DEBIX SOM B User Guide

Version: V1.0 (2025-05)

Compiled by: Polyhex Technology Company Limited (http://www.polyhex.net/)

DEBIX SOM B is the second System-on-Module product of the DEBIX series. As with the DEBIX Model C SBC, it is based on NXP i.MX 93 CPU with a 0.5 TOPS microNPU, which brings us the same powerful system performance. This core board design has some notable benefits, such as design reutilization, reduction of development time of the carrier boards, and flexible integration into various embedded systems. It is suitable for applications in Industry 4.0, IoT, smart homes, building control, and multimedia, meeting the demands for high performance and real-time control in these fields.

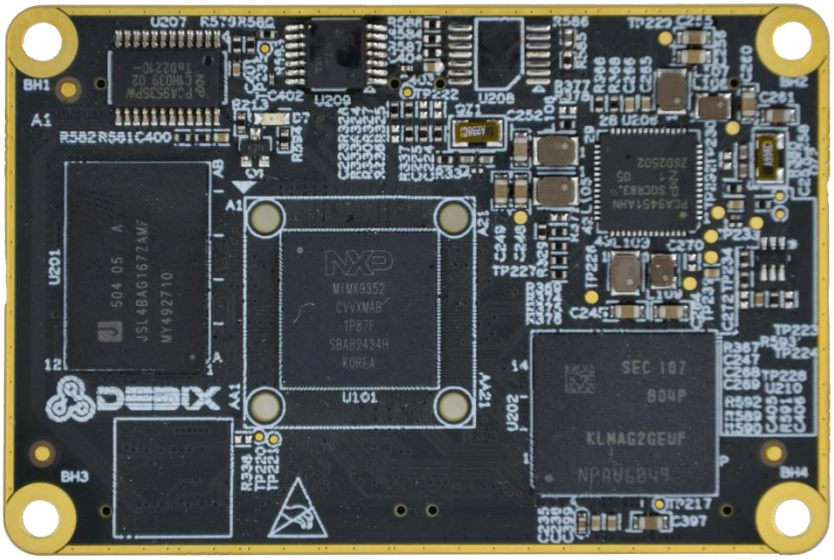

Figure 1 DEBIX SOM B

REVISION HISTORY		
Rev.	**Date**	**Description**
1.0	2025.05.09	First edition

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Chapter 1 Security

1.1. Safety Precaution

This document describes the safety requirements for operating the device with board-to-board direct interfaces. The interfaces are designed for plug-and-play connections, but proper handling is critical to ensure reliability.

Table 1 Terms and Conventions

Symbol	Meaning
Warning! 	Always power off the device before inserting or removing board-to-board connectors. Do not hot-plug interfaces while the system is powered on. Incorrect insertion during live operation may cause short circuits or damage to sensitive components.
Caution! 	Always ground yourself to remove static charge before handling the device. Board-to-board connectors and internal circuits are highly sensitive to electrostatic discharge (ESD). Use a grounded wrist strap and place components on an ESD-safe surface or in shielded packaging.

1.2. Safety Instruction

To ensure safe operation and prevent damage, observe the following:

a. Power Management

✧ Disconnect the device from all power sources before cleaning. Use a dry or slightly damp cloth. Do not use liquid cleaners.

✧ Verify that the power supply voltage matches the device specifications before initial use.

b. Interface Handling

✧ Ensure board-to-board connectors are aligned correctly before insertion. Forcing misaligned connectors may bend pins or damage the interface.

✧ Do not stack or apply excessive mechanical pressure on connected boards.

c. Environmental Requirements

- ✧ Operate and store the device within the specified temperature and humidity range. Extreme conditions may degrade connector integrity.
- ✧ Keep the device away from liquids, dust, and corrosive gases.

d. Static Sensitivity

- ✧ Handle the device only in an ESD-protected environment.
- ✧ Never touch exposed board-to-board pins or connector contacts directly.

e. Maintenance

- ✧ If the device is unused for extended periods, store it in a dry, anti-static bag.
- ✧ Inspect connectors regularly for debris or oxidation. Clean only with compressed air or a specialized contact cleaner.

f. Fault Response

Immediately power off the device and contact service personnel if any of the following occur:

- ✧ Visible damage to board-to-board connectors (e.g., bent pins, cracked housing).
- ✧ Unusual odors, smoke, or overheating.
- ✧ Liquid ingress into the device.
- ✧ Functional failure despite correct operation.

g. Access Control

This device contains precision components. Only authorized personnel may disassemble or modify the hardware.

DISCLAIMER: Polyhex assumes no liability for the accuracy of any statement of this instructional document.

1.3. Declaration of Compliance

This product has passed the following certifications:

Table 2 Compliance Certification

Symbol	Meaning
	This equipment has passed CE certified.
	This equipment has passed UKCA certified.
	This equipment has passed FCC certified.
	This equipment is manufactured in compliance with RoHS regulations.
	This equipment has passed PSE certified.
	This equipment is manufactured in compliance with RCM regulations.

1.4. Technical Support

1. Visit DEBIX website https://www.debix.io/ where you can find the latest information about the product.

■ Quick Links:

Debix Documentation: https://debix.io/Document/manual.html

Debix Blog: https://debix.io/Software/blog.html

Debix GitHub: https://github.com/debix-tech

2. Contact your distributor, sales representative or Polyhex's customer service center for technical support if you need additional assistance. Please have the following info ready before you call:

- Product name and memory size

- Description of your peripheral attachments
- Description of your software(operating system, version, application software, etc.)
- A complete description of the problem
- The exact wording of any error messages

■ TechSupport Platforms:

Discord Community (recommended): https://discord.com/invite/adaHHaDkH2

Email: teksupport@debix.io

Chapter 2 Introduction

DEBIX SOM B is the second System-on-Module product of the DEBIX series. As with the DEBIX Model C SBC, it is based on NXP i.MX 93 CPU with a 0.5 TOPS microNPU, which brings us the same powerful system performance. This core board design has some notable benefits, such as design reutilization, reduction of development time of thecarrier boards, and flexible integration into various embedded systems.

Main features:

- Designed for demanding applications in Industry 4.0, IoT, smart home, building control, multimedia, etc;
- General-purpose Cortex-M33 up to 250MHz for real-time and low-power processing;
- Support for Yocto, Ubuntu, Debian, OpenWRT and FreeRTOS.

2.1. Overview

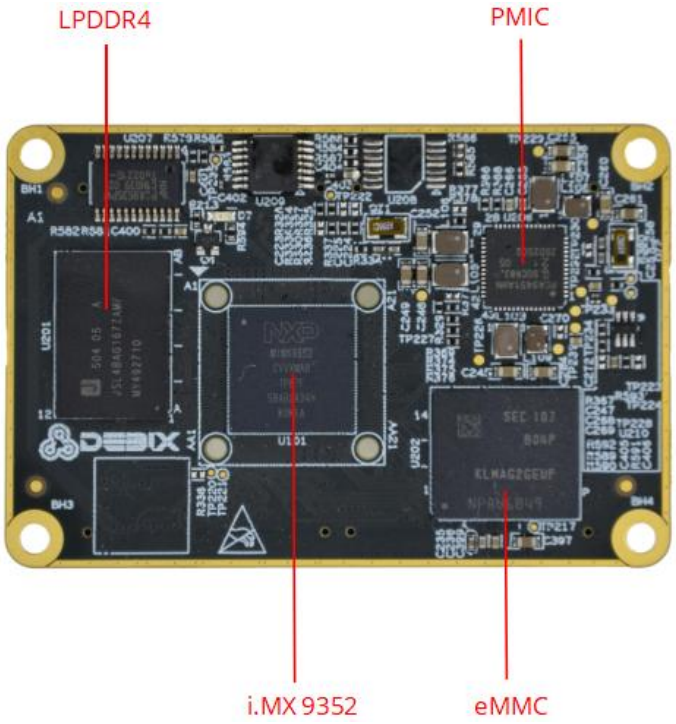


Figure 2 Front View of the DEBIX SOM B

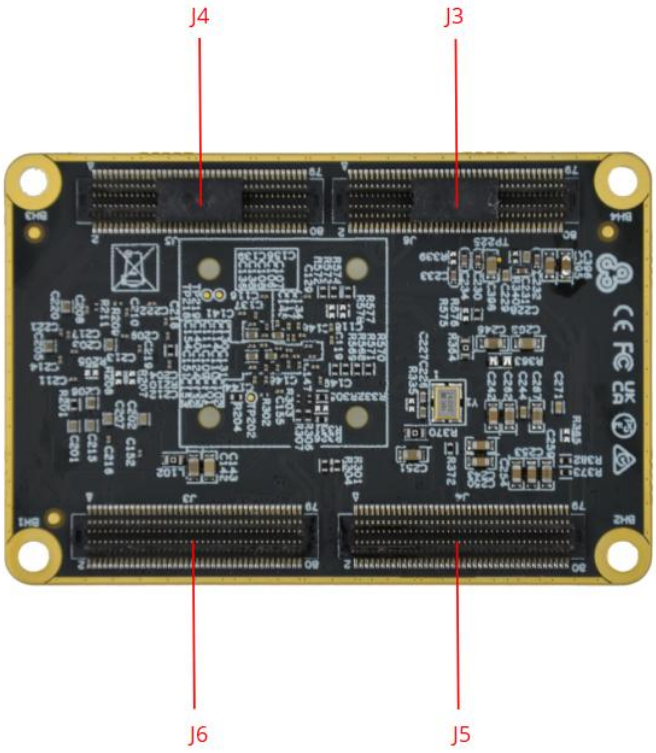


Figure 3 Back View of the DEBIX SOM B

DEBIX SOM B utilizes NXP i.MX 93 as SoC. See Table 3 for the data specifications.

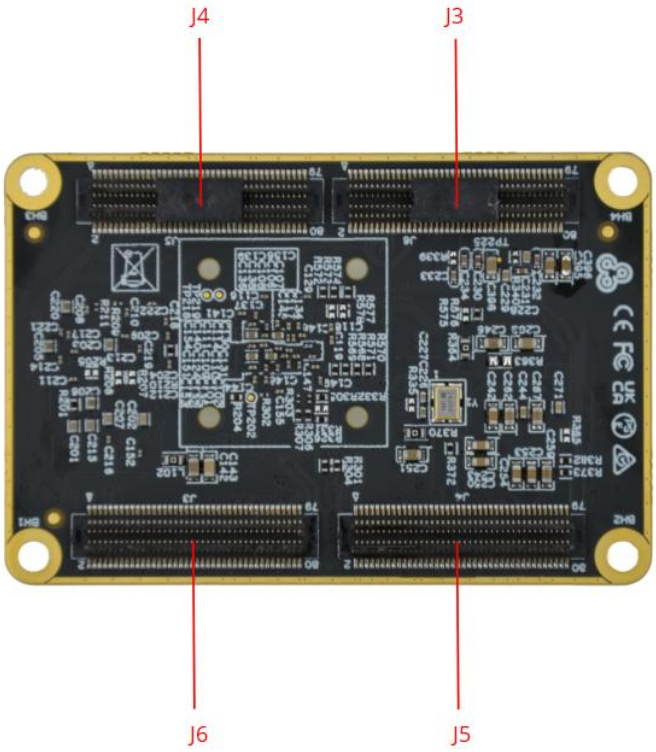
Table 3 DEBIX SOM B Specification

DEBIX SOM B	
System	
CPU	NXP i.MX 9352, 2 x Arm® Cortex®-A55 @1.7GHz, 1 x Arm® Cortex®-M33 @250MHz, 1 x Arm® Ethos™-U65 microNPU @0.5TOPS. (i.MX 93 series CPU optional)
Memory	2GB LPDDR4 (1GB optional)
Storage	Onboard 16GB eMMC (8GB/32GB/64GB/128GB/256GB optional)
OS	Ubuntu 22.04, Yocto-L6.12.3_1.0.0, Debian 12 (also supports OpenWRT and FreeRTOS)
I/O Interfaces	
Gigabit Ethernet	Up to 2 x Gigabit Ethernet controller, one of which supports Time Sensitive Networking (TSN)
Display	● 1 x LVDS (4-lane), supports up to 1366x768@60Hz or 1280x800@60Hz ● 1 x MIPI DSI (4-lane), supports up to 1080@60Hz or 1920x1200@60Hz ● 1 x 24-bit parallel RGB, supports up to 1366x768@60Hz or 1280x800@60Hz
Camera	1 x MIPI CSI, supports up to 2 RX data lanes (plus 1 RX clock lane). Compliant with MIPI CSI-2 v1.3 and MIPI D-PHY v1.2 specifications.
Audio	Up to 3 x SAI (synchronous audio interface), 1 x SPDIF IN, 1 x SPDIF OUT/IN, 1 x PDM
USB	2 x USB 2.0
UART	Up to 8 x UART
I2C	Up to 6 x I2C
SDIO	Up to 2 x SDIO 3.0

CAN	Up to 2 x CAN
SPI	Up to 8 x SPI
ADC	Up to 4 x 12-bit ADC (4-channel)
JTAG	1 x JTAG
Power Supply	
Power Input	DC 3.5V~5V/1A
Operating Temperature	
Temp. Range	-40°C~85°C for default, -20°C~70°C optional
Mechanical & Environmental	
Connector	4 x 2*40pin/0.5mm pitch board-to-board connector (PN: BB51024A-R80-10-32), matching sockets of various heights
Size (L x W x H)	60.0mm x 40.0mm x 5.6mm (±0.5mm)
Gross Weight	23g (±0.5g)
Net Weight	11g (±0.5g)

2.2. Interface

DEBIX SOM B has four external 2*40pin/0.5mm pitch board-to-board Plug connectors, the model is BB51024A-R80-10-32, used to connect DEBIX SOM A I/O Board.



The table below lists the pinouts for the four connectors of DEBIX SOM B, as well as the corresponding CPU pin names for each pin.

Table 4 Header description of Pinout form

Table Column Name	Meaning
Default	The function pin definition we are using now (the definition given in the schematic diagram)
BALL_NAME	The pin name of the corresponding CPU
BALL	CPU pin number

2.2.1. J3 Pinout

Table 5 J3 Pinout

Pin	Default	BALL_NAME	BALL	NOTE
Pin1	GND			
Pin2	GND			

Pin3	GPIO2_IO10	GPIO_IO10	N17	NVCC_GPIO, 1V8
Pin4	EXP_DSI_EN	IO0_5	9	Pin of the PCA9535PW
Pin5	GPIO2_IO11	GPIO_IO11	N18	NVCC_GPIO, 1V8
Pin6	EXP_DSI_TP_RST	IO0_4	8	Pin of the PCA9535PW
Pin7	GPIO2_IO08	GPIO_IO08	M20	NVCC_GPIO, 1V8
Pin8	GPIO2_IO06	GPIO_IO06	L20	NVCC_GPIO, 1V8
Pin9	ADC_IN0	ADC_IN0	B19	NVCC_GPIO, 1V8
Pin10	EXP_LVDS_BL_EN	IO0_7	11	Pin of the PCA9535PW
Pin11	GND			
Pin12	EXP_LVDS_VDD_EN	IO1_0	13	Pin of the PCA9535PW
Pin13	NC			
Pin14	GPIO2_IO22	GPIO_IO22	T21	NVCC_GPIO, 1V8
Pin15	NC			
Pin16	GPIO2_IO24	GPIO_IO24	U21	NVCC_GPIO, 1V8
Pin17	GND			
Pin18	GPIO4_IO28	CCM_CLKO3	U4	NVCC_WAKEUP, 1V8
Pin19	NC			
Pin20	GPIO4_IO29	CCM_CLKO4	V4	NVCC_WAKEUP, 1V8
Pin21	NC			
Pin22	GND			
Pin23	GND			
Pin24	USB1_DN	USB1_D_N	A14	VDD_USB_3P3, 3V3
Pin25	NC			
Pin26	USB1_DP	USB1_D_P	B14	VDD_USB_3P3, 3V3
Pin27	NC			
Pin28	GND			
Pin29	GND			

Pin30	USB2_DN	USB2_D_N	A15	VDD_USB_3P3, 3V3
Pin31	NC			
Pin32	USB2_DP	USB2_D_P	B15	VDD_USB_3P3, 3V3
Pin33	NC			
Pin34	GND			
Pin35	GND			
Pin36	USB1_VBUS_3V3	USB1_VBUS	F12	VDD_USB_3P3, 3.3V
Pin37	NC			
Pin38	USB2_VBUS_3V3	USB2_VBUS	E14	VDD_USB_3P3, 3.3V
Pin39	NC			
Pin40	JTAG_TMS	JTAG_TMS	W2	NVCC_WAKEUP, 1V8
Pin41	GND			
Pin42	JTAG_TDO	JTAG_TDO	Y2	NVCC_WAKEUP, 1V8
Pin43	NC			
Pin44	JTAG_TDI	JTAG_TDI	W1	NVCC_WAKEUP, 1V8
Pin45	NC			
Pin46	JTAG_MOD	TP235		
Pin47	GND			
Pin48	JTAG_TCK	JTAG_TCK	Y1	NVCC_WAKEUP, 1V8
Pin49	NC			
Pin50	GND			
Pin51	NC			
Pin52	CSI1_DN0	MIPI_CSI1_D0_N	A11	VDD_MIPI_1P8, 1V8
Pin53	GND			
Pin54	CSI1_DP0	MIPI_CSI1_D0_P	B11	VDD_MIPI_1P8, 1V8
Pin55	DSI_DN0	MIPI_DSI1_D0_N	A6	VDD_MIPI_1P8, 1V8
Pin56	GND			

Pin57	DSI_DP0	MIPI_DSI1_D0_P	B6	VDD_MIPI_1P8, 1V8
Pin58	CSI1_DN1	MIPI_CSI1_D1_N	A10	VDD_MIPI_1P8, 1V8
Pin59	DSI_DN1	MIPI_DSI1_D1_N	A7	VDD_MIPI_1P8, 1V8
Pin60	CSI1_DP1	MIPI_CSI1_D1_P	B10	VDD_MIPI_1P8, 1V8
Pin61	DSI_DP1	MIPI_DSI1_D1_P	B7	VDD_MIPI_1P8, 1V8
Pin62	GND			
Pin63	GND			
Pin64	CSI1_CKN	MIPI_CSI1_CLK_N	D10	VDD_MIPI_1P8, 1V8
Pin65	DSI_CKN	MIPI_DSI1_CLK_N	D6	VDD_MIPI_1P8, 1V8
Pin66	CSI1_CKP	MIPI_CSI1_CLK_P	E10	VDD_MIPI_1P8, 1V8
Pin67	DSI_CKP	MIPI_DSI1_CLK_P	D6	VDD_MIPI_1P8, 1V8
Pin68	GND			
Pin69	GND			
Pin70	NC			
Pin71	DSI_DN2	MIPI_DSI1_D2_N	A8	VDD_MIPI_1P8, 1V8
Pin72	NC			
Pin73	DSI_DP2	MIPI_DSI1_D2_P	B8	VDD_MIPI_1P8, 1V8
Pin74	GND			
Pin75	DSI_DN3	MIPI_DSI1_D3_N	A9	VDD_MIPI_1P8, 1V8
Pin76	NC			
Pin77	DSI_DP3	MIPI_DSI1_D3_P	B9	VDD_MIPI_1P8, 1V8
Pin78	NC			
Pin79	GND			
Pin80	GND			

2.2.2. J4 Pinout

Table 6 J4 Pinout

Pin	Default	BALL_NAME	BALL	NOTE
Pin1	GND			
Pin2	GND			
Pin3	NC			
Pin4	NC			
Pin5	NC			
Pin6	NC			
Pin7	GND			
Pin8	GND			
Pin9	NC			
Pin10	NC			
Pin11	NC			
Pin12	NC			
Pin13	GND			
Pin14	GND			
Pin15	NC			
Pin16	NC			
Pin17	NC			
Pin18	NC			
Pin19	GND			
Pin20	GND			
Pin21	NC			
Pin22	NC			
Pin23	NC			
Pin24	NC			

Pin25	GND			
Pin26	GND			
Pin27	NC			
Pin28	NC			
Pin29	NC			
Pin30	NC			
Pin31	GND			
Pin32	GND			
Pin33	LVDS0_TX0_P	LVDS_D0_P	B5	VDD_LVDS_1P8, 1V8
Pin34	ADC_IN1	ADC_IN1	A20	VDD_ANA_1P8, 1V8
Pin35	LVDS0_TX0_N	LVDS_D0_N	A5	VDD_LVDS_1P8, 1V8
Pin36	ONOFF	ONOFF	A19	NVCC_BBSM, 1V8
Pin37	GND			
Pin38	POR_B	POR_B	A16	NVCC_BBSM, 1V8
Pin39	LVDS0_TX1_P	LVDS_D1_P	B4	VDD_LVDS_1P8, 1V8
Pin40	PMIC_ON_REQ	PMIC_ON_REQ	A17	NVCC_SNVS, 1V8
Pin41	LVDS0_TX1_N	LVDS_D1_N	A4	VDD_LVDS_1P8, 1V8
Pin42	GND			
Pin43	GND			
Pin44	BOOT_MODE0	UART1_TXD	E21	NVCC_AON, 1V8
Pin45	LVDS0_CLK_P	LVDS_CLK_P	B3	VDD_LVDS_1P8, 1V8
Pin46	BOOT_MODE1	UART2_TXD	F21	NVCC_AON, 1V8
Pin47	LVDS0_CLK_N	LVDS_CLK_N	A3	VDD_LVDS_1P8, 1V8
Pin48	BOOT_MODE2	SAI1_TXFS	G21	NVCC_AON, 1V8
Pin49	GND			
Pin50	BOOT_MODE3	SAI1_TXD0	H12	NVCC_AON, 1V8
Pin51	LVDS0_TX2_P	LVDS_D2_P	B2	VDD_LVDS_1P8, 1V8

Pin52	WDOG_B	WDOG_ANY	J18	NVCC_AON, 1V8
Pin53	LVDS0_TX2_N	LVDS_D2_N	A2	VDD_LVDS_1P8, 1V8
Pin54	GND			
Pin55	GND			
Pin56	CLKIN1	CLKIN1	B17	VDD_ANA_1P8, 1V8
Pin57	LVDS0_TX3_P	LVDS_D3_P	c1	VDD_LVDS_1P8, 1V8
Pin58	GND			
Pin59	LVDS0_TX3_N	LVDS_D3_N	B1	VDD_LVDS_1P8, 1V8
Pin60	NC			
Pin61	GND			
Pin62	GND			
Pin63	EXP_CSI1_PWDN	IO0_3	7	Pin of the PCA9535PW
Pin64	CLKIN2	CLKIN2	A28	VDD_ANA_1P8, 1V8
Pin65	EXP_WL_REG_ON	IO0_0	4	Pin of the PCA9535PW
Pin66	GND			
Pin67	SD3_CLK	SD3_CLK	V16	NVCC_WAKEUP, 1V8
Pin68	NC			
Pin69	SD3_CMD	SD3_CMD	U16	NVCC_WAKEUP, 1V8
Pin70	GND			
Pin71	SD3_DATA0	SD3_DATA0	T16	NVCC_WAKEUP, 1V8
Pin72	EXP_BT_REG_ON	IO0_1	5	Pin of the PCA9535PW
Pin73	SD3_DATA1	SD3_DATA1	V14	NVCC_WAKEUP, 1V8
Pin74	EXP_BT_WAKE_DEV	IO0_2	6	Pin of the PCA9535PW
Pin75	SD3_DATA2	SD3_DATA2	U14	NVCC_WAKEUP, 1V8
Pin76	GPIO2_IO07	GPIO_IO07	L21	NVCC_GPIO, 1V8
Pin77	SD3_DATA3	SD3_DATA3	T14	NVCC_WAKEUP, 1V8
Pin78	GPIO2_IO09	GPIO_IO09	M21	NVCC_GPIO, 1V8

Pin79	GND			
Pin80	GND			

2.2.3. J5 Pinout

Table 7 J5 Pinout

Pin	Default	BALL_NAME	BALL	NOTE
Pin1	GND			
Pin2	GND			
Pin3	I2C1_SCL	I2C1_SCL	C20	NVCC_AON, 1V8
Pin4	UART5_TXD	GPIO_IO00	J21	NVCC_GPIO, 1V8
Pin5	I2C1_SDA	I2C1_SDA	C21	NVCC_AON, 1V8
Pin6	UART5_RXD	GPIO_IO01	J20	NVCC_GPIO, 1V8
Pin7	I2C2_SCL	I2C2_SCL	D20	NVCC_AON, 1V8
Pin8	UART6_RXD	GPIO_IO05	L18	NVCC_GPIO, 1V8
Pin9	I2C2_SDA	I2C2_SDA	D21	NVCC_AON, 1V8
Pin10	UART6_TXD	GPIO_IO04	L17	NVCC_GPIO, 1V8
Pin11	I2C5_SCL	GPIO_IO23	U20	NVCC_GPIO, 1V8
Pin12	UART1_TXD	B1	13	Pin of the LSF0204PWR
Pin13	I2C5_SDA	GPIO_IO22	U18	NVCC_GPIO, 1V8
Pin14	UART1_RXD	UART1_RXD	E20	NVCC_AON, 1V8
Pin15	GND			
Pin16	UART2_TXD	B2	12	Pin of the LSF0204PWR
Pin17	ENET2_RXC	ENET2_RXC	AA3	NVCC_WAKEUP, 1V8
Pin18	UART2_RXD	UART2_RXD	F20	NVCC_AON, 1V8
Pin19	ENET2_TD0	ENET2_TD0	T8	NVCC_WAKEUP, 1V8
Pin20	GND			

Pin21	ENET2_TD1	ENET2_TD1	U8	NVCC_WAKEUP, 1V8
Pin22	ENET1_nINT	CCM_CLKO1	AA2	NVCC_WAKEUP, 1V8
Pin23	ENET2_TD2	ENET2_TD2	V8	NVCC_WAKEUP, 1V8
Pin24	EXP_GPIO_LED1	IO1_1	14	Pin of the PCA9535PW
Pin25	ENET2_TD3	ENET2_TD3	T10	NVCC_WAKEUP, 1V8
Pin26	ENET2_nINT	CCM_CLKO2	Y3	NVCC_WAKEUP, 1V8
Pin27	ENET2_TX_CTL	ENET2_TX_CTL	AH13	NVCC_WAKEUP, 1V8
Pin28	EXP_RTC_nINT	IO1_7	20	Pin of the PCA9535PW
Pin29	ENET2_TXC	ENET2_TXC	U6	NVCC_WAKEUP, 1V8
Pin30	ENET2_MDC	ENET2_MDC	Y7	NVCC_WAKEUP, 1V8
Pin31	EXP_ENET1_nRST	IO1_4	17	Pin of the PCA9535PW
Pin32	ENET2_MDIO	ENET2_MDIO	AA6	NVCC_WAKEUP, 1V8
Pin33	EXP_ENET2_nRST	IO1_3	16	Pin of the PCA9535PW
Pin34	ENET2_RD0	ENET2_RD0	AA4	NVCC_WAKEUP, 1V8
Pin35	ENET2_RX_CTL	ENET2_RX_CTL	Y4	NVCC_WAKEUP, 1V8
Pin36	ENET2_RD1	ENET2_RD1	Y5	NVCC_WAKEUP, 1V8
Pin37	GND			
Pin38	ENET2_RD2	ENET2_RD2	AA5	NVCC_WAKEUP, 1V8
Pin39	NC			
Pin40	ENET2_RD3	ENET2_RD3	Y5	NVCC_WAKEUP, 1V8
Pin41	CAN1_TXD	PDM_CLK	G17	NVCC_AON, 1V8
Pin42	EXP_GPIO_LED2	IO1_2	15	Pin of the PCA9535PW
Pin43	CAN1_RXD	PDM_BIT_STREAM0	J17	NVCC_AON, 1V8
Pin44	GND			
Pin45	CAN2_TXD	GPIO_IO25	V21	NVCC_GPIO, 1V8
Pin46	ADC_IN2	ADC_IN2	B20	VDD_ANA_1P8, 1V8
Pin47	NC			

Pin48	ADC_IN3	ADC_IN3	B21	VDD_ANA, 1V8
Pin49	UART5_RTSO	GPIO_IO03	K21	NVCC_GPIO, 1V8
Pin50	CAN2_RXD	GPIO_IO28	W20	NVCC_GPIO, 1V8
Pin51	GPIO1_IO10	GPIO_IO10	N17	NVCC_GPIO, 1V8
Pin52	NC			
Pin53	UART5_CTSI	GPIO_IO02	K20	NVCC_GPIO, 1V8
Pin54	NC			
Pin55	SAI3_TXC	GPIO_IO16	R21	NVCC_GPIO, 1V8
Pin56	NC			
Pin57	SAI3_TXFS	GPIO_IO26	V20	NVCC_GPIO, 1V8
Pin58	SAI3_MCLK	GPIO_IO17	R20	NVCC_GPIO, 1V8
Pin59	SAI3_TXD	GPIO_IO19	R17	NVCC_GPIO, 1V8
Pin60	EXP_HP_DET	IO1_6	19	Pin of the PCA9535PW
Pin61	GND			
Pin62	SAI3_RXFS	GPIO_IO18	R18	NVCC_GPIO, 1V8
Pin63	GPIO2_IO15	GPIO_IO15	P21	NVCC_GPIO, 1V8
Pin64	SAI3_RXD	GPIO_IO20	T20	NVCC_GPIO, 1V8
Pin65	GPIO2_IO12	GPIO_IO12	N20	NVCC_GPIO, 1V8
Pin66	NC			
Pin67	GPIO2_IO13	GPIO_IO13	N21	NVCC_GPIO, 1V8
Pin68	NC			
Pin69	GPIO2_IO14	GPIO_IO14	P20	NVCC_GPIO, 1V8
Pin70	NC			
Pin71	NC			
Pin72	GPIO1_IO12	SAI1_TXC	G20	NVCC_AON, 1V8
Pin73	NC			
Pin74	GPIO1_IO11	B3	11	Pin of the LSF0204PWR

Pin75	NC			
Pin76	GPIO1_IO14	SAI1_RXD0	H20	NVCC_AON, 1V8
Pin77	NC			
Pin78	GPIO1_IO13	B4	10	Pin of the LSF0204PWR
Pin79	GND			
Pin80	GND			

2.2.4. J6 Pinout

Table 8 J6 Pinout

Pin	Default	BALL_NAME	BALL	NOTE
Pin1	GND			
Pin2	GND			
Pin3	NC			
Pin4	ENET1_MDC	ENET1_MDC	AA11	NVCC_WAKEUP, 1V8
Pin5	NC			
Pin6	ENET1_MDIO	ENET1_MDIO	AA10	NVCC_WAKEUP, 1V8
Pin7	GND			
Pin8	ENET1_TX_CTL	ENET1_TX_CTL	V10	NVCC_WAKEUP, 1V8
Pin9	NC			
Pin10	ENET1_TXC	ENET1_TXC	U10	NVCC_WAKEUP, 1V8
Pin11	NC			
Pin12	ENET1_TD0	ENET1_TD0	W11	NVCC_WAKEUP, 1V8
Pin13	GND			
Pin14	ENET1_TD1	ENET1_TD1	T12	NVCC_WAKEUP, 1V8
Pin15	NC			
Pin16	ENET1_TD2	ENET1_TD2	U12	NVCC_WAKEUP, 1V8

Pin17	NC			
Pin18	ENET1_TD3	ENET1_TD3	V12	NVCC_WAKEUP, 1V8
Pin19	GND			
Pin20	ENET1_RX_CTL	ENET1_RX_CTL	V10	NVCC_WAKEUP, 1V8
Pin21	NC			
Pin22	ENET1_RXC	ENET1_RXC	AA7	NVCC_WAKEUP, 1V8
Pin23	NC			
Pin24	ENET1_RD0	ENET1_RD0	AA8	NVCC_WAKEUP, 1V8
Pin25	GND			
Pin26	ENET1_RD1	ENET1_RD1	Y9	NVCC_WAKEUP, 1V8
Pin27	NC			
Pin28	ENET1_RD2	ENET1_RD2	AA9	NVCC_WAKEUP, 1V8
Pin29	NC			
Pin30	ENET1_RD3	ENET1_RD3	Y10	NVCC_WAKEUP, 1V8
Pin31	GND			
Pin32	GND			
Pin33	SD2_DATA0	SD2_DATA0	Y18	NVCC_SD2
Pin34	SD2_WP	IO0_6	10	Pin of the PCA9535PW
Pin35	SD2_DATA1	SD2_DATA1	AA18	NVCC_SD2, 1V8
Pin36	SD2_nCD	SD2_CD_B	Y17	NVCC_SD2, 1V8
Pin37	SD2_DATA2	SD2_DATA2	Y20	NVCC_SD2, 1V8
Pin38	SD2_CLK	SD2_CLK	AA19	NVCC_SD2, 1V8
Pin39	GND			
Pin40	SD2_CMD	SD2_CMD	Y19	NVCC_SD2, 1V8
Pin41	NC			
Pin42	SD2_DATA3	SD2_DATA3	AA20	NVCC_SD2, 1V8
Pin43	PMIC_32K_OUT			

Pin44	NC			
Pin45	SYS_nRST			
Pin46	NC			
Pin47	VSD_3V3			
Pin48	NC			
Pin49	VSD_3V3			
Pin50	NC			
Pin51	VSD_3V3			
Pin52	NC			
Pin53	VDD_3V3			
Pin54	VDD_1V8			
Pin55	VDD_3V3			
Pin56	VDD_1V8			
Pin57	VDD_3V3			
Pin58	VDD_1V8			
Pin59	VDD_3V3			
Pin60	VDD_1V8			
Pin61	GND			
Pin62	GND			
Pin63	GND			
Pin64	GND			
Pin65	GND			
Pin66	GND			
Pin67	GND			
Pin68	GND			
Pin69	GND			
Pin70	GND			

Pin71	VSYS_5V			
Pin72	VSYS_5V			
Pin73	VSYS_5V			
Pin74	VSYS_5V			
Pin75	VSYS_5V			
Pin76	VSYS_5V			
Pin77	VSYS_5V			
Pin78	VSYS_5V			
Pin79	VSYS_5V			
Pin80	VSYS_5V			