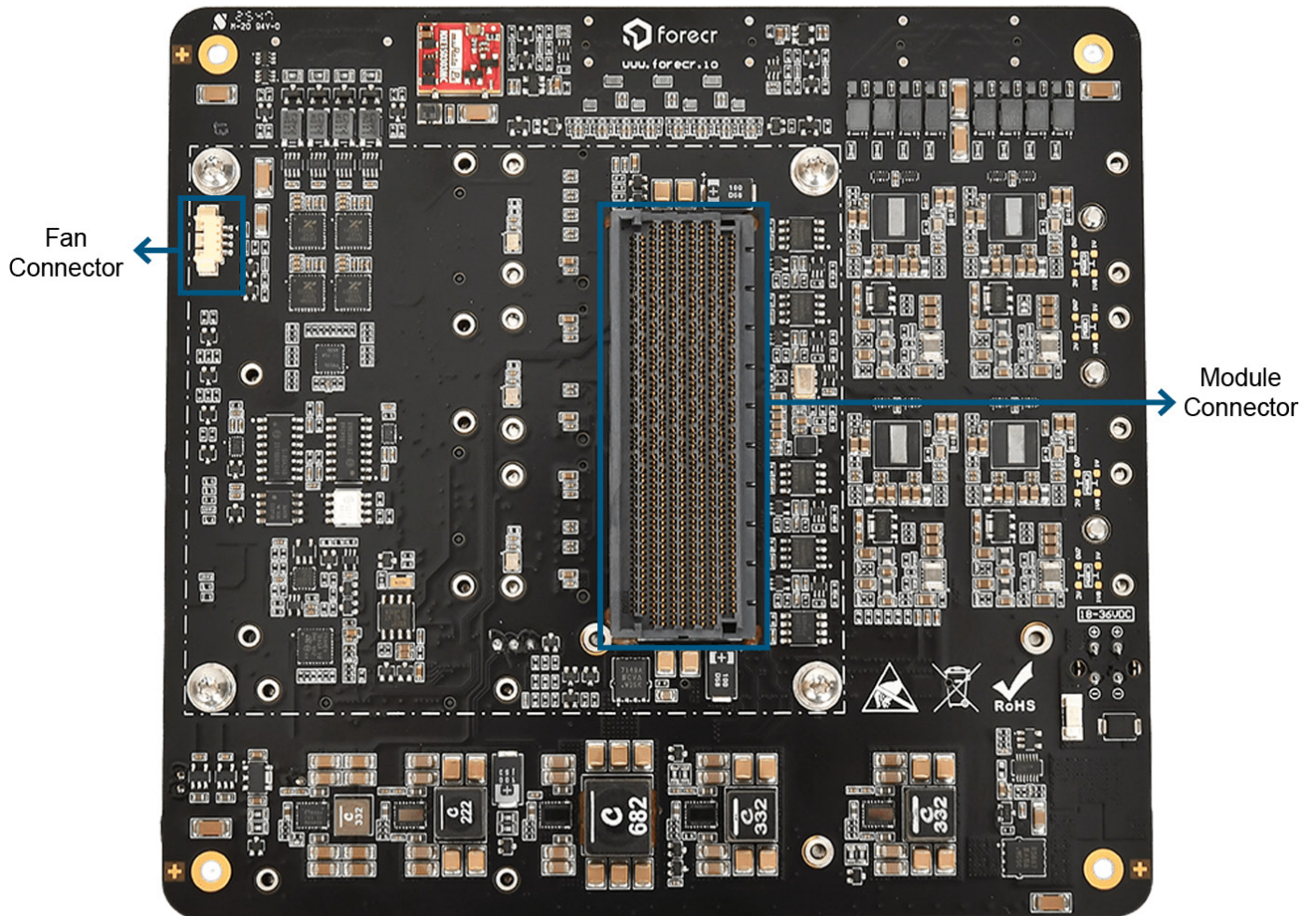
3. Hardware Information

3.1 Connector Location

3.1.1 Front Side



3.1.2 Rear Side

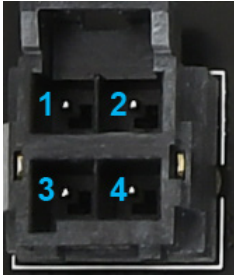


3.2 List of Connectors


Connectors
MILBOARD-THR Power Connector
MILBOARD-THR Low-Speed Connector
MILBOARD-THR High-Speed Connector
MILBOARD-THR Ethernet Connector
MILBOARD-THR Camera Connector
MILBOARD-THR M.2 Key-M (X1) Connector
MILBOARD-THR M.2 Key-M (X2) Connector
MILBOARD-THR M.2 Key-M (X4) Connector
MILBOARD-THR SDI CH1 Connector
MILBOARD-THR SDI CH2 Connector
MILBOARD-THR Expansion Connector
MILBOARD-THR Fan Connector
MILBOARD-THR CAM Power Connector
Buttons
MILBOARD-THR Recovery Button
MILBOARD-THR Reset Button

3.3 The Definition of Each Connector

3.3.1 Power Connector

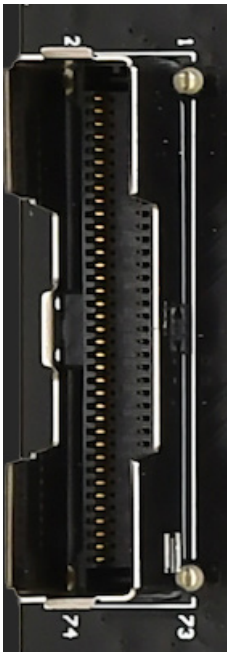
	Function	Description	
	Connector Type	1722981104	
	Mating Connector	1722583104	
	Voltage Range	18-32 VDC (28 VDC Nominal)	
	Pinout	Pin	Description
1		VDD_DC_IN	
2		VDD_DC_IN	
3		GND	
4	GND		

3.3.2 Low-Speed Connector


	Function	Description			
	Connector Type	TEM-120-02-03.0-G-D-L1			
	Mating Connector	SES DT-20-32-G-XX.X-L1			
	Pinout	Pin	Description	Pin	Description
		1	DIGITAL_IO_CH4	21	RS422_CH3.TX_N
		2	DIGITAL_IO_CH3	22	RS422_CH2.TX_N
		3	DIGITAL_IO_CH5	23	RS422_CH3.TX_P
		4	DIGITAL_IO_CH2	24	RS422_CH2.TX_P
		5	DIGITAL_IO_CH6	25	RS422_CH3.RX_P
		6	DIGITAL_IO_CH1	26	RS422_CH2.RX_P
		7	DIGITAL_IO_CH7	27	RS422_CH3.RX_N
		8	DIGITAL_IO_CH0	28	RS422_CH2.RX_N
		9	GND	29	GND
		10	GND	30	GND
		11	RS422_CH0.TX_N	31	RESET_ISO_N
		12	RS422_CH1.TX_N	32	RECOVERY_ISO_N
		13	RS422_CH0.TX_P	33	CAN0_CONN.D_P
		14	RS422_CH1.TX_P	34	CAN2_CONN.D_P
		15	RS422_CH0.RX_P	35	CAN0_CONN.D_N
		16	RS422_CH1.RX_P	36	CAN2_CONN.D_N
17		RS422_CH0.RX_N	37	CAN1_CONN.D_P	
18		RS422_CH1.RX_N	38	CAN3_CONN.D_P	
19		GND	39	CAN1_CONN.D_N	
20	GND	40	CAN3_CONN.D_N		

3.3.3 High-Speed Connector

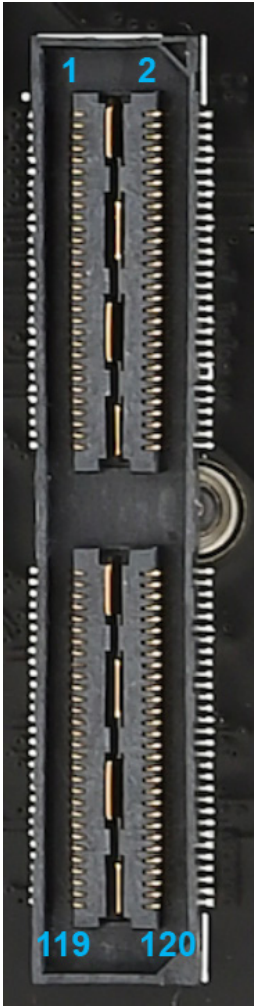
Function	Description			
Connector Type	ARF6-24-S-D-A-K-TR			
Mating Connector	ARC6-24-XX.X-LU-LU-3-1			
Pinout	Pin	Description	Pin	Description
	1	GND	38	GND
	2	GND	39	VDD_5V_HDMI2
	3	VDD_5V_HDMI3	40	USBSS1_CONN.TX_P
	4	USBSS0_CONN.RX_P	41	HDMI2_CON.HPD
	5	HDMI3_CON.HPD	42	USBSS1_CONN.TX_N
	6	USBSS0_CONN.RX_N	43	GND
	7	GND	44	GND
	8	GND	45	HDMI2_CON.SDA
	9	HDMI3_CON.SDA	46	USBSS1_VBUS
	10	USBSS0_CONN.D_P	47	HDMI2_CON.SCL
	11	HDMI3_CON.SCL	48	USBSS1_VBUS
	12	USBSS0_CONN.D_N	49	GND
	13	GND	50	GND
	14	GND	51	HDMI2_CON.TXC_N
	15	HDMI3_CON.TXC_N	52	USBSS2_CONN.RX_P
	16	USBSS0_CONN.TX_P	53	HDMI2_CON.TXC_P
	17	HDMI3_CON.TXC_P	54	USBSS2_CONN.RX_N
	18	USBSS0_CONN.TX_N	55	GND
	19	GND	56	GND
	20	GND	57	HDMI2_CON.TXD0_N
	21	HDMI3_CON.TXD0_N	58	USBSS2_CONN.D_P
	22	USBSS0_VBUS	59	HDMI2_CON.TXD0_P
	23	HDMI3_CON.TXD0_P	60	USBSS2_CONN.D_N
	24	USBSS0_VBUS	61	GND
	25	GND	62	GND
	26	GND	63	HDMI2_CON.TXD1_N
	27	HDMI3_CON.TXD1_N	64	USBSS2_CONN.TX_P
	28	USBSS1_CONN.RX_P	65	HDMI2_CON.TXD1_P
	29	HDMI3_CON.TXD1_P	66	USBSS2_CONN.TX_N
	30	USBSS1_CONN.RX_N	67	GND
	31	GND	68	GND
	32	GND	69	HDMI2_CON.TXD2_N
	33	HDMI3_CON.TXD2_N	70	USBSS2_VBUS
	34	USBSS1_CONN.D_P	71	HDMI2_CON.TXD2_P
	35	HDMI3_CON.TXD2_P	72	USBSS2_VBUS
	36	USBSS1_CONN.D_N	73	GND
37	GND	74	GND	



3.3.4 Ethernet Connector

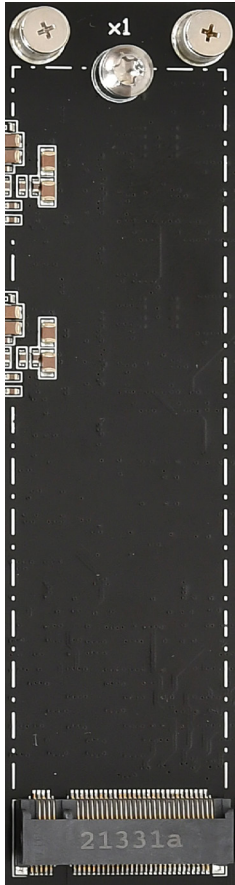
	Function	Description			
	Connector Type	ARF6-16-S-D-A-K-TR			
	Mating Connector	ARC6-16-XX.X-LU-LU-3-1			
	Pinout	Pin	Description	Pin	Description
		1	GND	26	GND
		2	GND	27	ENET_10G_CH3.D0_P
		3	ENET_10G_CH4.D0_P	28	ENET_10G_CH1.D0_N
		4	ENET_10G_CH2.D0_N	29	ENET_10G_CH3.D0_N
		5	ENET_10G_CH4.D0_N	30	ENET_10G_CH1.D0_P
		6	ENET_10G_CH2.D0_P	31	GND
		7	GND	32	GND
		8	GND	33	ENET_10G_CH3.D1_P
		9	ENET_10G_CH4.D1_P	34	ENET_10G_CH1.D1_N
		10	ENET_10G_CH2.D1_N	35	ENET_10G_CH3.D1_N
		11	ENET_10G_CH4.D1_N	36	ENET_10G_CH1.D1_P
		12	ENET_10G_CH2.D1_P	37	GND
		13	GND	38	GND
		14	GND	39	ENET_10G_CH3.D2_P
		15	ENET_10G_CH4.D2_P	40	ENET_10G_CH1.D2_N
		16	ENET_10G_CH2.D2_N	41	ENET_10G_CH3.D2_N
17		ENET_10G_CH4.D2_N	42	ENET_10G_CH1.D2_P	
18		ENET_10G_CH2.D2_P	43	GND	
19		GND	44	GND	
20	GND	45	ENET_10G_CH3.D3_P		
21	ENET_10G_CH4.D3_P	46	ENET_10G_CH1.D3_N		
22	ENET_10G_CH2.D3_N	47	ENET_10G_CH3.D3_N		
23	ENET_10G_CH4.D3_N	48	ENET_10G_CH1.D3_P		
24	ENET_10G_CH2.D3_P	49	GND		
25	GND	50	GND		

3.3.5 Camera Connector

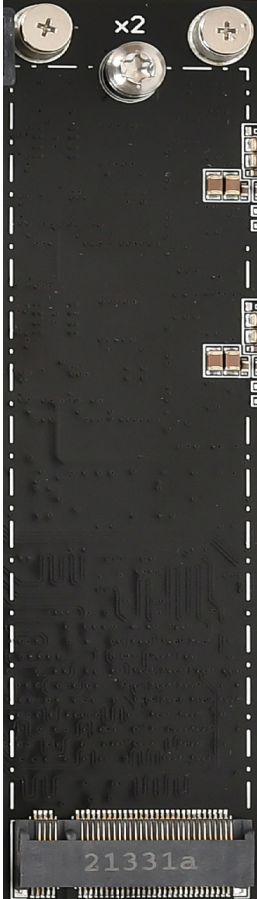
	Function		Description		
	Connector Type		QSH-060-01-L-D-A-K-TR		
	Pinout		Pin	Description	Pin
	1	CSI0.D0_P	61	CSI5.D0_N	
	2	CSI1.D0_P	62	CSI7.D0_N	
	3	CSI0.D0_N	63	GND	
	4	CSI1.D0_N	64	GND	
	5	GND	65	NOT CONNECTED	
	6	GND	66	NOT CONNECTED	
	7	CSI0.CLK_P	67	NOT CONNECTED	
	8	CSI1.CLK_P	68	NOT CONNECTED	
	9	CSI0.CLK_N	69	GND	
	10	CSI1.CLK_N	70	GND	
	11	GND	71	CSI5.D1_P	
	12	GND	72	CSI7.D1_P	
	13	CSI0.D1_P	73	CSI5.D1_N	
	14	CSI1.D1_P	74	CSI7.D1_N	
	15	CSI0.D1_N	75	CAM_I2C.SCL	
	16	CSI1.D1_N	76	NOT CONNECTED	
	17	GND	77	CAM_I2C.SDA	
	18	GND	78	NOT CONNECTED	
	19	CSI2.D0_P	79	GND	
	20	CSI3.D0_P	80	GND	
	21	CSI2.D0_N	81	NOT CONNECTED	
	22	CSI3.D0_N	82	NOT CONNECTED	
	23	GND	83	NOT CONNECTED	
	24	GND	84	NOT CONNECTED	
	25	CSI2.CLK_P	85	CAM_FRSYNC1	
	26	CSI3.CLK_P	86	NOT CONNECTED	
	27	CSI2.CLK_N	87	I2C2.SCL	
	28	CSI3.CLK_N	88	CAM1.MCLK	
	29	GND	89	I2C2.SDA	
	30	GND	90	CAM1_PWDN	
	31	CSI2.D1_P	91	CAM0.MCLK	
	32	CSI3.D1_P	92	CAM1_RST	
	33	CSI2.D1_N	93	CAM0_PWDN	
	34	CSI3.D1_N	94	CAM2.MCLK	
	35	GND	95	CAM0_RST	
	36	GND	96	NOT CONNECTED	
	37	CSI4.D0_P	97	NOT CONNECTED	
	38	CSI6.D0_P	98	NOT CONNECTED	
	39	CSI4.D0_N	99	GND	
	40	CSI6.D0_N	100	GND	

		41	GND	101	NOT CONNECTED
		42	GND	102	VDD_1V8
		43	CSI4.CLK_P	103	CAM_INT3
		44	CSI6.CLK_P	104	CAM_INT4
		45	CSI4.CLK_N	105	I2C5.SCL
		46	CSI6.CLK_N	106	CAM_INT2
		47	GND	107	I2C5.SDA
		48	GND	108	VDD_3V3
		49	CSI4.D1_P	109	NOT CONNECTED
		50	CSI6.D1_P	110	VDD_3V3
		51	CSI4.D1_N	111	NOT CONNECTED
		52	CSI6.D1_N	112	NOT CONNECTED
		53	GND	113	NOT CONNECTED
		54	GND	114	NOT CONNECTED
		55	NOT CONNECTED	115	GND
		56	NOT CONNECTED	116	GND
		57	NOT CONNECTED	117	CAM_INT1
		58	NOT CONNECTED	118	VDD_3V3
		59	CSI5.D0_P	119	CAM_VDD_SYS_EN
		60	CSI7.D0_P	120	VDD_3V3

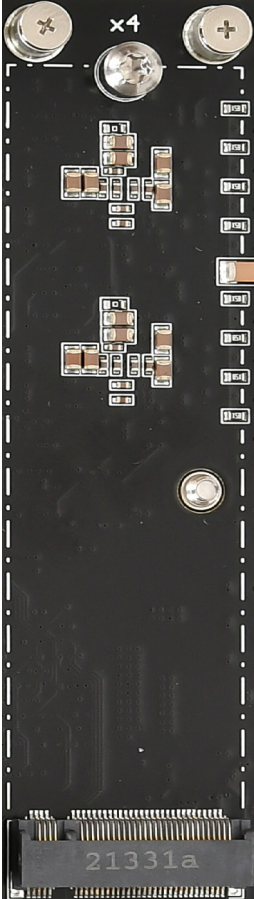
3.3.6 M.2 Key-M (X1) Connector

	Function		Description			
	Connector Type		123A-58M01			
	Pinout		Pin	Description	Pin	Description
	1	GND	35	NC		
	2	3V3	36	NC		
	3	GND	37	NC		
	4	3V3	38	NC		
	5	NC	39	GND		
	6	NC	40	NC		
	7	NC	41	PCIE_C1.RX0_N		
	8	NC	42	NC		
	9	GND	43	PCIE_C1.RX0_P		
	10	NC	44	NC		
	11	NC	45	GND		
	12	3V3	46	NC		
	13	NC	47	PCIE_C1.TX0_N		
	14	3V3	48	NC		
	15	GND	49	PCIE_C1.TX0_P		
	16	3V3	50	PCIE_C1_RST_N		
	17	NC	51	GND		
	18	3V3	52	PCIE_C1_CLKREQ_N		
	19	NC	53	PCIE_C1.CLK_N		
	20	NC	54	PCIE_WAKE_N		
	21	GND	55	PCIE_C1.CLK_P		
	22	NC	56	NC		
	23	NC	57	GND		
	24	NC	58	NC		
	25	NC	67	NC		
	26	NC	68	32KHz CLK		
	27	GND	69	NC		
	28	NC	70	3V3		
	29	NC	71	GND		
	30	NC	72	3V3		
	31	NC	73	GND		
	32	NC	74	3V3		
	33	GND	75	GND		
	34	NC				

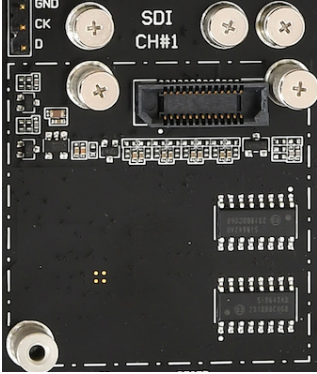
3.3.7 M.2 Key-M (X2) Connector

	Function		Description		
	Connector Type		123A-58M01		
	Pinout		Pin	Description	Pin
	1	GND	35	PCIE_C3.TX1_N	
	2	3V3	36	NC	
	3	GND	37	PCIE_C3.TX1_P	
	4	3V3	38	NC	
	5	NC	39	GND	
	6	NC	40	NC	
	7	NC	41	PCIE_C3.RX0_N	
	8	NC	42	NC	
	9	GND	43	PCIE_C3.RX0_P	
	10	NC	44	NC	
	11	NC	45	GND	
	12	3V3	46	NC	
	13	NC	47	PCIE_C3.TX0_N	
	14	3V3	48	NC	
	15	GND	49	PCIE_C3.TX0_P	
	16	3V3	50	PCIE_C3_RST_N	
	17	NC	51	GND	
	18	3V3	52	PCIE_C3_CLKREQ_N	
	19	NC	53	PCIE_C3.CLK_N	
	20	NC	54	PCIE_WAKE_N	
	21	GND	55	PCIE_C3.CLK_P	
	22	NC	56	NC	
	23	NC	57	GND	
	24	NC	58	NC	
	25	NC	67	NC	
	26	NC	68	32KHz CLK	
	27	GND	69	NC	
	28	NC	70	3V3	
	29	PCIE_C3.RX1_N	71	GND	
	30	NC	72	3V3	
	31	PCIE_C3.RX1_P	73	GND	
	32	NC	74	3V3	
	33	GND	75	GND	
	34	NC			

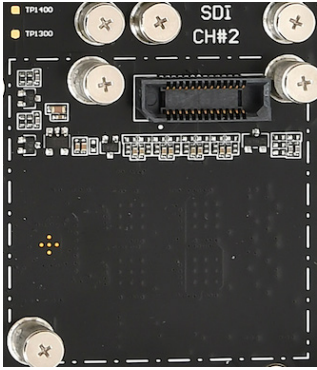
3.3.8 M.2 Key-M (X4) Connector

	Function	Description			
	Connector Type	123A-58M01			
Pinout	Pin	Description	Pin	Description	
	1	GND	35	PCIE_C5.TX1_N	
	2	3V3	36	NC	
	3	GND	37	PCIE_C5.TX1_P	
	4	3V3	38	NC	
	5	PCIE_C5.RX3_N	39	GND	
	6	NC	40	NC	
	7	PCIE_C5.RX3_P	41	PCIE_C5.RX0_N	
	8	NC	42	NC	
	9	GND	43	PCIE_C5.RX0_P	
	10	NC	44	NC	
	11	PCIE_C5.TX3_N	45	GND	
	12	3V3	46	NC	
	13	PCIE_C5.TX3_P	47	PCIE_C5.TX0_N	
	14	3V3	48	NC	
	15	GND	49	PCIE_C5.TX0_P	
	16	3V3	50	PCIE_C5_RST_N	
	17	PCIE_C5.RX2_N	51	GND	
	18	3V3	52	PCIE_C5_CLKREQ_N	
	19	PCIE_C5.RX2_P	53	PCIE_C5.CLK_N	
	20	NC	54	PCIE_WAKE_N	
	21	GND	55	PCIE_C5.CLK_P	
	22	NC	56	NC	
	23	PCIE_C5.TX2_N	57	GND	
	24	NC	58	NC	
	25	PCIE_C5.TX2_P	67	NC	
	26	NC	68	32KHz CLK	
	27	GND	69	NC	
	28	NC	70	3V3	
	29	PCIE_C5.RX1_N	71	GND	
	30	NC	72	3V3	
	31	PCIE_C5.RX1_P	73	GND	
	32	NC	74	3V3	
	33	GND	75	GND	
34	NC				

3.3.9 SDI-CH1 Connector

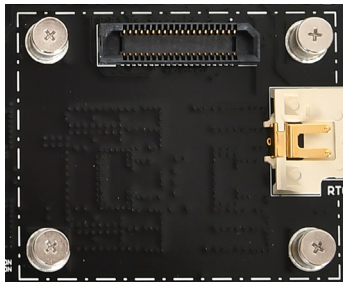
	Function	Description			
	Connector Type	ERF8-013-05.0-L-DV-TR			
	Pinout	Pin	Description	Pin	Description
		1	NC	14	GND
		2	GND	15	GND
		3	GND	16	VDD_5V_HDMI0
		4	HDMI0_TXC_N	17	HDMI0_TXD2_N
		5	HDMI0_TXD0_N	18	HDMI0_CON.HPD
		6	HDMI0_TXC_P	19	HDMI0_TXD2_P
		7	HDMI0_TXD0_P	20	VDD_12V
		8	NC	21	GND
		9	GND	22	GND
		10	HDMI0_SCL	23	GND
		11	HDMI0_TXD1_N	24	GND
12		HDMI0_SDA	25	GND	
13	HDMI0_TXD1_P	26	GND		

3.3.10 SDI-CH2 Connector

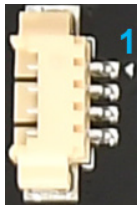
	Function	Description			
	Connector Type	ERF8-013-05.0-L-DV-TR			
	Pinout	Pin	Description	Pin	Description
		1	NC	14	GND
		2	GND	15	GND
		3	GND	16	VDD_5V_HDMI1
		4	HDMI1_TXC_N	17	HDMI1_TXD2_N
		5	HDMI1_TXD0_N	18	HDMI1_CON.HPD
		6	HDMI1_TXC_P	19	HDMI1_TXD2_P
		7	HDMI1_TXD0_P	20	VDD_12V
		8	NC	21	GND
		9	GND	22	GND
		10	HDMI1_SCL	23	GND
		11	HDMI1_TXD1_N	24	GND
12		HDMI1_SDA	25	GND	
13	HDMI1_TXD1_P	26	GND		

3.3.11 Expansion Connector

Function	Description			
	Connector Type	ERF8-020-05.0-L-DV-TR		
Pinout	Pin	Description	Pin	Description
	1	VDD_5V	21	GND
	2	VDD_3V3	22	PCIE_C2.TX0_P
	3	VDD_5V	23	SPI3.CLK
	4	VDD_3V3	24	PCIE_C2.TX0_N
	5	I2C3.SCL	25	SPI3.MISO
	6	VDD_1V8	26	GND
	7	I2C3.SDA	27	SPI3.MOSI
	8	GND	28	PCIE_C2.RX0_P
	9	GND	29	SPI3.CS0
	10	PCIE_C2.RST_N	30	PCIE_C2.RX0_N
	11	GND	31	SPI3.CS1
	12	PCIE_C2.CLKREQ_N	32	GND
	13	I2S1.SCLK	33	GND
	14	GND	34	AUD_MCLK
	15	I2S1.DOUT	35	USB3.D_N
	16	PCIE_C2.CLK_P	36	USB3_PWR_EN_3V3
	17	I2S1.DIN	37	USB3.D_P
	18	PCIE_C2.CLK_N	38	GPIO04
	19	I2S1.FS	39	GND
20	GND	40	GPIO05	
<p>Note: There is a pinout change on expansion connector in MILBOARD-THR Rev.1.1. Two pins that changed are:</p> <p>Pin 3: 1.8V Pin 6: 3.3V</p> <p>Rest of the pinout remains identical.</p>				




3.3.12 Fan Connector


	Function	Description		
	Mating Connector	5040510401 from Molex Pico-Lock series		
	Pinout	Pin	Description	
		1	GND	
		2	VDD_FAN	
3		FAN.TACH		
	4	FAN.PWM		

3.4 The Definition of Buttons

3.4.1 Recovery Pushbutton

	<p>The MILBOARD-THR implements a recovery pushbutton. Recovery button should be pressed with reset button at the same time. After released reset button, recovery button should be pressed a little bit more (min. 250 ms).</p>
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3.4.2 Reset Pushbutton

	<p>The MILBOARD-THR implements a reset button to reset the Jetson SoM.</p>
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4. Software Information

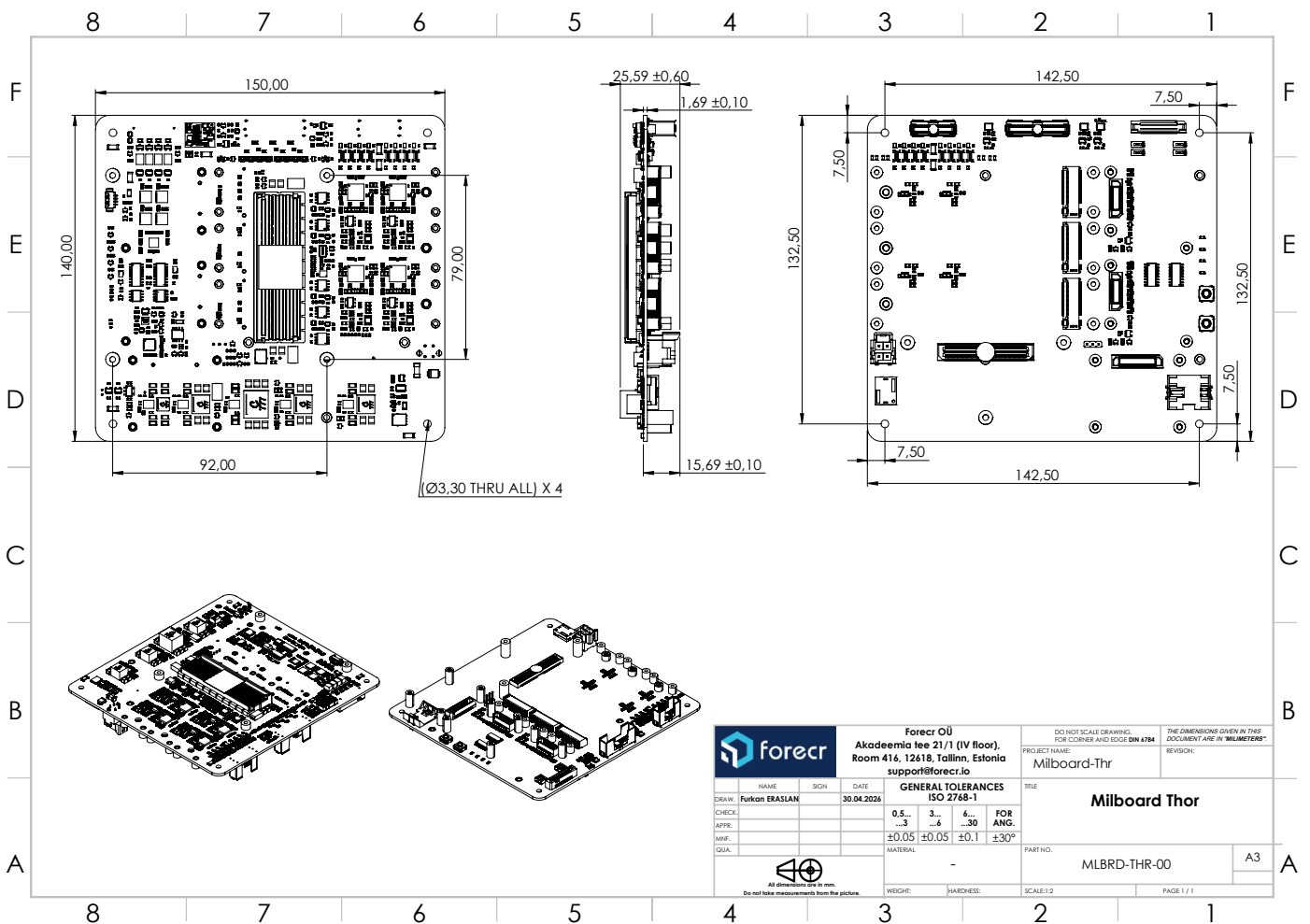
4.1 Installation

This section will be completed soon. It will be published on our website once completed. Please check our [Forecr Web Page](#) regularly.

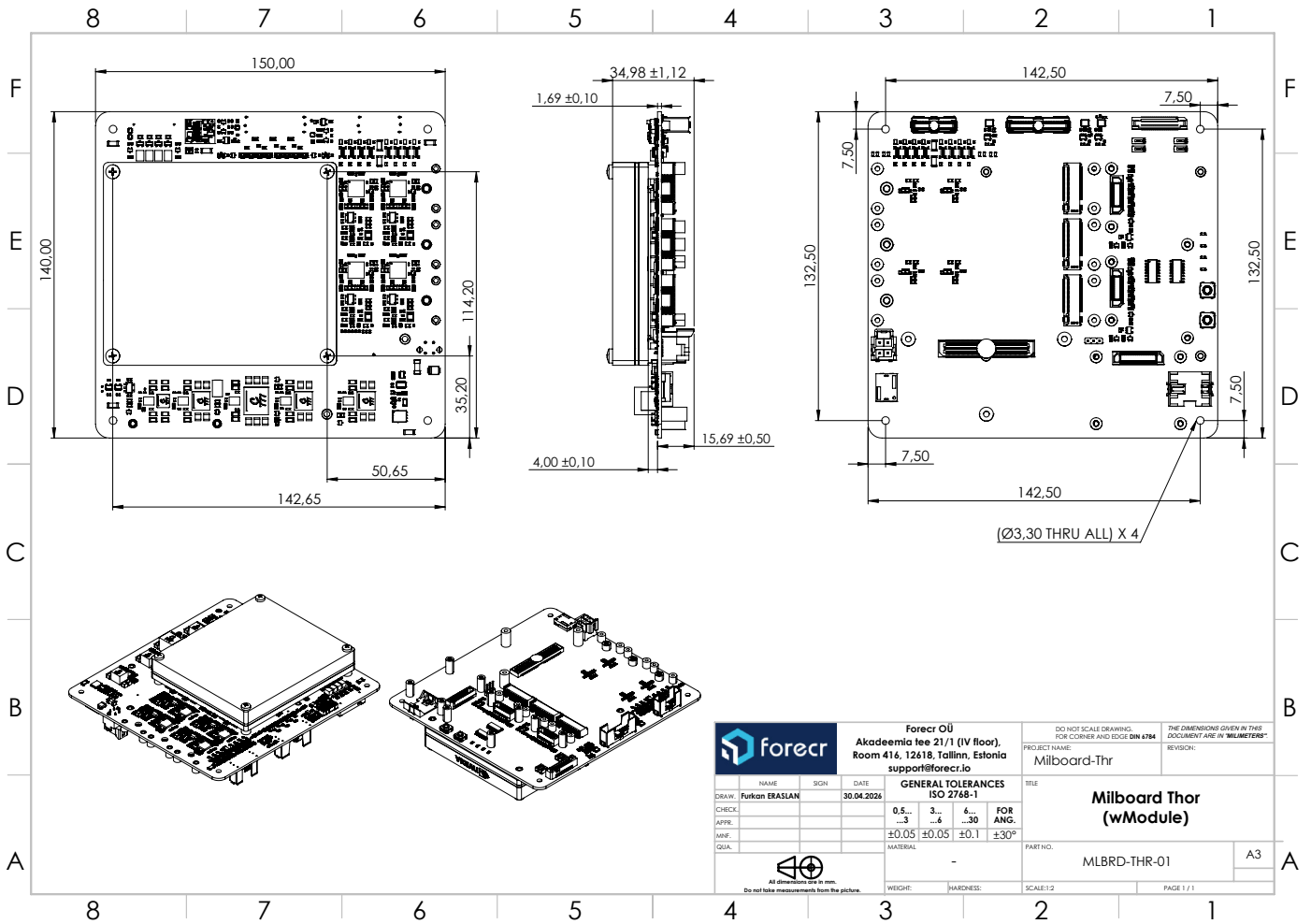
5. 3D Model & Mechanical Information



Full 3D models of all MILBOARD-THR Carrier Board can be found [here](#).

MILBOARD-THR Stand Alone

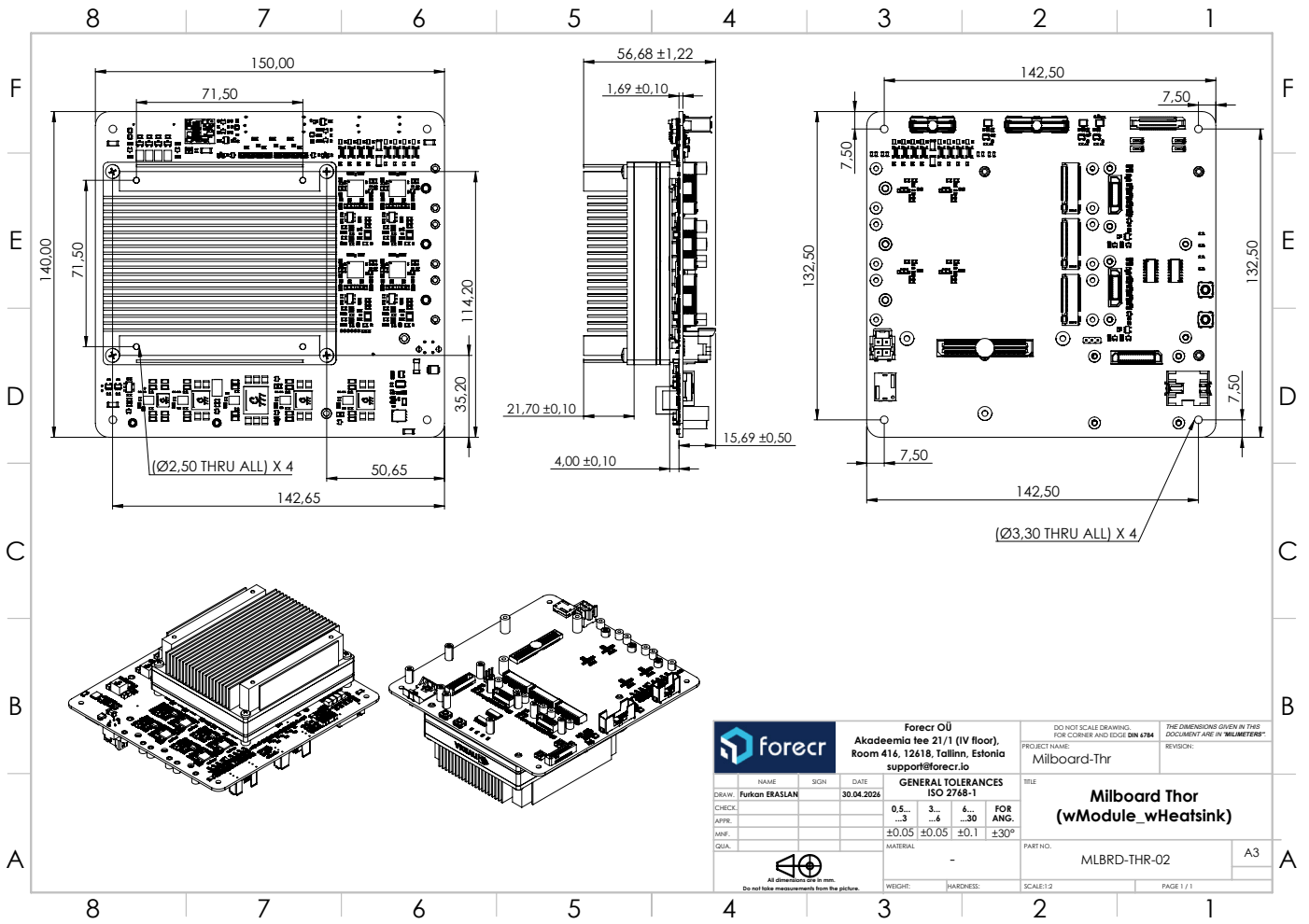


MILBOARD-THR with Jetson AGX Thor Module



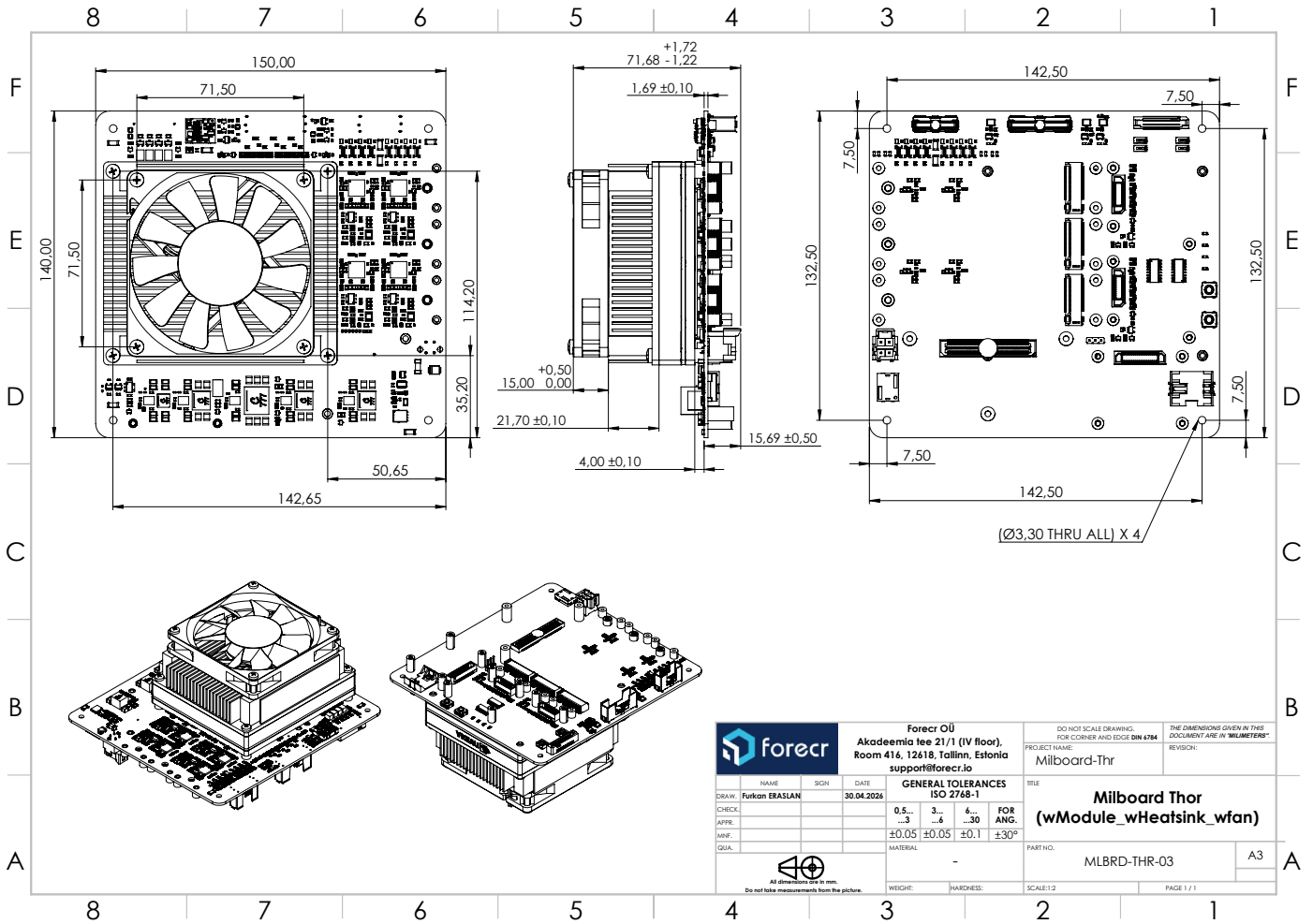
			Forecr OÜ Akadeemia tee 21/1 (IV floor), Room 416, 12618, Tallinn, Estonia support@forecr.io		DO NOT SCALE DRAWING. FOR CORNER AND EDGE DIN 6754		THE DIMENSIONS GIVEN IN THIS DOCUMENT ARE IN "MILLIMETERS". REVISION:	
NAME:	SGN:	DATE:	GENERAL TOLERANCES ISO 2768-1		TITLE Milboard Thor (wModule)			
DRW:	Furkan ERASLAN	30.04.2026	0.5	3	6	FOR ANG.		
CHECK:			..3	..6	..30			
APP:			±0.05	±0.05	±0.1	PART NO. MLBRD-THR-01		
MFR:			MATERIAL -			SCALE:1:2		
QUL:			WEICHT:			HARDNESS:		
 All dimensions are in mm. Do not take measurements from the picture.			SCALE:1:2		PAGE 1 / 1			

MILBOARD-THR with Jetson AGX Thor Module and Heatsink Integration Details



		Forecr OÜ Akadeemia tee 21/1 (IV floor), Room 416, 12618, Tallinn, Estonia support@forecr.io		DO NOT SCALE DRAWING. FOR CORNER AND EDGE DIN 6754		THE DIMENSIONS GIVEN IN THIS DOCUMENT ARE IN "MILLIMETERS". REVISION:	
NAME:	SGN:	DATE:	GENERAL TOLERANCES ISO 2768-1		TITLE Milboard Thor (wModule_wHeatsink)		
DRAW:	Furkan ERASLAN	30.04.2026	0.5	3	6	PART NO. MLBRD-THR-02	
CHECK:			..3	..6	..30	A3	
APPR:			±0.05 ±0.05 ±0.1 ±0.1		SCALE:1:2		
MFR:			MATERIAL: -		PAGE 1 / 1		
QUL:			WEIGHT: HARDNESS:				

MILBOARD-THR with Jetson AGX Thor Module, Heatsink and Thermal Integration Details



6. Power Consumption

6.1 Jetson T5000

Input Voltage: 24V

All CPU and GPU cores are %100 loaded.

	Power Up Sequence	Idle	Standby (Suspend mode)	70W	90W	120W	MAXN
Current (A)	2,5	0,8	0,14	4,5	5,1	6,3	6,7
Power (W)	60	19,2	3,36	108	122,4	151,2	160,8

7. MTBF Prediction

This section will be completed soon. It will be published on our website once completed. Please check our [Forecr Web Page](#) regularly.

8. Ordering Information

