



AXELERA
ARTIFICIAL INTELLIGENCE

Axelera Embedded 111c Datasheet

2026-08-032026-08-03
AX-000566-DS-7
Version: Issue 7

Copyright © | 2026 | Axelera AI BV | All rights reserved
All Rights Reserved

This documentation is protected by copyright and is intended solely for use as provided and in accordance with the applicable license agreement. Unauthorized use, reproduction, or distribution of this documentation, in whole or in part, is strictly prohibited.

Document and proprietary information

Document and information property

This document and the information contained herein are the property of Axelera AI. It must not be reproduced or otherwise disclosed without prior consent from Axelera AI.

Trademarks

The Axelera "AX" logo is a trademark of Axelera AI BV, registered in the Netherlands and other countries. "AXELERA" and "METIS" are registered as word marks across a number of countries/regions.

All other product and company names and registered trademarks may be property of their respective owners.

Document revision history

Revision	Date	Description
1 - PRELIMINARY	2025-04-25	First issue
2 - PRELIMINARY	2025-04-25	Improved formatting.
3 - PRELIMINARY	2025-07-23	Updated operating temperature in table 3. Updated block diagram in section 4. Added M.2 connector pinouts to section 7. Updated section 9 Part description.
4 - PRELIMINARY	2025-07-25	Added ON/OFF and RESET pin descriptions DC PlugIn spec added to table 2.
5	2026-02-06	Updated board photo in section 1.1 Added datapoints for full system in Footnote 1 Updated weights/dimensions in Table 3 and Table 6 Updated TDP and Typical Power in Table 4 Updated diagram and floorplan in Sections 3.1 and 3.2 Added no cooling diagram Updated part numbers in Section 8
6	2026-03-20	Removed no cooling variant and part numbers.
7	2026-08-03	Rebranded product name.

TABLE OF CONTENTS

DOCUMENT AND PROPRIETARY INFORMATION	2
1 INTRODUCTION	4
1.1 AXELERA EMBEDDED 111C OVERVIEW	4
1.2 KEY FEATURES	5
2 FUNCTIONAL SPECIFICATIONS	6
2.1 BOARD AND PRODUCT CHARACTERISTICS	6
2.2 SOFTWARE	8
2.3 SECURITY	8
3 ELECTRICAL, MECHANICAL, AND THERMAL SPECIFICATIONS	9
3.1 BOARD MECHANICAL DETAILS	10
3.1.1 BOARD WITH ACTIVE COOLING	10
3.2 BOARD FLOORPLAN: TOP VIEW	11
3.3 COOLING SOLUTION	12
3.3.1 ACTIVE COOLING	12
4 CONNECTOR PINOUT	13
4.1 CONNECTOR LIST	14
4.1.1 M.2 TYPE B1	15
4.1.2 M.2 TYPE E1	16
4.1.3 SATA POWER	18
4.1.4 GPIO1	18
4.1.5 AAFP	19
4.1.6 AMP_CON	20
4.1.7 CPU/CHASSIS FAN	20
4.1.8 ON/OFF AND RESET	21
5 SAFETY INFORMATION	23
6 INSTALLATION AND TROUBLESHOOTING	24
6.1 INSTALLATION	24
6.2 TROUBLESHOOTING	24
7 SUPPORT	24
8 MODEL/PART NUMBERS	24
9 LEGAL NOTICE	25

1 Introduction

The Axelera Embedded 111c is a single-board computer (SBC) designed to provide AI inference acceleration for edge systems requiring high performance with low power consumption.

This datasheet provides instructions and safety information to ensure the Axelera Embedded 111c can be installed, operated, stored, maintained, repaired, and disposed of safely.

1.1 Axelera Embedded 111c overview

The Axelera Embedded 111c is designed around the Axelera AI Metis AIPU AI inference accelerator and features the Arm-based Rockchip RK3588 edge computing System-on-Chip.

The Axelera Embedded 111c is specifically engineered for demanding, multi-stream computer vision and generative AI applications that require low power. It includes multiple connectivity options, making it suitable for a broad range of application environments, such as security, retail, industrial, robotics, and mobility applications. Its performance is enhanced through the [Voyager SDK](#) software stack to accelerate application deployment.

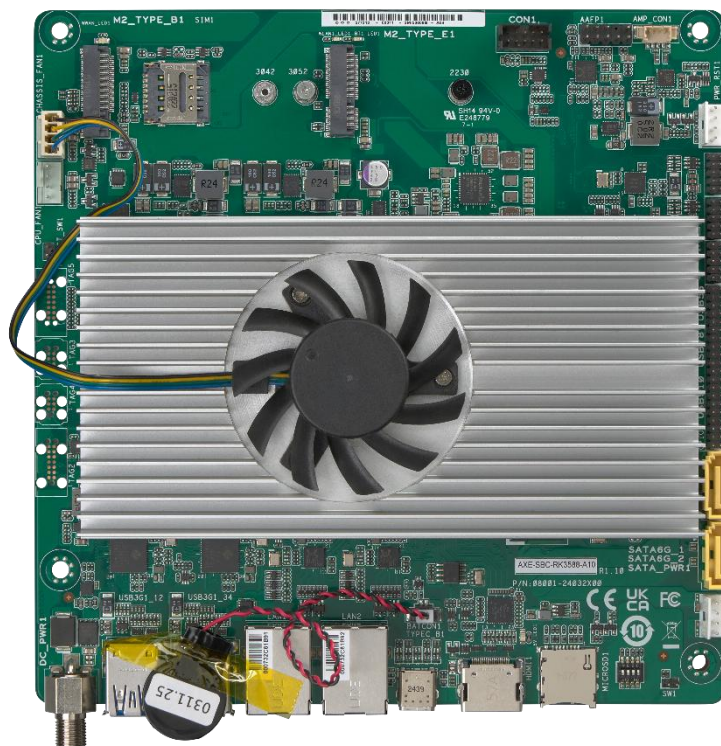


Figure 1: Axelera Embedded 111c

1.2 Key features

- SBC based on a Metis AIPU with a 4-lane PCIe connection to the CPU.
- RK3588 powered by two Arm quad-core processors and a GPU for general-purpose computing.
- Connectivity includes SATA, USB, HDMI 2.0, LAN, UART, I2C, GPIO.
- Energy efficiency and compact mini-ITX 170 x 170 mm form factor.

2 Functional specifications

2.1 Board and product characteristics

The tables in this section list the board characteristics, including physical and software characteristics.

Table 1: Axelera Embedded 111c functional specifications

Category	Component	Details
AI Accelerator	AIPU	Axelera AI Metis AIPU
	AIPU Memory	LPDDR4x 4 GB or 16GB
	Interface	PCIe Gen 3.0 4-lane
Compute	Edge Compute SoC	Rockchip RK3588 featuring: • Quad-core Arm Cortex A76 and quad-core Arm Cortex A55 CPUs • Arm Mali-G610 MC4 GPU • Decode 8k30 H.265, encode 8k60 H.265
Memory	SoC Memory	On-board LPDDR4 16 GB, dual channel
Storage	On-board	eMMC 64 GB
	External (SSD/HDD)	2x SATA 3.0 at 6.0 GB/s 2x 4-pin SATA power connectors
	Flash card	1x microSD
Expansion	M.2 E Key	(22 x 30mm) USB 2.0 + PCIe 2.1 1-lane for Wi-Fi, Bluetooth or Wi-Fi/Bluetooth combo modules
	M.2 B Key	(30 x 52 mm) USB 3.0 for 4G/5G modem modules
Networking	Ethernet	2x Gigabit Ethernet (1 Gbps) via RJ45 connector interfaced through RGMII
	Wake-on LAN / PXE	Yes
Display	HDMI	1x HDMI 2.0
	Display Port over USB-C	1x (4,096 x 2,160 @ 24 Hz / 3,840 x 2,160 @ 60 Hz)
Audio	Audio subsystem	HD Audio 144 kbps with integrated codec over I2S, mic input, speaker output at 2W, 4 Ohm
Connectivity	USB	4x USB 3.1 Gen1 (Rear) 3x USB 2.0 headers 1x USB Type-C
	General I/O	40-pin header (4 input and 4 output Digital I/Os, UART, ADC, I2C, SPI)
	Fans	1x 4-pin CPU connector 1x 4-pin Chassis connector

Category	Component	Details
Environment	Battery	Lithium battery (used for powering the RTC)
Power	PMIC	RK806-1
	Power	External 12V DC supply
Thermal	Cooling Solution	Active fan and heatsink
Certifications	-	CE, FCC, UKCA, Safety (UL)

2.2 Software

- BSP: The board is provided with Board Support Package pre-installed.
- OS: Yocto-based Linux OS.

2.3 Security

The Metis AIPU chip features a Root of Trust (RoT) that can be securely provisioned during chipset manufacturing. Secure boot and other security features built on this foundational RoT will be enabled in future revisions. For more information, please see Axelera contact details in section 7 *Support*.

3 Electrical, mechanical, and thermal specifications

Table 2: Electrical characteristics

Specification	Description
Power Rating	The Axelera Embedded 111c requires an external DC power supply of 12V at 7 A.
Typical Power ¹	9 – 20 W Typical average power of the full system when running Deep Neural Networks at maximum performance at an ambient temperature of 25°C. Please refer to the Software Release Notes for more information on the exact power consumption per Neural Network.
DC Plug In	2.5 x 5.5 x 7.5 mm, positive center, with or without lock

Table 3: Physical characteristics

Specification	Description
Mechanical Dimensions	See section Table 6: Axelera Embedded 111c dimensions.
Weight	465 g with active cooling

Table 4: Thermal characteristics

Specification	Description
Thermal Design Power	25W (measured with AI inference, 40% CPU utilization) 35W maximum (estimated combined CPU+AI workload)

Table 5: Environmental characteristics

Specification	Description
Operating temperature ²	0~60°C
Storage temperature	-40~85°C
Storage humidity	0%~85% RH, non-condensing

¹ For example, yolov5m runs at 397 FPS, uses 18 W and yolov8l runs at 174 FPS and uses 16 W.

² Extended operating temperature variant [-20~70°C] available upon request.

3.1 Board mechanical details

This section provides the board outline of the Axelera Embedded 111c.

3.1.1 Board with active cooling

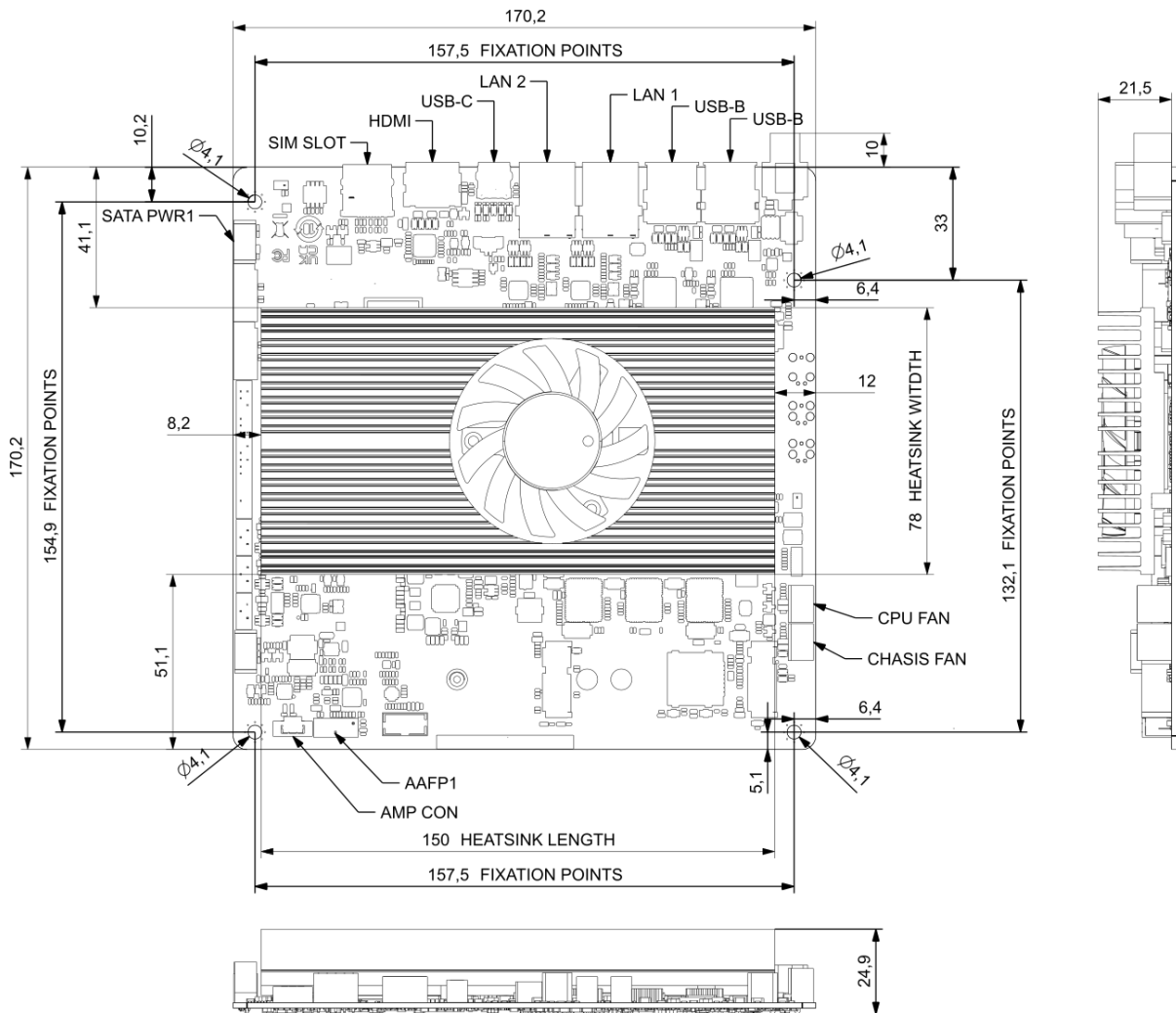


Figure 2: Axelera Embedded 111c package with active cooling

Table 6 shows the mechanical dimensions of the Axelera Embedded 111c.

Table 6: Axelera Embedded 111c dimensions

Item	Dimensions (mm)
Total length	170
Total width	170
Total height	24.9

3.2 Board floorplan: top view

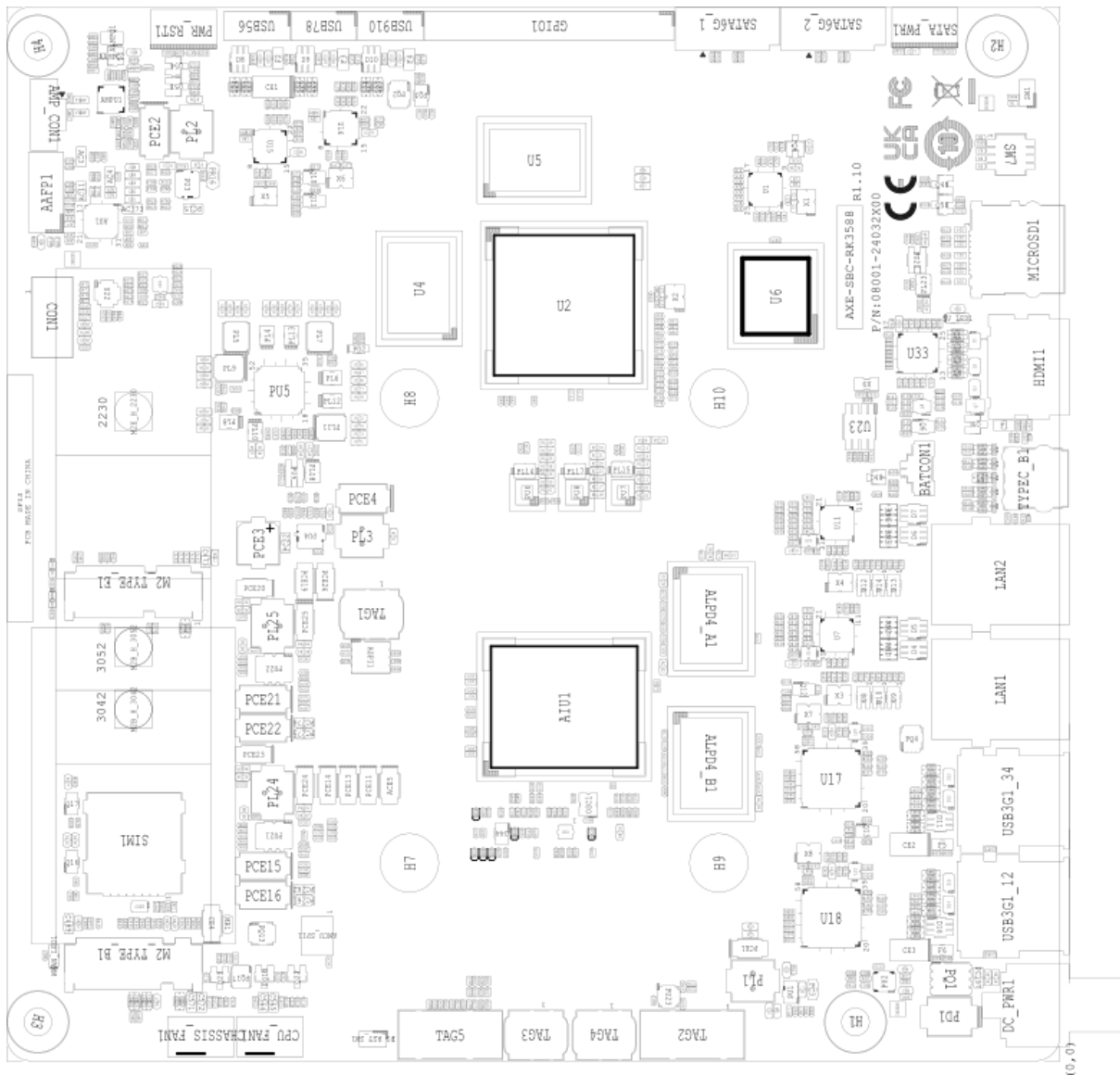


Figure 3: Top view of the Axelera Embedded 111c

3.3 Cooling solution

3.3.1 Active cooling

The Axelera Embedded 111c, uses a fan-based cooler. The fan dissipates hot air on either side of the heatsink. Figure 4 shows the airflow directions: the blue arrow indicates cold air, the red indicates hot air.

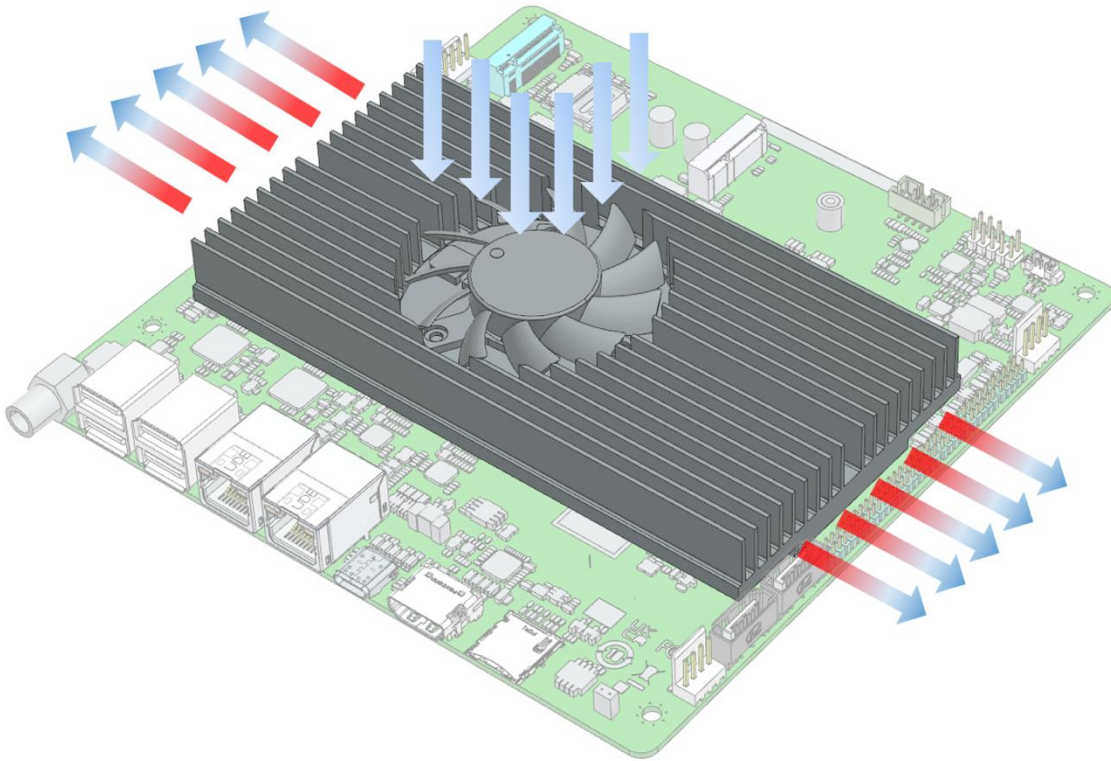


Figure 4: Air flow directions for the Axelera Embedded 111c.

The fan characteristics are shown in Table 7.

Table 7: The Axelera Embedded 111c's fan characteristics

Item	Dimensions (mm)
Fan dimensions	60 x 60 x 10 mm
Voltage	11.4 V - 12.6 V
Power consumption	5 W at 100% duty cycle

4 Connector pinout

Figure 5 shows the block diagram for the Axelera Embedded 111c. The rest of this section provides details of the connector list, and pin numbering and assignment for the various subsystems.

BLOCK DIAGRAM

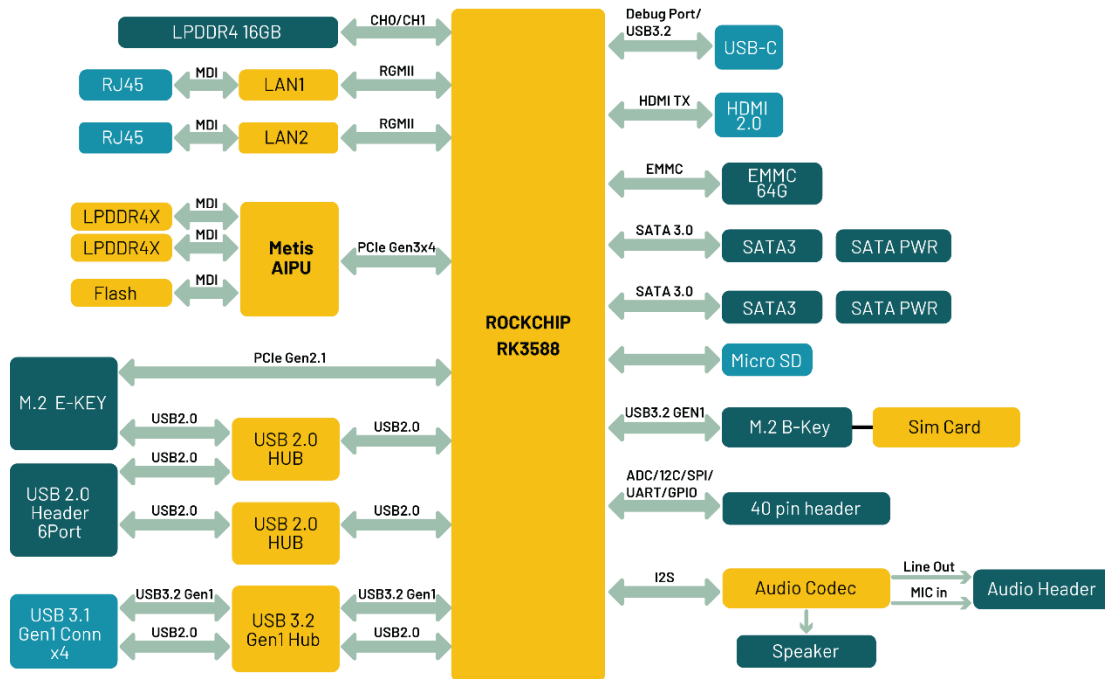


Figure 5: Axelera Embedded 111c block diagram

4.1 Connector list

Table 8: Axelera Embedded 111c connector list

Symbol	Description
DC_PWR1	12 V DC IN (Jack 2.5x5.5x7.5mm; w/wo lock; center-positive)
USB3G1_12	2x USB 3.0
USB3G1_34	2x USB 3.0
LAN1	1 Gbps LAN connection
LAN2	1 Gbps LAN connection
TYPEC_B1	USB C
HDMI1	HDMI 2.0
MICROSD1	MicroSD
SW1	Service connector
SATA_PWR1	SATA power 5 V, 12 V @ 1A
SATA6G_2	SATA 6.0 GB/s
SATA6G_1	SATA 6.0 GB/s
GPI01	D-I/Os, UART, ADC, I2C, SPI
USB910	USB 2.0
USB78	USB 2.0
USB56	USB 2.0
PWR_RST1	Power and reset button
AMP_CON1	Amplified audio output
AAFP1	Audio connector
CON1	Service connector
M2_TYPE_E1	M.2 E-key
M2_TYPE_B1	M.2 B-key
SIM1	SIM socket
CHASSIS_FAN1	Chassis fan
CPU_FAN1	CPU fan embedded fan within the heatsink
FPC1	Service connector
TAG3	Service connector
TAG4	Service connector
TAG2	Service connector
TAG1	Service connector

4.1.1 M.2 Type B1

Key B SSIC-based WWAN Adapter Pinout

Pin	Signal	Signal	Pin
74	3.3 VVBAT	CONFIG_2 (States 8, 9, 10, 11)	75
72	3.3 VVBAT	GND	73
70	3.3 VVBAT	GND	71
68	SUSCLK (I/O/3.3V)	CONFIG_1 (States 8, 9, 10, 11)	69
66	SIM_DETECT (I)	RESET# (I/O/1.8 V)	67
64	COEX_TXD (O/O/1.8V)	ANCTL3 (O/O/1.8 V)	65
62	COEX_RXD (I/O/1.8V)	ANCTL2 (O/O/1.8 V)	63
60	COEX3 (I/O/O/1.8V)	ANCTL1 (O/O/1.8 V)	61
58	NC	ANCTL0 (O/O/1.8 V)	59
56	NC	GND	57
54	NC	NC	55
52	NC	NC	53
50	NC	GND	51
48	GPIO_4 - TX_BLANKING/GNSS_1/UIM_PWR2/IPC_4 (I/O/O/1.8V)	NC	49
46	GPIO_3 - SYSCLK/GNSS_0/UIM_RESET2/IPC_3 (I/O/O/1.8V)	NC	47
44	GPIO_2 - GNSS_IRQ/GNSS_IRQ/UIM_CLK2/IPC_2 (I/O/O/1.8V)	GND	45
42	GPIO_1 - GNSS_SDA/GNSS_SDA/UIM_DATA2/IPC_1 (I/O/O/1.8V)	NC	43
40	GPIO_0 - GNSS_SCL/GNSS_SCL/SIM_DETECT2/IPC_0 (I/O/O/1.8V)	NC	41
38	NC	GND	39
36	UIM_PWR (O)	SSIC-RxP	37
34	UIM_DATA (I/O)	SSIC-RxN	35
32	UIM_CLK (O)	GND	33
30	UIM_RESET (O)	SSIC-TxP	31
28	GPIO_8 - AUDIO_3/AUDIO_3/RFU/IPC_6- AUDIO_3 (I/O/O/1.8V)	SSIC-TxN	29

Pin	Signal	Signal	Pin
26	GPIO_10 - W_DISABLE2#/W_DISABLE2#/W_DISABLE2# (I/O/1.8V)/HSIC_STROBE (I/O/1.2V)	GND	27
24	GPIO_7 - AUDIO_2/AUDIO_2/RFU/IPC_5-AUDIO_2 (I/O/1.8V)	DPR (I/O/1.8V)	25
22	GPIO_6 - AUDIO_1/AUDIO_1/RFU/AUDIO_1 (I/O/1.8V)	GPIO_11 - WoWWAN#/WoWWAN#/WoWWAN# (O/1.8V)/HSIC_DATA (I/O/1.2V)	23
20	GPIO_5 - AUDIO_0/AUDIO_0/RFU/AUDIO_0 (I/O/1.8V)	CONFIG_0 = NC	21
18	ADD-IN CARD KEY B	ADD-IN CARD KEY B	19
16	ADD-IN CARD KEY B	ADD-IN CARD KEY B	17
14	ADD-IN CARD KEY B	ADD-IN CARD KEY B	15
12	ADD-IN CARD KEY B	ADD-IN CARD KEY B	13
10	GPIO_9 - LED_1#/LED_1#/LED_1# (O/3.3V)/IPC_7 (I/O/1.8V)	GND	11
8	W_DISABLE1# (I/O/3.3V)	USB_D-	9
6	FULL_CARD_POWER_OFF# (I/O/1.8V or 3.3V)	USB_D+	7
4	3.3 V/VBAT	GND	5
2	3.3 V/VBAT	GND	3
		CONFIG_3 = GND	1

4.1.2 M.2 Type E1

Key E SDIO-based Pinout

Pin	Signal	Signal	Pin
74	3.3 V	GND	75
72	3.3 V	RESERVED/REFCLKn1	73
70	UIM_POWER_SRC/GPIO_1/PEWAKE1#	RESERVED/REFCLKp1	71
68	UIM_POWER_SNK/CLKREQ1#	GND	69
66	UIM_SWP/PERST1#	RESERVED/PERn1	67
64	RESERVED	RESERVED/PERp1	65
62	ALERT# (I/O/1.8 V)	GND	63
60	I2C_CLK (I/O/1.8 V)	RESERVED/PETn1	61
58	I2C_DATA (I/O/1.8 V)	RESERVED/PETp1	59
56	W_DISABLE1# (I/O/3.3 V)	GND	57
54	W_DISABLE2# (I/O/3.3 V)	PEWAKE0# (I/O/3.3 V)	55
52	PERST0# (O/3.3 V)	CLKREQ0# (I/O/3.3 V)	53

Pin	Signal	Signal	Pin
50	SUSCLK (O $\times$ O/3.3 V)	GND	51
48	COEX_TXD (O $\times$ O/1.8 V)	REFCLKn0	49
46	COEX_RXD (I $\times$ O/1.8 V)	REFCLKp0	47
44	COEX3 (I/O $\times$ O/1.8 V)	GND	45
42	VENDOR DEFINED	PERn0	43
40	VENDOR DEFINED	PERp0	41
38	VENDOR DEFINED	GND	39
36	UART_RTS (O $\times$ O/1.8 V)	PETn0	37
34	UART_CTS (I $\times$ O/1.8 V)	PETp0	35
32	UART_TXD (O $\times$ O/1.8 V)	GND	33
30	CONNECTOR KEY E	CONNECTOR KEY E	31
28	CONNECTOR KEY E	CONNECTOR KEY E	29
26	CONNECTOR KEY E	CONNECTOR KEY E	27
24	CONNECTOR KEY E	CONNECTOR KEY E	25
22	UART_RXD (I $\times$ O/1.8 V)	SDIO_RESET#/TX_BLANKING (O $\times$ O/1.8 V)	23
20	UART_WAKE# (I $\times$ O/3.3 V)	SDIO_WAKE# (I $\times$ O/1.8 V)	21
18	GND	SDIO_DATA3 (I/O $\times$ O/1.8 V)	19
16	LED_2# (I $\times$ OD)	SDIO_DATA2 (I/O $\times$ O/1.8 V)	17
14	PCM_OUT/I2S_SD_OUT (O $\times$ O/1.8 V)	SDIO_DATA1 (I/O $\times$ O/1.8 V)	15
12	PCM_IN/I2S_SD_IN (I $\times$ O/1.8 V)	SDIO_DATA0 (I/O $\times$ O/1.8 V)	13
10	PCM_SYNC/I2S_WS (I/O $\times$ O/1.8 V)	SDIO_CMD (I/O $\times$ O/1.8 V)	11
8	PCM_CLK/I2S_SCK (I/O $\times$ O/1.8 V)	SDIO_CLK/SYSCLK (O $\times$ O/1.8 V)	9
6	LED_1# (I $\times$ OD)	GND	7
4	3.3 V	USB_D-	5
2	3.3 V	USB_D+	3
		GND	1

4.1.3 SATA power

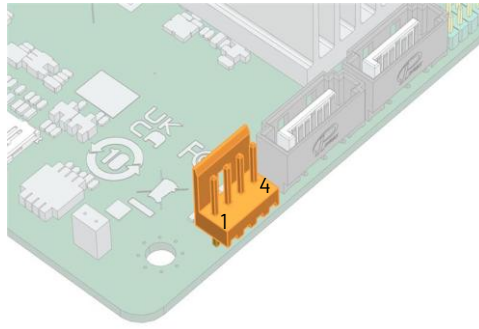


Figure 6: Detail of Axelera Embedded 111c showing SATA power pin numbering

Table 9: Axelera Embedded 111c SATA power pin numbering

Pin number	Description
1	+5 V
2	GND
3	GND
4	+12 V

4.1.4 GPIO1

Table 10: Axelera Embedded 111c GPIO1 characteristics

Pin number	Description	Description	Pin number
1	VCC_3V3_S0	+5VSUS	2
3	I2C5_SCL_M0	+5VSUS	4
5	I2C5_SDA_M0	GND	6
7	TEST_CLKOUT_M1	UART5_TX_M1	8
9	GND	UART5_RX_M1	10
11	GPIO4_B5	GPIO1_B7	12
13	GPIO1_A4	GND	14
15	GPIO1_A5	GPIO1_B1	16
17	VCC_3V3_S0	GPIO1_B9	18
19	GPIO1_A6	GND	20
21	GPIO1_A7	GPIO1_A1	22
23	GPIO1_B0	GPIO1_A3	24
25	GND	GPIO1_A2	26
27	SPI0_MISO_M2	GPIO1_A3	28
29	SPI0_MOSI_M2	GND	30

Pin number	Description	Description	Pin number
31	SPI0_CLK_M2	GPI04_A5	32
33	SPI0_CS0_M2	GND	34
35	SPI0_CS1_M2	GPI04_B2	36
37	GPI01_B6	SARADC_VIN2	38
39	GND	SARADC_VIN3	40

4.1.5 AAFP

Figure 7 shows the pin numbering for the audio connector and Table 11 shows the corresponding pin assignments.

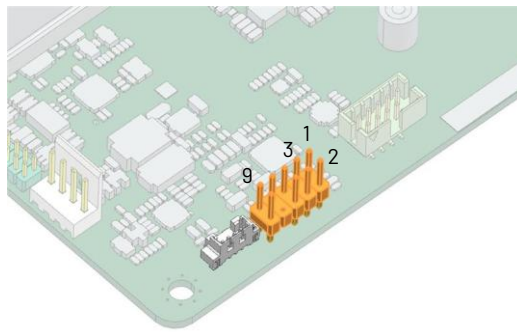


Figure 7: Detail of Axelera Embedded 111c showing pin numbering for AAFP audio

Table 11: Axelera Embedded 111c AAFP characteristics

Pin number	Description	Description	Pin number
1	MIC_L	GND	2
3	MIC_R	NC	4
5	LINE_OUT_R	NC	5
7	NC	[key]	6
9	LINE_OUT_L	NC	8

4.1.6 AMP_CON

Figure 8 shows the pin numbering for the 8/4 Ω impedance speaker connector.

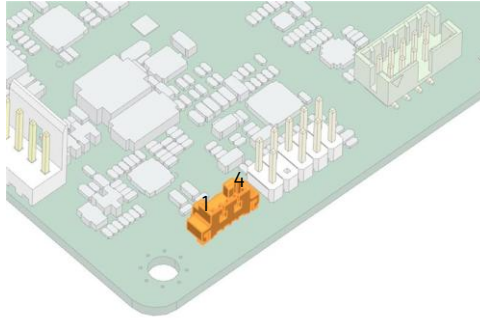


Figure 8: Detail of Axelera Embedded 111c showing pin numbering for the speaker connector

Table 12: Axelera Embedded 111c AMP_CON power pin numbering

Pin number	Description
1	LEFT OUT Positive
2	LEFT OUT Negative
3	RIGHT OUT Positive
4	RIGHT OUT Negative

4.1.7 CPU/Chassis FAN

Figure 9 and Figure 10 show the positioning of the CPU and Chassis FAN connectors respectively.

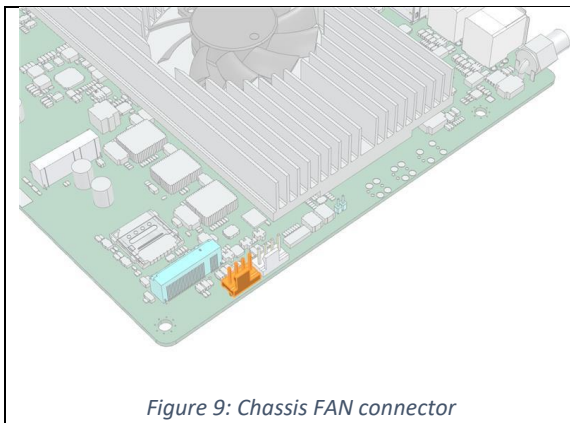


Figure 9: Chassis FAN connector

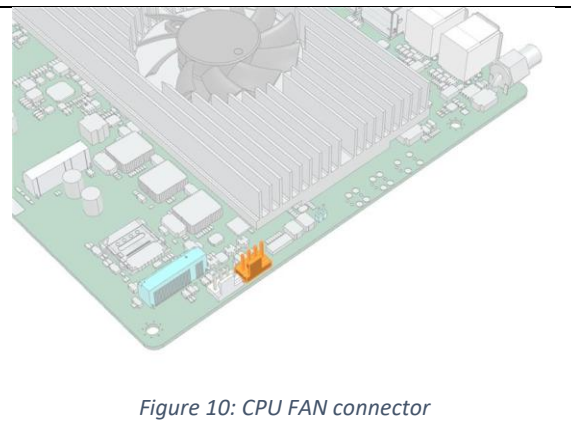


Figure 10: CPU FAN connector

Figure 11 shows the pin numbering that applies to both FAN connectors and Table 13 shows the corresponding pin assignments.

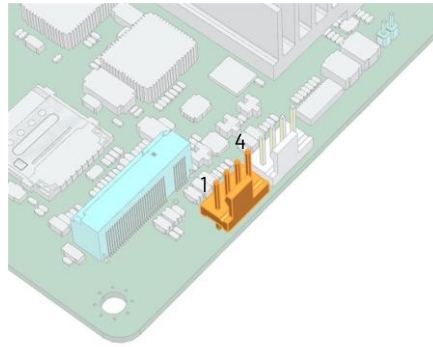


Figure 11: Detail of Axelera Embedded 111c showing pin numbering for the FAN connector

Table 13: Axelera Embedded 111c FAN connector pin numbering

Pin number	Description
1	GND
2	+12 V
3	SENSE - Open drain
4	PWM - 5 V signal

4.1.8 ON/OFF and RESET

Figure 12 shows the pin numbering of the ON/OFF and RESET buttons on the board and Table 14 shows the pin assignments.



Figure 12: Detail of Axelera Embedded 111c showing pin numbering for ON/OFF and RESET buttons

Table 14: Axelera Embedded 111c ON/OFF and RESET buttons pin numbering

Pin number	Description
1	PWR_ON#
2	GND
3	GND
4	RESET#

5 Safety information

Before installing the Axelera Embedded 111c and to ensure its safe use, follow these guidelines:

- **General handling:**
 - Handle the board with care to avoid physical damage.
 - Wear an anti-static wrist strap during installation to prevent electrostatic discharge (ESD).
 - Disconnect the power supply before handling, installing, or maintaining the product.
- **Installation:**
 - Verify that the power supply complies with the product's power requirements (72 W or above recommended).
- **Operation:**
 - Be careful not block to the airflow to the fan or heatsink during operation.
 - Monitor system temperatures regularly to prevent overheating.
 - Operate only within the specified ambient temperature range
- **Storage:**
 - Store the product in a dry environment within -40°C to 85°C and 0%–85% relative humidity (non-condensing).
- **Maintenance:**
 - Regularly clean the fan and heatsink to prevent dust buildup.
 - Ensure software and firmware are updated to maintain performance and security.
 - Inspect the card and connectors periodically for signs of wear or damage.
- **Disposal:**
 - Dispose of the product in accordance with local electronic waste regulations.

WARNING: Improper handling, installation, or use may result in injury, equipment damage, or voiding of warranty.

6 Installation and troubleshooting

6.1 Installation

1. **Cooling verification:**
 - Ensure the fan is securely attached and unobstructed.
 - Verify airflow in the system chassis.
2. **Power connection:**
 - Confirm that the power supply is firmly connected to the card.
3. **Software Setup:**
 - Install the Voyager SDK for model configuration and optimization.

6.2 Troubleshooting

Issue: Overheating during operation.

Solution:

1. Ensure adequate airflow within the chassis.
2. Clean the fan and verify its operation.

7 Support

For further information and support please visit:

- Axelera AI Community: <https://community.axelera.ai/>
- Axelera AI Customer Portal: <https://support.axelera.ai/>

8 Model/Part numbers

The **Model type** of the Axelera Embedded 111c is **AXE-BME20S1**. Table 15 shows the part numbers and description configurations of the board.

Table 15: Axelera Embedded 111c part numbers

Part number	Description
AXE-BME20S1BD04A02	Axelera Embedded 111c. Compute Board, 1x Metis AIPU, 4 GB of Metis RAM, 16 GB of host RAM, active cooling, Rev 2.0
AXE-BME20S1AL16A01	Axelera Embedded 111c. Compute Board, 1x Metis AIPU, 16 GB of Metis RAM, 16 GB of host RAM, active cooling, Rev 2.0

9 Legal Notice

This document is provided for information purposes only and shall not be regarded as a warranty of a certain functionality, condition, or quality of a product. Axelera AI BV ("Axelera") makes no representations or warranties, expressed or implied, as to the accuracy or completeness of the information contained in this document and assumes no responsibility for any errors contained herein. Axelera shall have no liability for the consequences or use of such information or for any infringement of patents or other rights of third parties that may result from its use. This document is not a commitment to develop, release, or deliver any Material (defined below), code, or functionality.

Axelera reserves the right to make corrections, modifications, enhancements, improvements, and any other changes to this document, at any time without notice.

Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete.

AXELERA products are sold subject to the Axelera standard terms and conditions of sale supplied at the time of order acknowledgement, unless otherwise agreed in an individual sales agreement signed by authorized representatives of Axelera and the Customer ("Terms of Sale"). Axelera hereby expressly objects to applying any customer general terms and conditions with regards to the purchase of the Axelera product referenced in this document. No contractual obligations are formed either directly or indirectly by this document.

Axelera products are not designed, authorized, or warranted to be suitable for use in medical, military, aircraft, space, or life support equipment, nor in applications where failure or malfunction of the Axelera product can reasonably be expected to result in personal injury, death, or property or environmental damage. Axelera accepts no liability for inclusion and/or use of Axelera products in such equipment or applications and therefore such inclusion and/or use is at customer's own risk.

Axelera makes no representation or warranty that products based on this document will be suitable for any specified use. Testing of all parameters of each product is not necessarily performed by Axelera. It is customer's sole responsibility to evaluate and determine the applicability of any information contained in this document, ensure the product is suitable and fit for the application planned by customer, and perform the necessary testing for the application in order to avoid a default of the application or the product. Weaknesses in customer's product designs may affect the quality and reliability of the Axelera product and may result in additional or different conditions and/or requirements beyond those contained in this document. Axelera accepts no liability related to any default, damage, costs, or problem which may be based on or attributable to: (i) the use of the Axelera product in any manner that is contrary to this document or (ii) customer product designs.

No license, either expressed or implied, is granted under any Axelera patent right, copyright, or other Axelera intellectual property right under this document. Information published by Axelera regarding third-party products or services does not constitute a license from Axelera to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property rights of the third party, or a license from Axelera under the patents or other intellectual property rights of Axelera.

Reproduction of information in this document is permissible only if approved in advance by Axelera in writing, reproduced without alteration and in full compliance with all applicable

export laws and regulations, and accompanied by all associated conditions, limitations, and notices.

THIS DOCUMENT AND ALL AXELERA DESIGN SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS, AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." AXELERA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY, OR OTHERWISE WITH RESPECT TO THE MATERIALS, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF NONINFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL AXELERA BE LIABLE FOR ANY DAMAGES, INCLUDING WITHOUT LIMITATION ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF ANY USE OF THIS DOCUMENT, EVEN IF Axelera HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Notwithstanding any damages that customer might incur for any reason whatsoever, Axelera's aggregate and cumulative liability towards customer for the products described herein shall be limited in accordance with the Terms of Sale for the product.

Trademarks

The Axelera "AX" logo is a trademark of Axelera AI BV, registered in the Netherlands and other countries. "AXELERA" and "METIS" are registered as word marks across a number of countries/regions. Other company and product names may be trademarks of the respective companies with which they are associated.