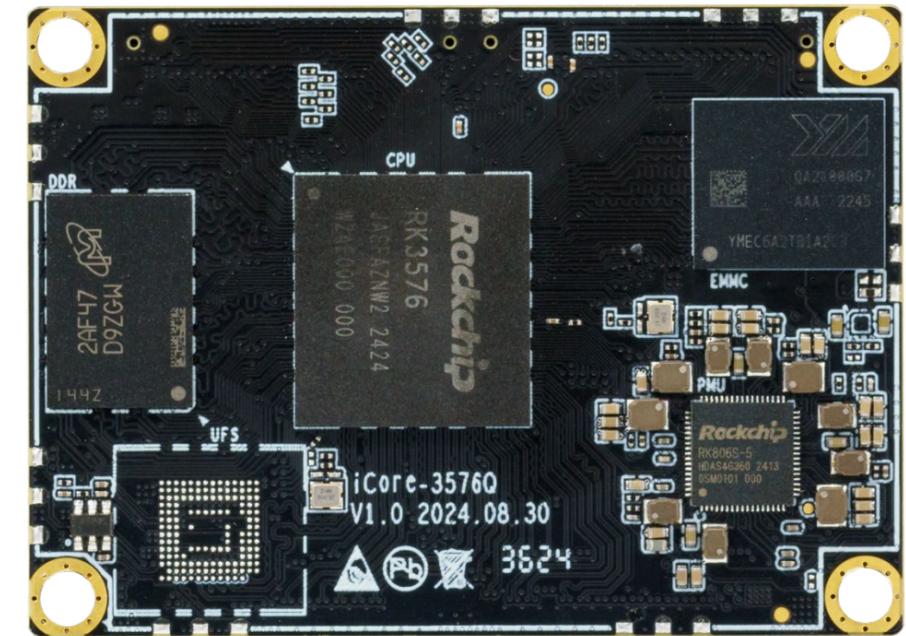




# Low-power Industrial AIOT Core board

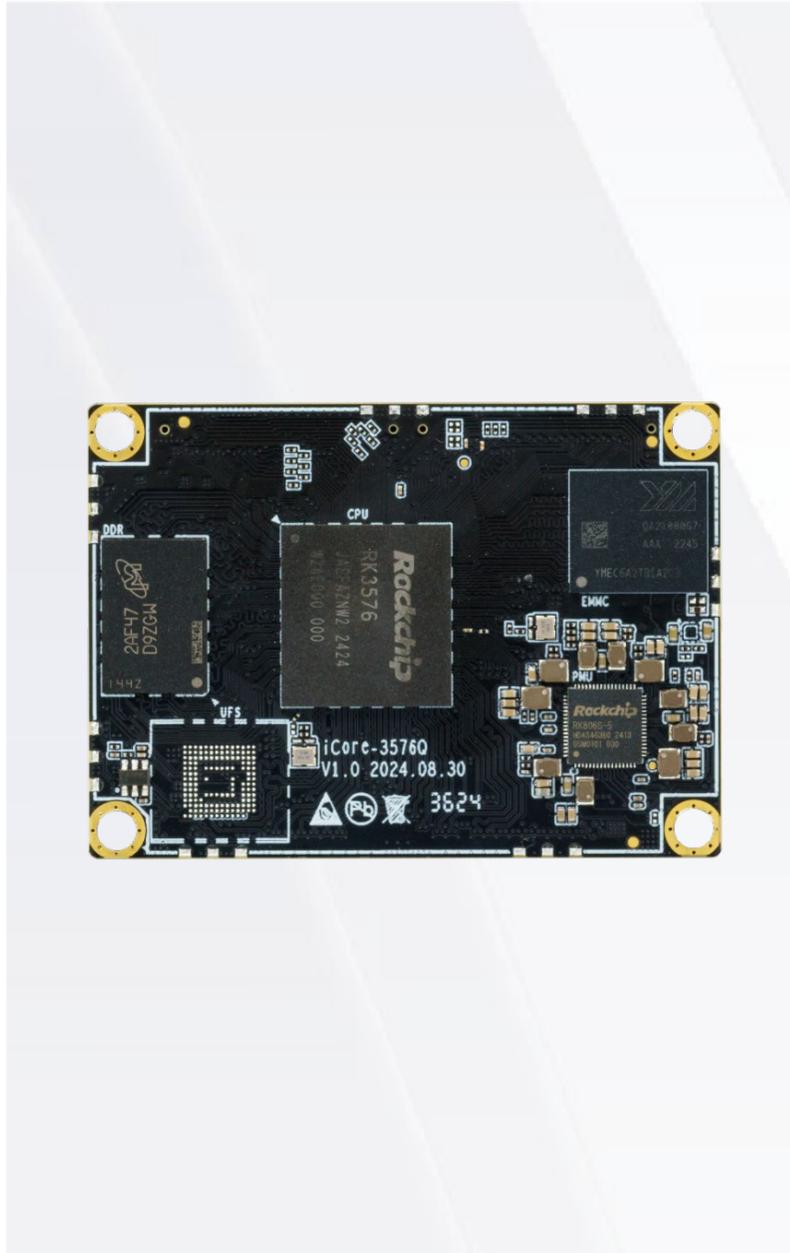
- iCore-3576Q(Commercial)
- iCore-3576JQ(Industrial)



V1.0 2025-3-27

T-CHIP INTELLIGENCE TECHNOLOGY

# Product features



## High-performance Octa-core 64-bit AIOT processor, RK3576

RK3576, the new octa-core 64-bit AIOT processor, features a big.LITTLE architecture (4xA72 +4xA53), an advanced lithography process, and a frequency of up to 2.2GHz. It ensures strong support for high-performance computing and multitasking.



## 4K@120fps high frame rate video decoding

It supports 8K@30fps/4K@120fps (H.265/HEVC, VP9, AVS2, and AV1) and 4K@60fps (H.264/AVC) video decoding, and 4K@60fps video encoding (H.265/HEVC and H.264/AVC).



## Built-in 6TOPS computing power NPU

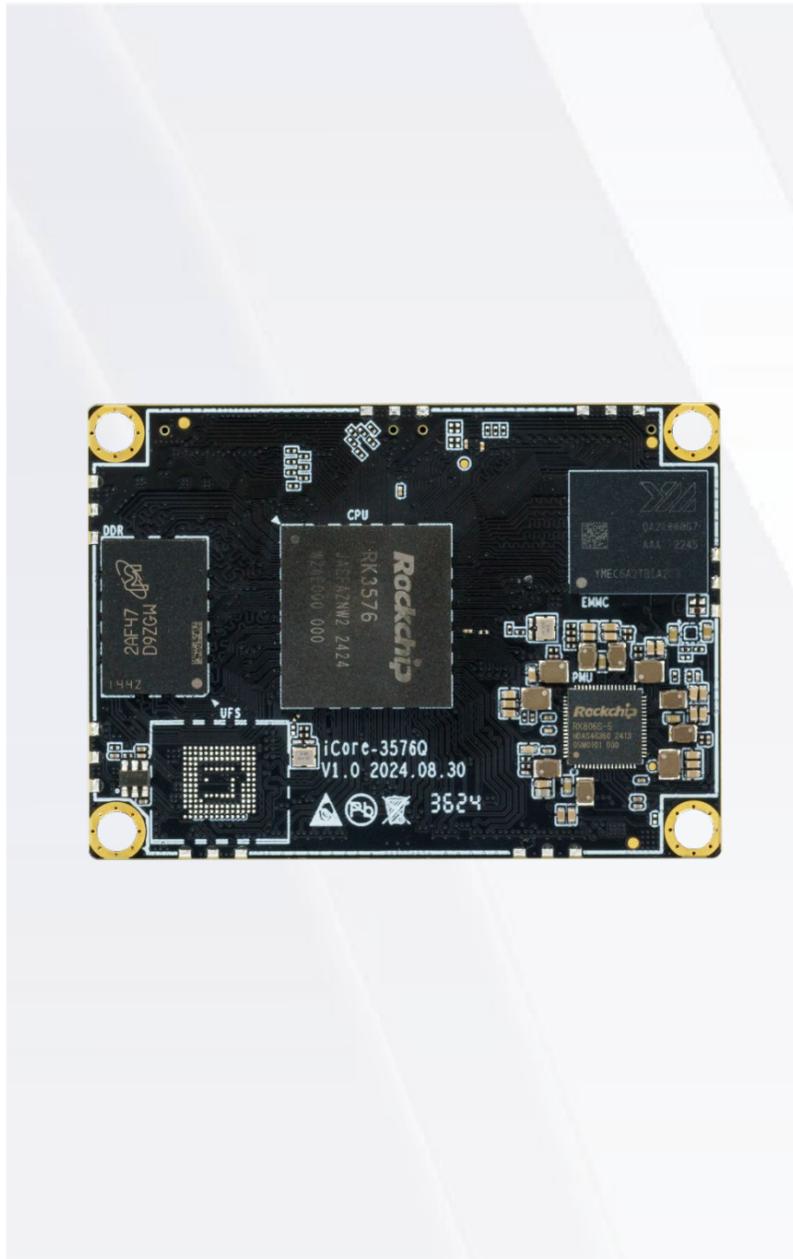
The NPU has a computing power of up to 6TOPS, supports INT4/INT8/INT16/FP16/BF16/TF32 operations, supports dual-core collaborative or independent work, and supports multi-task and multi-scenario parallelism. It supports the real-time object detection algorithm YOLO based on deep learning, and supports the private deployment of large language models.



## New features for industry

It has new industrial features such as real-time network, Flexbus, hardware resource isolation, and DSMC to meet the needs of different industrial applications.

# Product features



## BTB interface design

The core board is designed with BTB interface and high-speed industrial-grade connectors, which has super transmission capacity, high-frequency transmission stability, and convenience without welding, helping products to be quickly marketed.



## Support RTLinux and multiple operating systems

It supports RTLinux kernel and has excellent real-time performance. Support Android 14, Linux OS, and Buildroot. These provide safe and stable systems for product research and production.



## Abundant expansion interfaces

It provides a rich array of expansion interfaces such as CAN FD, I3C, UART, I2C, SAI, PWM, SPI, PCIe2.1, SATA3.0, USB3.0, USB2.0, MIPI-CSI, MIPI-DSI, DP1.4, SPDIF, SDIO3.0, GPIO to meet peripheral expansion needs for various applications.



## Wide range of application scenarios

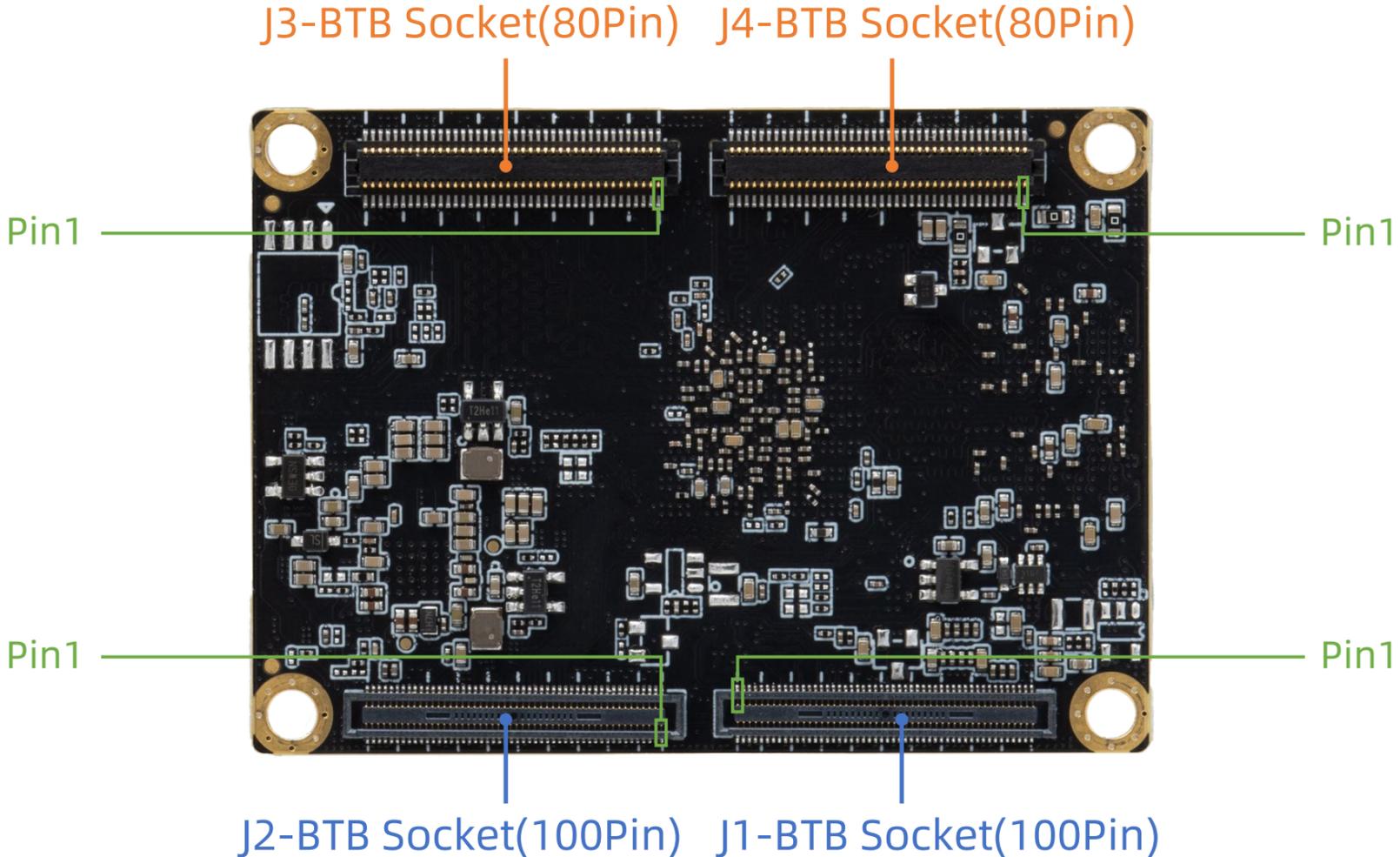
It is widely used in edge computing, local deployment of large models, intelligent digital signage, cloud terminal products, industrial PCs, automotive electronics, and more.

# Specifications



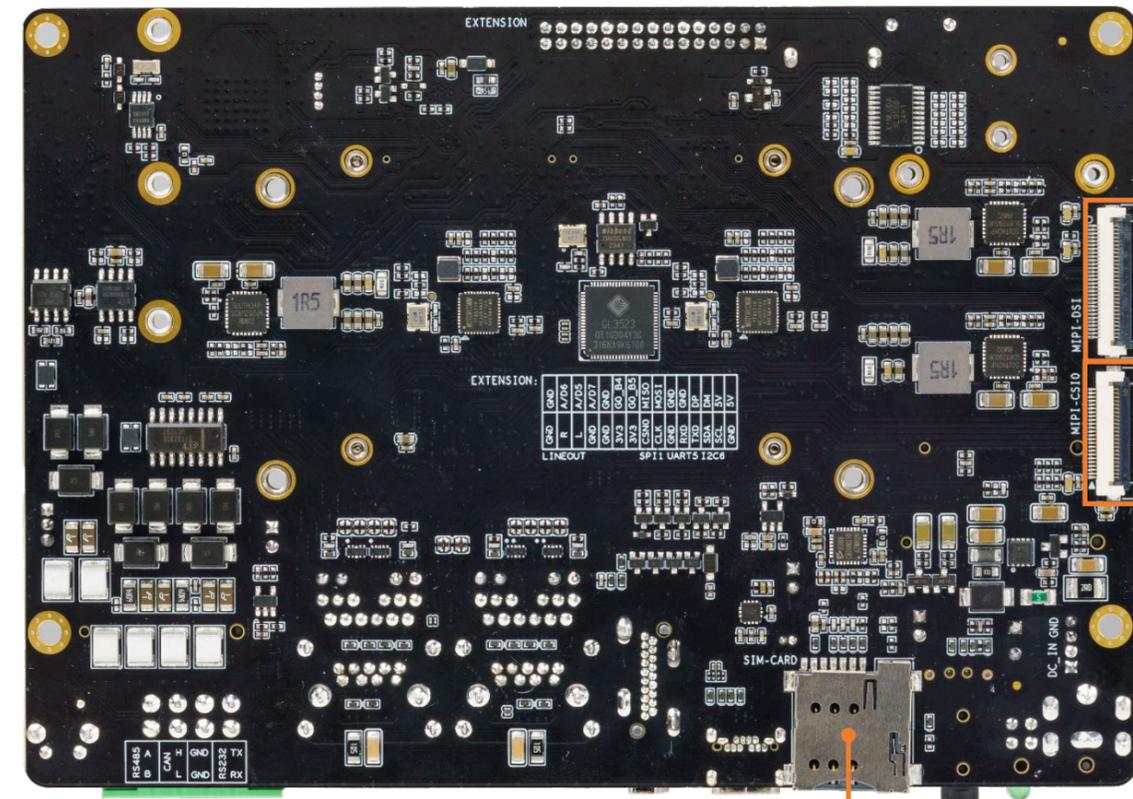
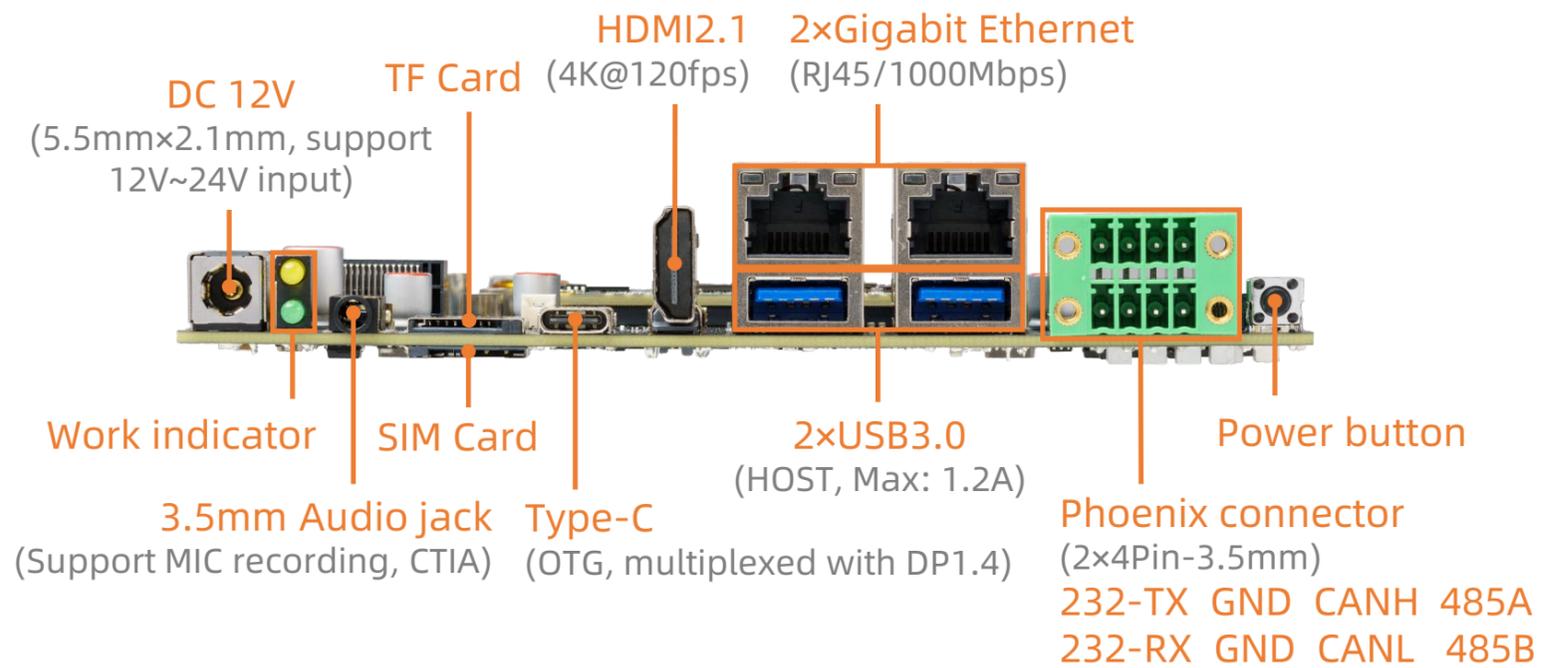
	iCore-3576Q(Commercial)		iCore-3576JQ(Industrial)	
Basic Specifications	SOC	Rockchip RK3576	Rockchip RK3576J	
	CPU	Octa-core 64-bit processor (4xA72 + 4xA53) with a maximum frequency of 2.2GHz	Octa-core 64-bit processor (4xA72 + 4xA53) with a maximum frequency of 1.6GHz	
	GPU	G52 MC3@1GHz, support OpenGL ES 1.1/2.0/3.2, OpenCL 2.0, Vulkan 1.1, embedded with high-performance 2D acceleration hardware		
	NPU	6 TOPS NPU, It supports INT4/INT8/INT16/FP16/BF16/TF32 operations, supports dual-core collaborative or independent work, and supports multi-task and multi-scene parallelism		
	ISP	Built-in 16 million pixel ISP, support low-light noise reduction, support RGB-IR sensor, support up to 120dB HDR, AI-ISP to improve low-noise image effect		
	Decoding/Encoding	Video decoding: 8K@30fps/4K@120fps (H.265/HEVC, VP9, AVS2, AV1), 4K@60fps (H.264/AVC) Video encoding: 4K@60fps (H.265/HEVC, H.264/AVC) Image codec: 4K@60fps MJPG		
	RAM	LPDDR4/LPDDR4x (4GB/8GB optional)		
	Storage	eMMC (16GB/32GB/64GB/128GB/256GB optional), UFS2.0 (Optional)		
	Power	5.0V (voltage tolerance ± 5%)		
	Power consumption	Max: 4.5W(5V/900mA) Normal: 0.5W(5V/100mA) Min: 0.045W(5V/9mA)	Max: 3.75W(5V/750mA) Normal: 0.45W(5V/90mA) Min: 0.045W(5V/9mA)	
	OS	It supports RTLinux kernel and has excellent real-time performance, which is widely used in industrial application scenarios Support Android14, Linux OS, Buildroot, domestic operating system, provide a safe and stable system environment for product research and production It has new industrial features such as real-time network, Flexbus, hardware resource isolation, and DSMC to meet the needs of different industrial applications		
	AI performance	Support the privatization deployment of ultra-large-scale parametric models under the Transformer architecture, such as Gemma-2B, ChatGLM3-6B, Qwen-1.8B, Phi-3-3.8B and other large language models It supports traditional network architectures such as CNN, RNN, and LSTM, and supports the import and export of RKNN models; Support a variety of deep learning frameworks, including TensorFlow, TensorFlow Lite, PyTorch, Caffe, ONNX and Darknet. It also supports the development of custom operators Support Docker container management technology		
		It supports the real-time object detection algorithm YOLO (You Only Look Once), which is fast and real-time compared with traditional object detection methods, and can accurately identify and locate multiple target objects in images or videos, powering AI applications		
	Interface type	BTB(2 × BTB Socket(80Pin) + 2 × BTB Socket(100Pin))		
	Size	60.00mm × 42.95mm × 5.68mm		
	Weight	≈15g		
Environment	Operating Temperature: -20°C ~ 60°C Storage Humidity: 10% ~ 90%RH (non-condensing)	Operating Temperature: -40°C ~ 85°C Storage Humidity: 10% ~ 90%RH (non-condensing)		
Interface Specifications	Internet	2 × GMAC (providing RMII or RGMII interfaces to connect external Ethernet PHY); Supports 10/100/1000 Mbps speeds), expandable WiFi, Bluetooth, 4G, 5G through USB, PCIE, SDIO, UART		
	Video input	2 × MIPI DPHY CSI (Supports MIPI V1.2 version; 1 × 4 Lanes or 2 × 2 Lanes) 1 × MIPI DCPHY CSI RX (DPHY supports V2.0 version with 4Lane/2Lane/1Lane modes; CPHY supports V1.1 version with 0/1/2 Trio modes) 1 × DVP (8/10/12/16-bit, BT.601/BT.656 and BT.1120)		
	Video output	1 × HDMI2.1(4096×2160@120Hz)/eDP1.3(4096×2160@60Hz, supports 1Lane/2Lane/4Lane modes) 1 × DP1.4 (4096×2160@120Hz) 1 × EBC Output interface (support E-ink EPD (Electronic Paper Display), 2560×1920) 1 × MIPI_DCPHY_TX (Supports V2.0 version and 0/1/2/3 Lane mode; C-PHY supports V1.1 version and 0/1/2 Trio mode; 2560×1600@60Hz) 1 × LCDC TX (Supports parallel 24 bit RGB mode) 1920×1080@60Hz 16 bit BT1120 mode 1920×1080@60Hz 8-bit BT656 mode 720×576@60Hz And MCU mode)		
	Audio	2 × SAI (4T/4R), 3 × SAI (1T/1R), supports I2S/TDM/PCM mode, and supports sampling rates up to 192KHz 2 × SPDIF TX & RX (8ch; Supports up to 24bits resolution) 2 × PDM (Up to 8 channels, audio resolution 16~24 bits, sample rate up to 192KHz, support PDM master receive mode) 2 × DSM (Double-rate interface supported; Supports 8-wire and 16-wire serial transmission modes; DSMC_CLKP/N up to 100MHz)		
	PCIe/SATA	1 × PCIe 2.1/SATA 3.1/USB 3.2 Gen1 Combo interfaces 1 × PCIe 2.1/SATA 3.1 Combo interfaces		
	USB	1 × USB3.2 Gen1 OTG0 (multiplexed with DP1.4) 1 × USB3.2 Gen1 OTG1 (multiplexed with PCIe 2.1/SATA 3.1)		
	SDIO	2 × SDIO3.0		
	PWM	16 × PWM		
	SPI	5 × SPI (Supports serial master and serial slave modes, software configurable)		
	I2C	10 × I2C (Supports 7-bit and 10-bit address modes, data rates up to 100kbps in standard mode and up to 400kbps in fast mode)		
	I3C	2 × I3C (I2C compliant, SDR mode supported, up to 10 devices supported)		
	UART	12 × UART (Support automatic flow control mode, support RS485 function)		
	CAN	2 × CAN FD (Supports 8192 bit receive FIFO)		
	Watchdog	External watchdog support (on-board watchdog IC)		
	SARADC	7 × SARADC + 1 × SARADC (boot only), supports 12-bit resolution, up to 1MS/s sampling rate		

# Core board Interface description





# Mainboard Interface description

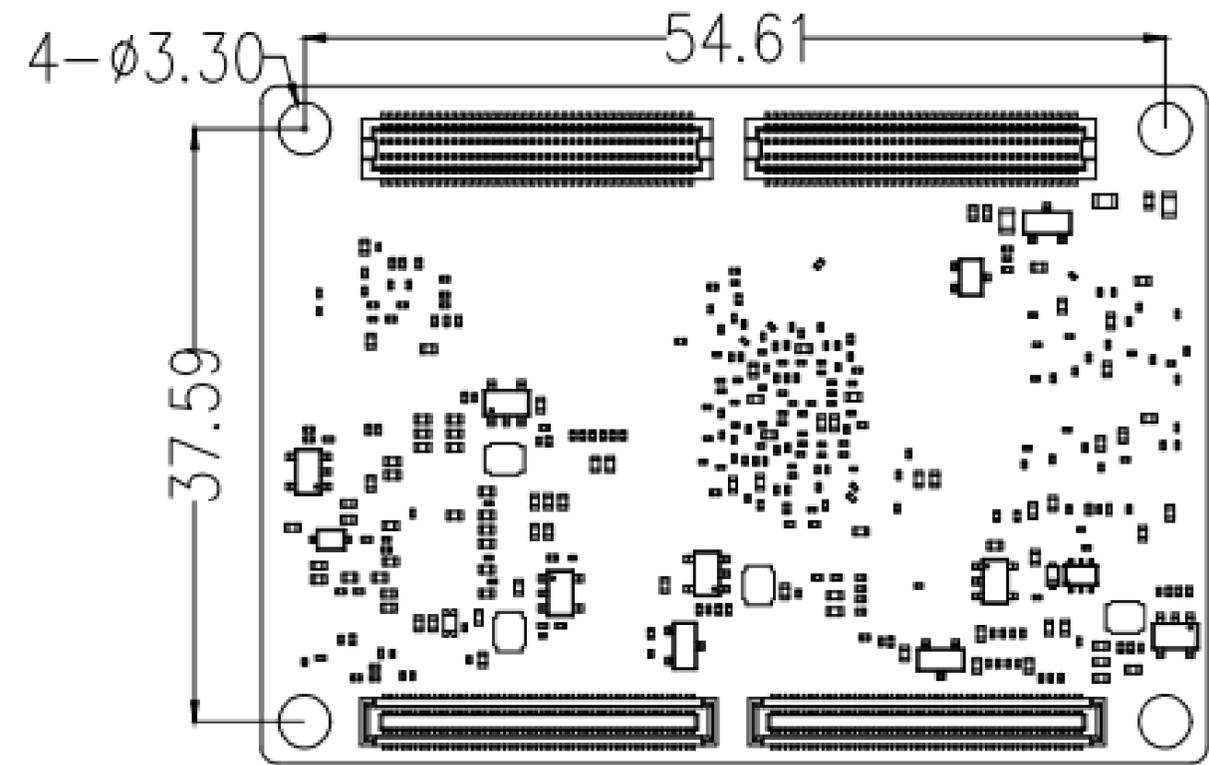
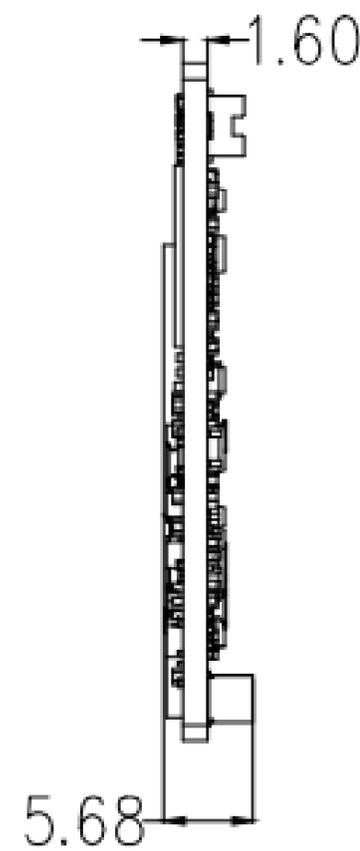
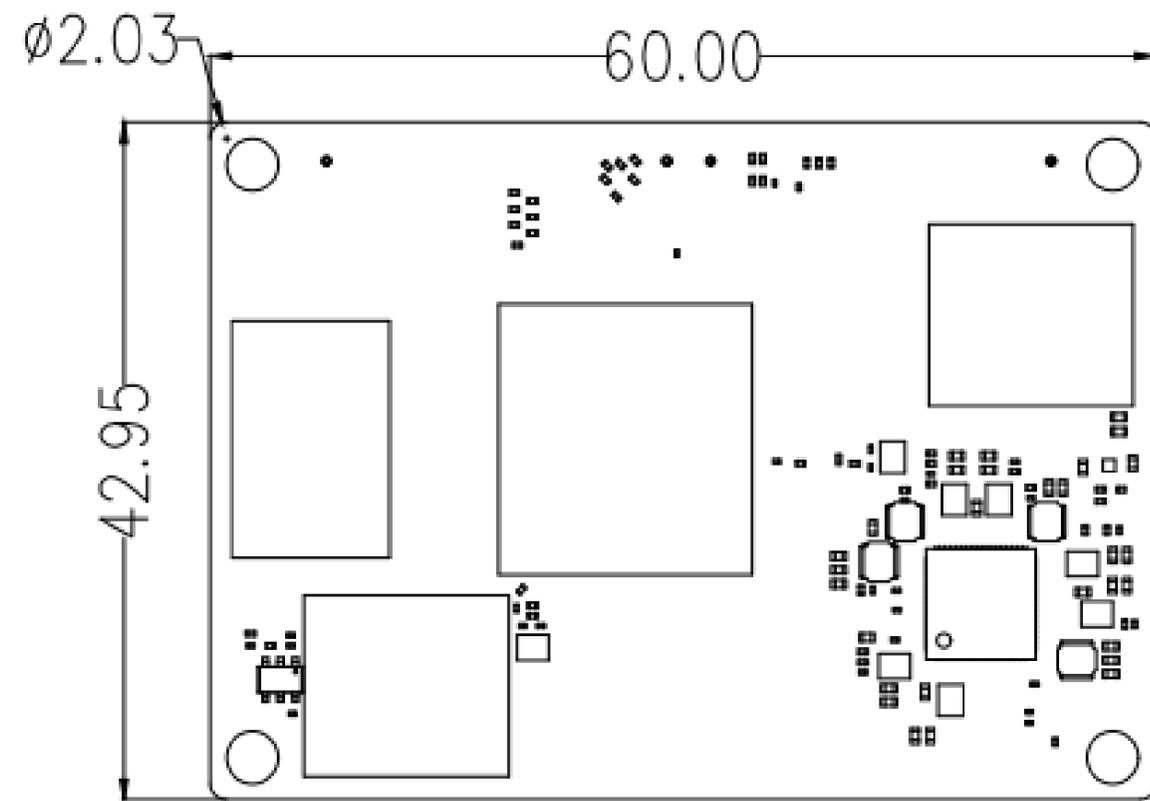


**MIPI DSI D/CPHY**  
 (30Pin-0.5mm, 2560×1600@60Hz)

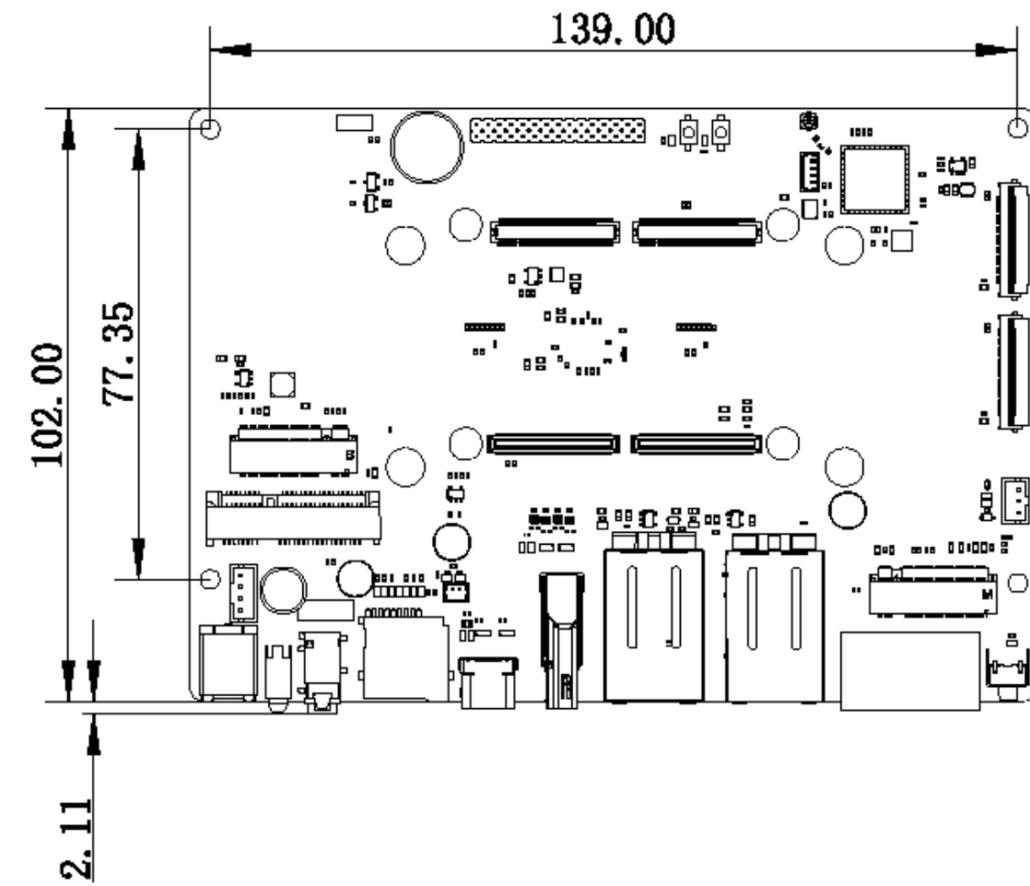
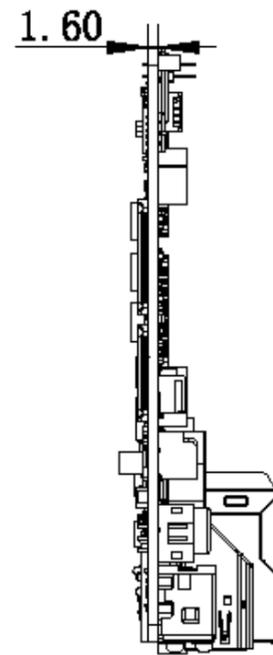
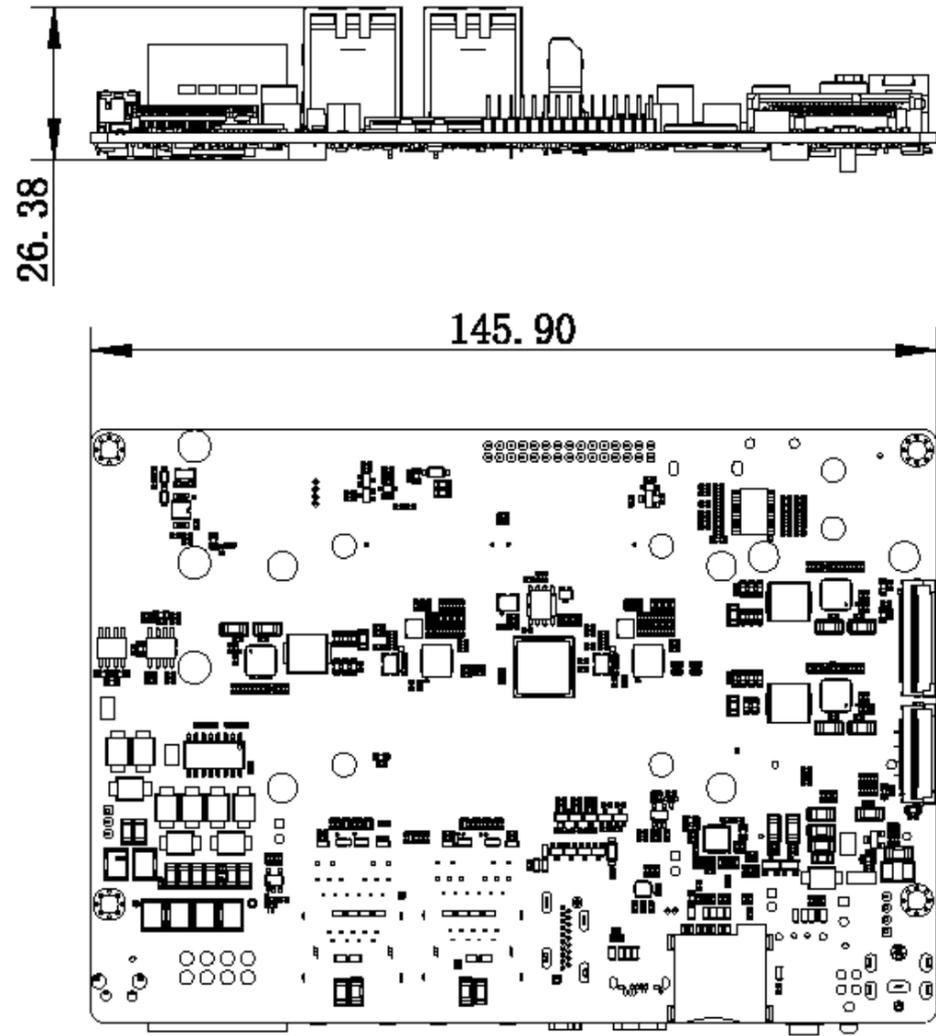
**MIPI CSI D/C PHY**  
 (DPHY(1×4 Lanes/2×2 Lanes) or CPHY(3 Lanes), 24Pin-0.5mm)

SIM Card

# Core board Dimension



# Mainboard Dimension





# Interface definition

**Notes1:**

① : Pad types: I = input, O = output, I/O = input/output (bidirectional), G= Ground ,  
P = power supply , DOWN = Internal pull down , UP = Internal pull UP L = Lowe Level H = High level”

PIN	iCORE-3576Q pin definition (J1)	RK3576 Pin NO.	Pad type	IO Power domain	IO Pull	Function for Main BOARD (MB-Q-RK3576)	Defual function description
1	GND		G			GND	GND
3	MIPI_DPHY_DSI_TX_D3N/MIPI_CPHY_DSI_TX_TRIO2_C	AK19	I/O	-		MIPI_DPHY_DSI_TX_D3N	MIPI_DPHY_DSI_TX_D3N
5	MIPI_DPHY_DSI_TX_D3P/NO_USE	AL19	I/O	-		MIPI_DPHY_DSI_TX_D3P	MIPI_DPHY_DSI_TX_D3P
7	GND		G			GND	GND
9	MIPI_DPHY_DSI_TX_D2N/MIPI_CPHY_DSI_TX_TRIO2_A	AK18	I/O	-		MIPI_DPHY_DSI_TX_D2N	MIPI_DPHY_DSI_TX_D2N
11	MIPI_DPHY_DSI_TX_D2P/MIPI_CPHY_DSI_TX_TRIO2_B	AL18	I/O	-		MIPI_DPHY_DSI_TX_D2P	MIPI_DPHY_DSI_TX_D2P
13	GND		G			GND	GND
15	MIPI_DPHY_DSI_TX_CLKN/MIPI_CPHY_DSI_TX_TRIO1_B	AK17	I/O	-		MIPI_DPHY_DSI_TX_CLKN	MIPI_DPHY_DSI_TX_CLKN
17	MIPI_DPHY_DSI_TX_CLKP/MIPI_CPHY_DSI_TX_TRIO1_C	AL17	I/O	-		MIPI_DPHY_DSI_TX_CLKP	MIPI_DPHY_DSI_TX_CLKP
19	GND		G			GND	GND
21	MIPI_DPHY_DSI_TX_D1N/MIPI_CPHY_DSI_TX_TRIO0_C	AK16	I/O	-		MIPI_DPHY_DSI_TX_D1N	MIPI_DPHY_DSI_TX_D1N
23	MIPI_DPHY_DSI_TX_D1P/MIPI_CPHY_DSI_TX_TRIO1_A	AL16	I/O	-		MIPI_DPHY_DSI_TX_D1P	MIPI_DPHY_DSI_TX_D1P
25	GND		G			GND	GND
27	MIPI_DPHY_DSI_TX_D0N/MIPI_CPHY_DSI_TX_TRIO0_A	1K23	I/O	-		MIPI_DPHY_DSI_TX_D0N	MIPI_DPHY_DSI_TX_D0N
29	MIPI_DPHY_DSI_TX_D0P/MIPI_CPHY_DSI_TX_TRIO0_B	1K22	I/O	-		MIPI_DPHY_DSI_TX_D0P	MIPI_DPHY_DSI_TX_D0P



# Interface definition

31	GND		G			GND	GND
33	USB2_OTG0_DP	AK9		-		USB2_OTG0_DP	USB2_OTG0_DP
35	USB2_OTG0_DM	AL9		-		USB2_OTG0_DM	USB2_OTG0_DM
37	GND		G			GND	GND
39	USB2_OTG1_DP	2T4		-		USB2_HOST1_DP	USB2_HOST1_DP
41	USB2_OTG1_DM	2T5		-		USB2_HOST1_DM	USB2_HOST1_DM
43	GND		G			GND	GND
45	DP_TX_AUXN	2T3		-		DP_TX_AUXN	DP_TX_AUXN
47	DP_TX_AUXP	2T2		-		DP_TX_AUXP	DP_TX_AUXP
49	GND		G			GND	GND
51	GND		G			GND	GND
53	GND		G			GND	GND
55	GND		G			GND	GND
57	GND		G			GND	GND
59	GND		G			GND	GND
61	GND		G			GND	GND
63	GND		G			GND	GND
65	GND		G			GND	GND



# Interface definition

67	GND		G			GND	GND
69	GND		G			GND	GND
71	GND		G			GND	GND
73	GND		G			GND	GND
75	GND		G			GND	GND
77	GND		G			GND	GND
79	GND		G			GND	GND
81	GND		G			GND	GND
83	GND		G			GND	GND
85	GND		G			GND	GND
87	PWM0_CH1_M1/UART11_RX_M2/EDP_TX_HPDIN_M0/I2C7_SDA_M3/PCIE1_CLKREQN_M3/HDMI_TX_HPDIN_M0/DSM_AUD_LN_M1/GPIO4_C1_d	AK2	I	3.3V	DOWN	HDMI_TX0_HPDIN	HDMI_HPD INPUT, Active H
89	PWM2_CH0_M1/UART9_TX_M2/CAN0_TX_M1/I2C2_SCL_M3/HDMI_TX_SCL/DSM_AUD_RP_M1/GPIO4_C2_d	AL2	I/O	3.3V	DOWN	HDMI_TX_SCL	HDMI_TX_SCL
91	PWM2_CH1_M1/UART9_RX_M2/CAN0_RX_M1/I2C2_SDA_M3/HDMI_TX_SDA/DSM_AUD_RN_M1/GPIO4_C3_d	1AE2	I/O	3.3V	DOWN	HDMI_TX_SDA	HDMI_TX_SDA
93	PWM1_CH5_M1/UART11_TX_M2/SPI4_CSN1_M0/I2C7_SCL_M3/PCIE1_WAKEN_M3/HDMI_TX_CEC_M0/SAI4_MCLK_M2/DSM_AUD_LP_M1/GPIO4_C0_d	AK3	I/O	3.3V	DOWN	HDMI_TX0_CEC	HDMI_TX0_CEC
95	PWM2_CH6_M1/UART6_TX_M3/SPI4_CSN0_M0/I2C3_SCL_M3/DP_HPDIN_M0/SAI4_LRCK_M2/ISP_PRELIGHT_TRIG_M1/GPIO4_C4_d	AL3	I/O	3.3V	DOWN	I2C3_SCL_M3	I2C3_SCL_M3 (Core board pull up resistance 2.2K)
97	PWM2_CH5_M1/UART6_RX_M3/SPI4_MOSI_M0/I2C3_SDA_M3/SATA1_ACTLED_M1/PCIE0_WAKEN_M3/VPO_SYNC_OUT/SAI4_SDO_M2/ISP_FLASH_TRIGOUT_M1/GPIO4_C5_d	AK1	I/O	3.3V	DOWN	I2C3_SDA_M3	I2C3_SDA_M3(Core board pull up resistance 2.2K)



# Interface definition

99	GND		G			GND	GND
2	MIPI_DPHY_CSI0_RX_D3P/NO_USE	AK24	I/O	-		MIPI_DPHY_CSI0_RX_D3P/NO_USE	MIPI_DPHY_CSI0_RX_D3P/NO_USE
4	MIPI_DPHY_CSI0_RX_D3N/MIPI_CPHY_CSI_RX_TRIO2_C	AL24	I/O	-		MIPI_DPHY_CSI0_RX_D3N/MIPI_CPHY_CSI_RX_TRIO2_C	MIPI_DPHY_CSI0_RX_D3N/MIPI_CPHY_CSI_RX_TRIO2_C
6	GND		G			GND	GND
8	MIPI_DPHY_CSI0_RX_D2P/MIPI_CPHY_CSI_RX_TRIO2_B	AK23	I/O	-		MIPI_DPHY_CSI0_RX_D2P/MIPI_CPHY_CSI_RX_TRIO2_B	MIPI_DPHY_CSI0_RX_D2P/MIPI_CPHY_CSI_RX_TRIO2_B
10	MIPI_DPHY_CSI0_RX_D2N/MIPI_CPHY_CSI_RX_TRIO2_A	AL23	I/O	-		MIPI_DPHY_CSI0_RX_D2N/MIPI_CPHY_CSI_RX_TRIO2_A	MIPI_DPHY_CSI0_RX_D2N/MIPI_CPHY_CSI_RX_TRIO2_A
12	GND		G			GND	GND
14	MIPI_DPHY_CSI0_RX_CLKP/MIPI_CPHY_CSI_RX_TRIO1_C	AK22	I/O	-		MIPI_DPHY_CSI0_RX_CLKP/MIPI_CPHY_CSI_RX_TRIO1_C	MIPI_DPHY_CSI0_RX_CLKP/MIPI_CPHY_CSI_RX_TRIO1_C
16	MIPI_DPHY_CSI0_RX_CLKN/MIPI_CPHY_CSI_RX_TRIO1_B	AL22	I/O	-		MIPI_DPHY_CSI0_RX_CLKN/MIPI_CPHY_CSI_RX_TRIO1_B	MIPI_DPHY_CSI0_RX_CLKN/MIPI_CPHY_CSI_RX_TRIO1_B
18	GND		G			GND	GND
20	MIPI_DPHY_CSI0_RX_D1P/MIPI_CPHY_CSI_RX_TRIO1_A	AK21	I/O	-		MIPI_DPHY_CSI0_RX_D1P/MIPI_CPHY_CSI_RX_TRIO1_A	MIPI_DPHY_CSI0_RX_D1P/MIPI_CPHY_CSI_RX_TRIO1_A
22	MIPI_DPHY_CSI0_RX_D1N/MIPI_CPHY_CSI_RX_TRIO0_C	AL21	I/O	-		MIPI_DPHY_CSI0_RX_D1N/MIPI_CPHY_CSI_RX_TRIO0_C	MIPI_DPHY_CSI0_RX_D1N/MIPI_CPHY_CSI_RX_TRIO0_C
24	GND		G			GND	GND
26	MIPI_DPHY_CSI0_RX_D0P/MIPI_CPHY_CSI_RX_TRIO0_B	AK20	I/O	-		MIPI_DPHY_CSI0_RX_D0P/MIPI_CPHY_CSI_RX_TRIO0_B	MIPI_DPHY_CSI0_RX_D0P/MIPI_CPHY_CSI_RX_TRIO0_B
28	MIPI_DPHY_CSI0_RX_D0N/MIPI_CPHY_CSI_RX_TRIO0_A	AL20	I/O	-		MIPI_DPHY_CSI0_RX_D0N/MIPI_CPHY_CSI_RX_TRIO0_A	MIPI_DPHY_CSI0_RX_D0N/MIPI_CPHY_CSI_RX_TRIO0_A
30	GND		G			GND	GND
32	USB3_OTG0_SSTX2N/DP_TX_D3N	AK13	I/O	-		USB3_OTG0_SSTX2N/DP_TX_D3N	USB3_OTG0_SSTX2N/DP_TX_D3N
34	USB3_OTG0_SSTX2P/DP_TX_D3P	AL13	I/O	-		USB3_OTG0_SSTX2P/DP_TX_D3P	USB3_OTG0_SSTX2P/DP_TX_D3P



# Interface definition

36	GND		G			GND	GND
38	USB3_OTG0_SSRX2P/DP_TX_D2P	AK12	I/O	-		USB3_OTG0_SSRX2P/DP_TX_D2P	USB3_OTG0_SSRX2P/DP_TX_D2P
40	USB3_OTG0_SSRX2N/DP_TX_D2N	AL12	I/O	-		USB3_OTG0_SSRX2N/DP_TX_D2N	USB3_OTG0_SSRX2N/DP_TX_D2N
42	GND		G			GND	GND
44	USB3_OTG0_SSTX1N/DP_TX_D1N	AK11	I/O	-		USB3_OTG0_SSTX1N/DP_TX_D1N	USB3_OTG0_SSTX1N/DP_TX_D1N
46	USB3_OTG0_SSTX1P/DP_TX_D1P	AL11	I/O	-		USB3_OTG0_SSTX1P/DP_TX_D1P	USB3_OTG0_SSTX1P/DP_TX_D1P
48	GND		G			GND	GND
50	USB3_OTG0_SSRX1P/DP_TX_D0P	AK10	I/O	-		USB3_OTG0_SSRX1P/DP_TX_D0P	USB3_OTG0_SSRX1P/DP_TX_D0P
52	USB3_OTG0_SSRX1N/DP_TX_D0N	AL10	I/O	-		USB3_OTG0_SSRX1N/DP_TX_D0N	USB3_OTG0_SSRX1N/DP_TX_D0N
54	GND		G			GND	GND
56	GND		G			GND	GND
58	GND		G			GND	GND
60	GND		G			GND	GND
62	GND		G			GND	GND
64	GND		G			GND	GND
66	GND		G			GND	GND
68	GND		G			GND	GND
70	GND		G			GND	GND



# Interface definition

72	GND		G			GND	GND
74	GND		G			GND	GND
76	GND		G			GND	GND
78	GND		G			GND	GND
80	GND		G			GND	GND
82	GND		G			GND	GND
84	GND		G			GND	GND
86	GND		G			GND	GND
88	USB2_OTG0_ID	2R6	I	1.8V		NC	USB2_OTG0_ID (RK3576 internal pull-up)
90	USB2_OTG0_VBUSDET	2P3	I	3.3V		USB2_OTG0_VBUSDET	USB2_OTG0_VBUSDET
92	SB2_OTG1_ID	2T9	I	1.8V		NC	SB2_OTG1_ID (RK3576 internal pull-up)
94	USB2_OTG1_VBUSDET	2T10	I	3.3V		NC	USB2_OTG1_VBUSDET
96	PWM2_CH2_M1/CAN1_TX_M1/SPI4_MISO_M0/I2C6_SCL_M3/SAT_A0_ACTLED_M1/PCIE0_CLKREQN_M3/VP1_SYNC_OUT/SAI4_SDI_M2/GPIO4_C6_d	1AE1	I/O	3.3V	DOWN	I2C6_SCL_M3	I2C6_SCL
98	PWM2_CH3_M1/CAN1_RX_M1/SPI4_CLK_M0/I2C6_SDA_M3/VP2_SYNC_OUT/SAI4_SCLK_M2/GPIO4_C7_d	AJ1	I/O	3.3V	DOWN	I2C6_SDA_M3	I2C6_SDA
100	GND		G			GND	GND
<b>PIN</b>	<b>iCORE-3576Q pin definition (J2)</b>	<b>RK3576 Pin NO.</b>	<b>Pad type</b>	<b>IO Power domain</b>	<b>IO Pull</b>	<b>Function for Main BOARD (MB-Q-RK3576)</b>	<b>Defual function description</b>
1	GND		G			GND	GND



# Interface definition

3	MIPI_DPHY_CSI1_RX_D3N/MIPI_DPHY_CSI2_RX_D1N	AH28	I/O	-		MIPI_DPHY_CSI1_RX_D3N/MIPI_DPHY_CSI2_RX_D1N	MIPI_DPHY_CSI1_RX_D3N/MIPI_DPHY_CSI2_RX_D1N
5	MIPI_DPHY_CSI1_RX_D3P/MIPI_DPHY_CSI2_RX_D1P	AH29	I/O	-		MIPI_DPHY_CSI1_RX_D3P/MIPI_DPHY_CSI2_RX_D1P	MIPI_DPHY_CSI1_RX_D3P/MIPI_DPHY_CSI2_RX_D1P
7	GND		G			GND	GND
9	MIPI_DPHY_CSI1_RX_D2N/MIPI_DPHY_CSI2_RX_D0N	AG28	I/O	-		MIPI_DPHY_CSI1_RX_D2N/MIPI_DPHY_CSI2_RX_D0N	MIPI_DPHY_CSI1_RX_D2N/MIPI_DPHY_CSI2_RX_D0N
11	MIPI_DPHY_CSI1_RX_D2P/MIPI_DPHY_CSI2_RX_D0P	AG29	I/O	-		MIPI_DPHY_CSI1_RX_D2P/MIPI_DPHY_CSI2_RX_D0P	MIPI_DPHY_CSI1_RX_D2P/MIPI_DPHY_CSI2_RX_D0P
13	GND		G			GND	GND
15	MIPI_DPHY_CSI2_RX_CLKN	1AD22	I/O	-		MIPI_DPHY_CSI2_RX_CLKN	MIPI_DPHY_CSI2_RX_CLKN
17	MIPI_DPHY_CSI2_RX_CLKP	1AD21	I/O	-		MIPI_DPHY_CSI2_RX_CLKP	MIPI_DPHY_CSI2_RX_CLKP
19	GND		G			GND	GND
21	MIPI_DPHY_CSI1_RX_D1N	AF28	I/O	-		MIPI_DPHY_CSI1_RX_D1N	MIPI_DPHY_CSI1_RX_D1N
23	MIPI_DPHY_CSI1_RX_D1P	AF29	I/O	-		MIPI_DPHY_CSI1_RX_D1P	MIPI_DPHY_CSI1_RX_D1P
25	GND		G			GND	GND
27	MIPI_DPHY_CSI1_RX_D0N	AE28	I/O	-		MIPI_DPHY_CSI1_RX_D0N	MIPI_DPHY_CSI1_RX_D0N
29	MIPI_DPHY_CSI1_RX_D0P	AE29	I/O	-		MIPI_DPHY_CSI1_RX_D0P	MIPI_DPHY_CSI1_RX_D0P
31	GND		G			GND	GND
33	MIPI_DPHY_CSI1_RX_CLKN	1AC23	I/O	-		MIPI_DPHY_CSI1_RX_CLKN	MIPI_DPHY_CSI1_RX_CLKN
35	MIPI_DPHY_CSI1_RX_CLKP	1AC22	I/O	-		MIPI_DPHY_CSI1_RX_CLKP	MIPI_DPHY_CSI1_RX_CLKP
37	GND		G			GND	GND



# Interface definition

39	PCIE0_REFCLKP	1N22	O	-		PCIE0_REFCLKP	PCIE0_REFCLKP
41	PCIE0_REFCLKN	1N23	O	-		PCIE0_REFCLKN	PCIE0_REFCLKN
43	GND		G			GND	GND
45	PCIE1_REFCLKP	1L23	O	-		NC	PCIE1_REFCLKP
47	PCIE1_REFCLKN	1M23	O	-		NC	PCIE1_REFCLKN
49	GND		G			GND	GND
51	PCIE0_RXP/SATA0_RXP	R28	I	-		PCIE0_RXP/SATA0_RXP	PCIE0_RXP
53	PCIE0_RXN /SATA0_RXN	R29	I	-		PCIE0_RXN /SATA0_RXN	PCIE0_RXN
55	GND		G			GND	GND
57	PCIE0_TXP/SATA0_TXP	P29	O	-		PCIE0_TXP/SATA0_TXP	PCIE1_TX0_P
59	PCIE0_TXN/SATA0_TXN	P28	O	-		PCIE0_TXN/SATA0_TXN	PCIE1_TX0_N
61	GND		G			GND	GND
63	PCIE1_RXN/SATA1_RXN/USB3_HOST1_SSRXN	M29	I	-		USB3_HOST1_SSRXP	USBSS0_RX_N (Default:)
65	PCIE1_RXP /SATA1_RXP/USB3_HOST1_SSRXP	M28	I	-		USB3_HOST1_SSRXN	USBSS0_RX_P (Default:)
67	GND		G			GND	GND
69	PCIE1_TXP/SATA1_TXP/USB3_HOST1_SSTXP	N28	O	-		USB3_HOST1_SSTXP	USBSS0_TX_P
71	PCIE1_TXN/SATA1_TXN/USB3_HOST1_SSTXN	N29	O	-		USB3_HOST1_SSTXN	USBSS0_TX_N
73	GND		G			GND	GND



# Interface definition

75	SAI0_SDI2_M1/SAI0_SDO2_M1/PDM0_SDI2_M0/I2C4_SCL_M0/CPUBIG_AVS/PWM1_CH5_M0/UART1_CTSN_M0/GPIO0_D2_d	1Y22	I/O	3.3V	DOWN	VCC_SYS_EN	VCC_SYS_EN, Active H
77	PDM0_CLK1_M0/HDMI_TX_CEC_M1/SPI0_CSN1_M0/PWM0_CH1_M0/GPIO0_C3_d	1W21	I/O	3.3V	DOWN	FAN_PWM	FAN_PWM OUTPUT
79	CLK_32K_IN/CLK0_32K_OUT/I2C6_SCL_M0/GPIO0_A2_d	1U23	I/O	1.8V	DOWN	32KOUT_RTC2SOC	32KOUT_RTC INPUT To SOC
81	VCCA_3V3_S0		P	3.3V		VCCA_3V3_S0	VCCA_3V3_S0 OUTPUT (3.3V, Total Max:100mA)
83	VCC5V0_SYS_S5		P	5.0V		VCC5V0_SYS Normal: 5V/220mA Max.:5V/1500mA Min.:5V/10mA	VCC5V0_SYS INPUT Voltage 5.0V +/-5%
85	VCC5V0_SYS_S5		P	5.0V			
87	VCC5V0_SYS_S5		P	5.0V			
89	VCC5V0_SYS_S5		P	5.0V			
91	VCC5V0_SYS_S5		P	5.0V			
93	GND		G	GND		GND	GND
95	GND		G	GND			
97	GND		G	GND			
99	GND		G	GND			
2	GND		G			GND	GND
4	HDMI_TX_D3N/EDP_TX_D3N	AK26	O	-		HDMI_TX_D3N	HDMI_TX_D3N
6	HDMI_TX_D3P/EDP_TX_D3P	AL26	O	-		HDMI_TX_D3P	HDMI_TX_D3P
8	GND		G			GND	GND
10	HDMI_TX_D0N/EDP_TX_D0N	AK27	O	-		HDMI_TX_D0N	HDMI_TX_D0N



# Interface definition

12	HDMI_TX_D0P/EDP_TX_D0P	1AE24	O	-		HDMI_TX_D0P	HDMI_TX_D0P
14	GND		G			GND	GND
16	HDMI_TX_D1N/EDP_TX_D1N	AL28	O	-		HDMI_TX_D1N	HDMI_TX_D1N
18	HDMI_TX_D1P/EDP_TX_D1P	AK28	O	-		HDMI_TX_D1P	HDMI_TX_D1P
20	GND		G			GND	GND
22	HDMI_TX_D2N/EDP_TX_D2N	AK29	O	-		HDMI_TX_D2N	HDMI_TX_D2N
24	HDMI_TX_D2P/EDP_TX_D2P	AJ28	O	-		HDMI_TX_D2P	HDMI_TX_D2P
26	GND		G			GND	GND
28	HDMI_TX_SBDN/EDP_TX_AUXN	2U12	O	-		HDMI_TX_SBDP	HDMI_TX_SBDP
30	HDMI_TX_SBDP/EDP_TX_AUXP	2T12	O	-		HDMI_TX_SBDN	HDMI_TX_SBDN
32	GND		G			GND	GND
34	REF_CLK2_OUT/I2C1_SDA_M1/UART4_RX_M2/PWM1_CH1_M0/GPIO0_B5_d	AD29	I/O	3.3V	DOWN	UART4_RX_M2	UART4_RX_M2
36	REF_CLK1_OUT/I2C1_SCL_M1/UART4_TX_M2/PWM1_CH0_M0/GPIO0_B4_d	AD28	I/O	3.3V	DOWN	UART4_TX_M2	UART4_TX_M2
38	SDMMC0_PWREN/SDMMC1_dETN_M2/HDMI_TX_HPDI_M1/EDP_TX_HPDI_M1/PWM1_CH2_M0/GPIO0_B6_d	1Y24	I/O	3.3V	DOWN	SDMMC0_PWREN_H	SDMMC0_PWREN_H
40	SAI0_SDI1_M1/SAI0_SDO3_M1/PDM0_SDI1_M0/SPI0_MISO_M0/GPIO0_D1_d	AC28	I/O	3.3V	DOWN	GPIO0_D1_d	GPIO0_D1_d
42	I2C2_SCL_M0/UART1_TX_M0/NPU_AVS/PWM1_CH4_M0/GPIO0_B7_d	1W24	I/O	3.3V	DOWN	I2C2_SCL_M0	I2C2_SCL_M0
44	I2C2_SDA_M0/UART1_RX_M0/CPULIT_AVS/PWM1_CH3_M0/GPIO0_C0_d	AB29	I/O	3.3V	DOWN	I2C2_SDA_M0	I2C2_SDA_M0
46	I2C0_SCL_M1/UART8_TX_M2/I3C0_SCL_M0/GPIO0_C1_d	AB28	I/O	3.3V	DOWN	UART8_TX_M2	UART8_TX_M2



# Interface definition

48	I2C0_SDA_M1/UART8_RX_M2/I3C0_SDA_M0/GPIO0_C2_d	1V24	I/O	3.3V	DOWN	UART8_RX_M2	UART8_RX_M2
50	UART0_RX_M0/JTAG_TMS_M1/GPIO0_d5_u	AA28	I/O	3.3V	UP	UART0_RX_M0_DEBUG	UART0_RX_M0_DEBUG
52	UART0_TX_M0/JTAG_TCK_M1/GPIO0_D4_u	1U24	I/O	3.3V	UP	UART0_RX_M0_DEBUG	UART0_RX_M0_DEBUG
54	GND		G			GND	GND
56	GND		G			GND	GND
58	PWM0_CH0_M0/UART10_TX_M2/PDM0_CLK0_M0/SAI0_MCLK_M1/GPIO0_C4_d	1W22	I/O	3.3V	DOWN	UART10_TX_M2	UART10_TX_M2
60	SPI0_MOSI_M0/PDM0_SDI0_M0/SAI0_SDI0_M1/GPIO0_D0_d	1W23	I/O	3.3V	DOWN	RS485_RE_DE	RS485_RE_DE
62	SPI0_CSN0_M0/I2C3_SCL_M1/SAI0_SCLK_M1/GPIO0_C6_d	1Y21	I/O	3.3V	DOWN	GMAC0_INT/PMEB	GMAC0_INT, Active L
64	I3C0_SDA_PU_M0/UART10_RX_M2/DP_HPDI0_M1/SAI0_SDO0_M1/GPIO0_C5_d	1AA22	I/O	3.3V	DOWN	UART10_RX_M2	UART10_RX_M2
66	SAI0_SDI3_M1/SAI0_SDO1_M1/PDM0_SDI3_M0/I2C4_SDA_M0/GPU_AVS/PWM2_CH0_M0/UART1_RTSN_M0/GPIO0_D3_d	1AA23	I/O	3.3V	DOWN	GMAC1_INT/PMEB	GMAC1_INT, Active L
68	GND		G			GND	GND
70	SPI0_CLK_M0/I2C3_SDA_M1/SAI0_LRCK_M1/GPIO0_C7_d	1Y23	I/O	3.3V	DOWN	USBCC_INT_L	USBCC_INT_L
72	REF_CLK0_OUT/AUPLL_CLK_IN_M0/GPIO0_A0_d	V29	I/O	1.8V	DOWN	RTC_INT_L	RTC_INT INPUT, Active L
74	SPI2_MISO_M0/I2C0_SDA_M0/GPIO0_B1_Z	1P23	I/O	3.3V		BT_WAKE_HOST_H	BT_WAKE_HOST_H
76	SDMMC0_DET/SPI2_CSN1_M0/GPIO0_A7_u	1U21	I/O	1.8V	UP	SDMMC0_DET_L	SDMMC0_DET, Active L
78	AUPLL_CLK_IN_M1/SPI2_CSN0_M0/I2C0_SCL_M0/GPIO0_B0_Z	1U22	I/O	3.3V		WIFI_WAKE_HOST_H	WIFI_WAKE_HOST_H
80	NPOR (System Reset Input, Active L)	V29	I/O	1.8V		RESET_L	SYSTEM RESET INPUT, Active L
82	VCCA_3V3_S0		P	3.3V		VCCA_3V3_S0	VCCA_3V3_S0 OUTPUT (3.3V, Total Max:100mA)



# Interface definition

84	VCC5V0_SYS_S5		P	5.0V		VCC5V0_SYS Normal: 5V/220mA Max.:5V/1500mA Min.:5V/10mA	VCC5V0_SYS INPUT Voltage 5.0V +/-5%
86	VCC5V0_SYS_S5		P	5.0V			
88	VCC5V0_SYS_S5		P	5.0V			
90	VCC5V0_SYS_S5		P	5.0V			
92	VCC5V0_SYS_S5		P	5.0V			
94	GND		G	GND		GND	GND
96	GND		G	GND			
98	GND		G	GND			
100	GND		G	GND			
PIN	iCORE-3576Q pin definition (J3)	RK3576 Pin NO.	Pad type	IO Power domain	IO Pull	Function for Main BOARD (MB-Q-RK3576)	Defual function description
1	GND		G	GND			
3	I3C1_SDA_PU_M1/SPI0_CLK_M1/I2C5_SCL_M0/UART5_TX_M2/TEST_CLK_OUT/SAI3_SCLK_M3/FSPI1_CLK_M0/SDMMC0_CLK/GPIO2_A5_d	1B21	I/O	1.8V/3.3V	DOWN	SDMMC0_CLK (To SD CARD)	SDMMC_CLK (Core board series resistance 22R)
5	I3C1_SCL_M1/CAN1_RX_M0/SPI0_CSN1_M1/UART5_RTSN_M2/JTAG_TCK_M0/SAI3_LRCK_M3/DSM_AUD_RP_M0/FSPI1_D2_M0/SDMMC0_D2/GPIO2_A2_d	A23	I/O	1.8V/3.3V	DOWN	SDMMC0_D2 (To SD CARD)	SDMMC0_D2
7	I3C1_SDA_M1/CAN1_TX_M0/UART5_CTSN_M2/JTAG_TMS_M0/SAI3_SDI_M3/DSM_AUD_RN_M0/FSPI1_D3_M0/SDMMC0_D3/GPIO2_A3_d	B23	I/O	1.8V/3.3V	DOWN	SDMMC0_D3 (To SD CARD)	SDMMC0_D3
9	PWM2_CH4_M0/SPI0_CSN0_M1/I2C5_SDA_M0/UART5_RX_M2/SAI3_SDO_M3/FSPI1_CSN0_M0/SDMMC0_CMD/GPIO2_A4_d	1A21	I/O	1.8V/3.3V	DOWN	SDMMC0_CMD (To SD CARD)	SDMMC0_CMD
11	PWM2_CH2_M0/CAN0_RX_M0/SPI0_MOSI_M1/I2C8_SCL_M0/UART7_RX_M2/UART0_RX_M1/DSM_AUD_LP_M0/FSPI1_D0_M0/SDMMC0_D0/GPIO2_A0_d	B24	I/O	1.8V/3.3V	DOWN	SDMMC0_D0 (To SD CARD)	SDMMC0_D0
13	PWM2_CH3_M0/CAN0_TX_M0/SPI0_MISO_M1/I2C8_SDA_M0/UART7_TX_M2/UART0_TX_M1/SAI3_MCLK_M3/DSM_AUD_LN_M0/FSPI1_D1_M0/SDMMC0_D1/GPIO2_A1_d	B25	I/O	1.8V/3.3V	DOWN	SDMMC0_D1 (To SD CARD)	SDMMC0_D1



# Interface definition

15	SARADC_VIN0_BOOT	A25	I	1.8V		SARADC_VIN0_BOOT	ADC0 INPUT (MASKROM Model)
17	SARADC_IN1	1A22	I	1.8V		SARADC_VIN1_KEY/RECOVERY	ADC1 INPUT (LOADER Model)
19	GND		G			GND	GND
21	UART3_RX_M2/PDM0_CLK0_M2/SAI3_MCLK_M1/SDMMC1_CLK_M0/ETH1_TXCLK_M1/GPIO1_C1_d	1B22	I/O	1.8V	DOWN	SDMMC1_CLK_M0 (To SDIO WIFI)	SDMMC1_CLK_M0
23	PWM0_CH0_M1/PI1_CSN1_M0/UART3_TX_M2/PDM0_SDI2_M2/SDMMC1_CMD_M0/ETH1_TXD3_M1/GPIO1_C0_d	B26	I/O	1.8V	DOWN	SDMMC1_CMD_M0 (To SDIO WIFI)	SDMMC1_CMD_M0
25	PCIE0_WAKEN_M1/SPI1_CSN0_M0/UART3_RTSN_M2/SAI3_SDI_M1/SDMMC1_D3_M0/ETH1_TXD2_M1/GPIO1_B7_d	A27	I/O	1.8V	DOWN	SDMMC1_D3_M0 (To SDIO WIFI)	SDMMC1_D3_M0
27	PCIE0_CLKREQN_M1/SPI1_MISO_M0/UART3_CTSN_M2/SAI3_SDO_M1/SDMMC1_D2_M0/ETH1_RXCLK_M1/GPIO1_B6_d	1A23	I/O	1.8V	DOWN	SDMMC1_D2_M0 (To SDIO WIFI)	SDMMC1_D2_M0
29	PWM1_CH0_M1/PCIE1_CLKREQN_M1/SPI1_CLK_M0/I2C9_SDA_M1/SAI3_SCLK_M1/SDMMC1_D0_M0/ETH1_RXD2_M1/GPIO1_B4_d	A28	I/O	1.8V	DOWN	SDMMC1_D0_M0 (To SDIO WIFI)	SDMMC1_D0_M0
31	PWM1_CH1_M1/PCIE1_WAKEN_M1/SPI1_MOSI_M0/I2C9_SCL_M1/SAI3_LRC_K_M1/SDMMC1_D1_M0/ETH1_RXD3_M1/GPIO1_B5_d	B27	I/O	1.8V	DOWN	SDMMC1_D1_M0 (To SDIO WIFI)	SDMMC1_D1_M0
33	GND		G			GND	GND
35	MIPI_DPHY_CSI3_RX_CLKN	1H23	I/O	-		MIPI_DPHY_CSI3_RX_CLKN	MIPI_DPHY_CSI3_RX_CLKN
37	MIPI_DPHY_CSI3_RX_CLKP	1H22	I/O	-		MIPI_DPHY_CSI3_RX_CLKP	MIPI_DPHY_CSI3_RX_CLKP
39	GND		G			GND	GND
41	MIPI_DPHY_CSI4_RX_CLKN	1K23	I/O	-		MIPI_DPHY_CSI4_RX_CLKN	MIPI_DPHY_CSI4_RX_CLKN
43	MIPI_DPHY_CSI4_RX_CLKP	1K22	I/O	-		MIPI_DPHY_CSI4_RX_CLKP	MIPI_DPHY_CSI4_RX_CLKP
45	GND		G			GND	GND
47	MIPI_DPHY_CSI3_RX_D3N/MIPI_DPHY_CSI4_RX_D1N	L29	I/O	-		MIPI_DPHY_CSI3_RX_D3N/MIPI_DPHY_CSI4_RX_D1N	MIPI_DPHY_CSI3_RX_D3N/MIPI_DPHY_CSI4_RX_D1N
49	MIPI_DPHY_CSI3_RX_D3P/MIPI_DPHY_CSI4_RX_D1P	L28	I/O	-		MIPI_DPHY_CSI3_RX_D3P/MIPI_DPHY_CSI4_RX_D1P	MIPI_DPHY_CSI3_RX_D3P/MIPI_DPHY_CSI4_RX_D1P



# Interface definition

51	GND		G			GND	GND
53	MIPI_DPHY_CSI3_RX_D2N/MIPI_DPHY_CSI4_RX_D0N	K29	I/O	-		MIPI_DPHY_CSI3_RX_D2N/MIPI_DPHY_CSI4_RX_D0N	MIPI_DPHY_CSI3_RX_D2N/MIPI_DPHY_CSI4_RX_D0N
55	MIPI_DPHY_CSI3_RX_D2P/MIPI_DPHY_CSI4_RX_D0P	K28	I/O	-		MIPI_DPHY_CSI3_RX_D2P/MIPI_DPHY_CSI4_RX_D0P	MIPI_DPHY_CSI3_RX_D2P/MIPI_DPHY_CSI4_RX_D0P
57	GND		G			GND	GND
59	MIPI_DPHY_CSI3_RX_D1N	J29	I/O	-		MIPI_DPHY_CSI3_RX_D1N	MIPI_DPHY_CSI3_RX_D1N
61	MIPI_DPHY_CSI3_RX_D1P	J28	I/O	-		MIPI_DPHY_CSI3_RX_D1P	MIPI_DPHY_CSI3_RX_D1P
63	GND		G			GND	GND
65	MIPI_DPHY_CSI3_RX_D0N	H29	I/O	-		MIPI_DPHY_CSI3_RX_D0N	MIPI_DPHY_CSI3_RX_D0N
67	MIPI_DPHY_CSI3_RX_D0P	H28	I/O	-		MIPI_DPHY_CSI3_RX_D0P	MIPI_DPHY_CSI3_RX_D0P
69	GND		G			GND	GND
71	VCCA_RK806S		P	5.0V		VCCA_RK806S	RK806S startup circuit power supply
73	VDC_EXT		I	5.0V		VDC_EXT	PMIC_EN INPUT, Active H
75	VCC_3V3_S3		P	3.3V		VCC_3V3_S3	VCC_3V3_S3 OUTPUT (3.3V, Total Max:500mA)
77	VCC_3V3_S3		P	3.3V		VCC_3V3_S3	
79	GND		G			GND	GND
2	GND		G			GND	GND
4	PWM2_CH7_M2/SPI3_CSN1_M0/UART9_CTSN_M0/SPDIF_TX0_M2/SAIO_SDO3_M0/ETH_CLK0_25M_OUT_M1/ETH1_MCLK_M0/CAM_CLK2_OUT_M1/GPIO2_D7_d	1E15	I/O	1.8V	DOWN	CAM_CLK2_OUT_M1	CAM_CLK2_OUTPUT
6	VI_CIF_D7/ETH1_PTP_REFCLK_M1/ETH0_RXD3_M1/SAIO_SCLK_M0/UART7_TX_M0/UART8_RTSN_M1/I2C8_SCL_M2/GPIO2_B6_d	A21	I/O	1.8V	DOWN	SAIO_SCLK_M0	SAIO_SCLK_M0



# Interface definition

8	VI_CIF_D6/ETH0_RXD2_M1/SAI0_LRCK_M0/UART7_RX_M0/UART8_CTSN_M1/I2C8_SDA_M2/GPIO2_B7_d	B21	I/O	1.8V	DOWN	SAI0_LRCK_M0	SAI0_LRCK_M0
10	CAN1_RX_M3 / SPI3_CSN0_M0 /UART3_RTSN_M0 /SPDIF_TX1_M1 / SAI3_SDI_M2 / ETH0_RXD1_M1 / ETH1_PTP_REFCLK_M0 /VI_CIF_CLKI/ GPIO3_A3_d	1A19	I/O	1.8V	DOWN	DIY_LED	DIY_LED
12	MIPI_TE_M1 / CAN1_TX_M3 / SPI3_MISO_M0 / UART3_CTSN_M0 / SPDIF_RX1_M1 /SAI3_SDO_M2 / ETH0_RXCTL_M1 / ETH1_PPSCCLK_M0 / VI_CIF_CLKO / GPIO3_A2_d	1A20	I/O	1.8V	DOWN	WORK_LED	WORK_LED
14	I2C4_SCL_M2 / SPI4_CSN1_M3 /UART8_TX_M1/SAI0_SDO0_M0 / ETH0_RXD0_M1 / SDMMC1_D0_M1 / VI_CIF_D15 / GPIO2_A6_d	B22	I/O	1.8V	DOWN	SAI0_SDO0_M0	SAI0_SDO0_M0
16	PCIE1_CLKREQN_M0/ SPI4_CLK_M3/UART1_RTSN_M1/PDM0_CLK1_M3/SAI0_SDO2_M0 / ETH0_TXCLK_M1 / SDMMC1_CLK_M1/VI_CIF_D10 /GPIO2_B3_d	1B16	I/O	1.8V	DOWN	CAM3_PWDN	CAM3_PWDN
18	PCIE0_CLKREQN_M0 / SPI4_CSN0_M3 / UART1_CTSN_M1 / PDM0_SDI1_M3 / SAI0_SDI2_M0 / ETH0_TXD3_M1 / SDMMC1_CMD_M1/ VI_CIF_D11 /GPIO2_B2_d	1A17	I/O	1.8V	DOWN	HUB30_RESET	HUB30_RESET OUTPUT, Active L
20	SATA0_ACTLED_M0/SPI4_MOSI_M3/UART7_CTSN_M0/PDM0_SDI0_M3/SAI0_SDI3_M0 / ETH0_TXD2_M1/SDMMC1_PWREN_M1/VI_CIF_D9/GPIO2_B4_d	A19	I/O	1.8V	DOWN	HP_CTL_H	HP_CTL OUTPUT, Active H
22	SATA1_ACTLED_M0/SPI4_MISO_M3 /UART7_RTSN_M0 / PDM0_CLK0_M3 /SAI0_MCLK_M0 / ETH0_RXCLK_M1 / SDMMC1_DET_N_M1 / VI_CIF_D8/ GPIO2_B5_d	1C18	I/O	1.8V	DOWN	SAI0_MCLK_M0	SAI0_MCLK_M0
24	I2C7_SCL_M1/SPI3_CLK_M0/UART3_TX_M0/SAI3_SCLK_M2 / ETH0_MDIO_M1/VI_CIF_HREF / GPIO3_A0_d	1D16	I/O	1.8V	DOWN	HP_DET_L	HP_DET INPUT, Active H
26	I2C7_SDA_M1 /SPI3_MOSI_M0 /UART3_RX_M0/SAI3_LRCK_M2 /ETH0_MDC_M1/ETH1_PPSTRIG_M0 /VI_CIF_VSYNC /GPIO3_A1_d	1B18	I/O	1.8V	DOWN	CAM4_RESET	CAM4_RESET OUTPUT, Active L
28	VI_CIF_D12/SDMMC1_D3_M1/ETH0_TXD0_M1/SAI0_SDI1_M0/PDM0_SDI2_M3/UART1_RX_M1/GPIO2_B1_d	1A18	I/O	1.8V	DOWN	HDMI_TX_ON_H	HDMI_TX_ON_H
30	VI_CIF_D13/SDMMC1_D2_M1/ETH0_TXD1_M1/SAI0_SDI0_M0/PDM0_SDI3_M3/UART1_TX_M1/GPIO2_B0_d	B19	I/O	1.8V	DOWN	SAI0_SDI0_M0	SAI0_SDI0_M0
32	VI_CIF_D14/SDMMC1_D1_M1/ETH0_TXCTL_M1/SAI0_SDO1_M0/UART8_RX_M1/I2C4_SDA_M2/GPIO2_A7_d	B20	I/O	1.8V	DOWN	CAM4_PWDN	CAM4_PWDN
34	PWM2_CH6_M2/I3C1_SDA_PU_M0/UART9_RTSN_M0 /SPDIF_RX0_M2/ SAI3_MCLK_M2/ETH0_MCLK_M1/ETH_CLK1_25M_OUT_M0/CAM_CLK1_OUT_M1/GPIO2_D6_d	1D18	I/O	1.8V	DOWN	CAM_CLK1_OUT_M1	CAM_CLK1_OUT_M1
36	SARADC_IN7	1E19	I	1.8V		SARADC_VIN7	ADC7 INPUT
38	SARADC_IN4	1E18	I	1.8V		SARADC_VIN4	ADC4 INPUT
40	SARADC_IN3	1C19	I	1.8V		SARADC_VIN3_HP_HOOK	ADC3 INPUT



# Interface definition

42	SARADC_IN6	1D21	I	1.8V		SARADC_VIN6	ADC6 INPUT
44	SARADC_IN5	1D19	I	1.8V		SARADC_VIN5	ADC5 INPUT
46	GND		G			GND	GND
48	PCIE0_BUTTONRSTN/SPI2_MOSI_M1/UART2_RTSN_M0/UART4_TX_M1/FSPI1_D0_M1/ETH1_TXD0_M1/GPIO1_C4_d	1B23	I/O	1.8V	DOWN	UART4_TX_M1	UART4_TX_M1
50	SPI2_CSN0_M1/I2C6_SDA_M1/UART4_CTSN_M1/FSPI1_CSN0_M1/SDMMC1_DET_N_M0/ETH1_PPSTRIG_M1/GPIO1_C3_u	1C23	I/O	1.8V	UP	UART4_CTSN_M1	UART4_CTSN_M1
52	I2C8_SCL_M1/UART2_TX_M0/PDM0_SDI0_M2/FSPI1_D2_M1/ETH1_TXCTL_M1/GPIO1_C6_d	A26	I/O	1.8V	DOWN	WIFI_REG_ON_H	WIFI_EN, Active H
54	I2C8_SDA_M1/UART2_RX_M0/PDM0_SDI1_M2/FSPI1_D3_M1/ETH1_RXD0_M1/GPIO1_C7_d	1C22	I/O	1.8V	DOWN	BT_REG_ON_H	BT_EN, Active H
56	PCIE1_BUTTONRSTN/SPI2_MISO_M1/UART2_CTSN_M0/UART4_RX_M1/FSPI1_D1_M1/ETH1_TXD1_M1/GPIO1_C5_d	B28	I/O	1.8V	DOWN	UART4_RX_M1	UART4_RX_M1
58	ETH1_PPCLK_M1/SDMMC1_PWREN_M0/FSPI1_RSTN_M1/FSPI1_CSN1_M1/UART4_RTSN_M1/I2C6_SCL_M1/SPI2_CSN1_M1/PWM1_CH2_M1/GPIO1_C2_u	B29	I/O	1.8V	UP	UART4_RTSN_M1	UART4_RTSN_M1
60	I2C5_SCL_M1/UART10_RTSN_M1/SPDIF_RX1_M2/PDM0_SDI3_M2/SAI2_MCLK_M0/FSP1_DQS_M1 ETH1_MCLK_M1/GPIO1_D4_d	1E21	I/O	1.8V	DOWN	HOST_WAKE_BT_H	HOST_WAKE_BT_H
62	ETH1_RXCTL_M1/SAI2_SCLK_M0/UART10_RX_M1/I3C0_SDA_PU_M1/GPIO1_D1_d	1D22	I/O	1.8V	DOWN	SAI2_SCLK_M0	SAI2_SCLK_M0
64	ETH1_MDC_M1/SAI2_LRCK_M0/I3C0_SCL_M1/PWM1_CH3_M1/GPIO1_D2_d	1A24	I/O	1.8V	DOWN	SAI2_LRCK_M0	SAI2_LRCK_M0
66	ETH1_RXD1_M1/SAI2_SDO_M0/UART10_TX_M1/GPIO1_D0_d	C29	I/O	1.8V	DOWN	SAI2_SDO_M0	SAI2_SDO_M0
68	ETH1_MDIO_M1/SAI2_SDI_M0/I3C0_SDA_M1/PWM1_CH4_M1/GPIO1_D3_d	C28	I/O	1.8V	DOWN	SAI2_SDI_M0	SAI2_SDI_M0
70	GND		G			GND	GND
72	ETH_CLK1_25M_OUT_M1/FSPI1_CLK_M1/PDM0_CLK1_M2/SPDIF_TX1_M2/UART10_CTSN_M1/I2C5_SDA_M1/SPI2_CLK_M1/SATA_MPSWIT/CLK1_32K_OUT/GPIO1_D5_d	1E22	I/O	1.8V	DOWN	CAM3_RESET	CAM3_RESET OUTPUT, Active L
74	GND		G			GND	GND
76	PMIC_EXT_EN_OUT		O	5.0V		NC	PMIC_EXT_EN OUTPUT, Active H



# Interface definition

78	PWRON_L		I	5.0V		PWRON_L	PWERON KEY INPUT, Active L
80	GND		G			GND	GND
PIN	iCORE-3576Q pin definition (J4)	RK3576 Pin NO.	Pad type	IO Power domain	IO Pull	Function for Main BOARD (MB-Q-RK3576)	Defual function description
1	VCC_1V8_S3		P	1.8V		VCC_1V8_S3	VCC_1V8_S3 OUTPUT (1.8V, Total Max:500mA)
3	VCC_1V8_S3		P	1.8V		VCC_1V8_S3	
5	CAN1_TX_M2/PCIE0_CLKREQN_M2/I2C3_SCL_M0/UART2_TX_M1 FLEXBUS0_D15_M1 SPDIF_TX0_M0/GPIO4_B5_d	1A4	I/O	3.3V	DOWN	PCIE0_CLKREQN_M2	PCIE0_CLKREQN_M2
7	MIPI_TE_M0/SPI4_MISO_M2/FLEXBUS1_D15_M1/PDM1_SDI1_M1/SAI1_SDI1_M0/SAI1_SDO3_M0/GPIO4_B2_d	B6	I/O	3.3V	DOWN	PCIE0_WAKEN_M2	PCIE0_WAKEN_M2
9	SAI1_SDO1_M0/SAI1_SDI3_M0/PDM1_CLK1_M1/FLEXBUS1_D13_M1/SPI4_CLK_M2/UART5_TX_M1/UART6_RTSN_M0/UART2_RTSN_M1/GPIO4_B0_d	1A5	I/O	3.3V	DOWN	UART5_TX_M1	UART5_TX_M1
11	SAI1_SDO2_M0/SAI1_SDI2_M0/PDM1_SDI2_M1/FLEXBUS1_D14_M1/SPI4_MOSI_M2/UART5_RX_M1/UART6_CTSN_M0/UART2_CTSN_M1/GPIO4_B1_d	B7	I/O	3.3V	DOWN	UART5_RX_M1	UART5_RX_M1
13	PWM2_CH7_M0/SPI3_CSN1_M2/SPI4_CSN0_M2/PDM1_SDI0_M1/SAI4_SDO_M0/SAI1_SDI0_M0/GPIO4_B3_d	1A6	I/O	3.3V	DOWN	TYPEC_DPTX_AUX_PUPDCTL2	TYPEC_DPTX_AUX_PUPDCTL2
15	SPDIF_RX0_M0/FLEXBUS0_CSN_M4/UART2_RX_M1/I2C3_SDA_M0/CAN1_RX_M2/GPIO4_B4_d	B8	I/O	3.3V	DOWN	TYPEC_DPTX_AUX_PUPDCTL1	TYPEC_DPTX_AUX_PUPDCTL1
17	VO_LCDC_D21/VO_EBC_GDOE/ETH0_MDC_M0/PDM1_SDI2_M2/DSMC_DATA14/FLEXBUS0_D6/UART1_RX_M2/UART10_CTSN_M0/PWM1_CH2_M3/GPIO3_A6_d	1A7	I/O	1.8V	DOWN	GMAC0_MDC_M0	GMAC0_MDC_M0
19	VO_LCDC_D22/VO_EBC_GDSP/ETH0_MDIO_M0/PDM1_SDI3_M2/DSMC_DATA15/FLEXBUS0_D7/UART1_RTSN_M2/SPI2_CSN1_M2/PWM1_CH1_M3/GPIO3_A5_d	A9	I/O	1.8V	DOWN	GMAC0_MDIO_M0	GMAC0_MDIO_M0
21	GND		G			GND	GND
23	VO_LCDC_D9/VO_EBC_SDDO9/ETH0_TXD3_M0/SAI2_SCLK_M2/DSMC_INT1/FLEXBUS0_D9/UART11_RTSN_M0/SPI4_MISO_M1/I2C9_SCL_M3/PWM2_CH0_M3/GPIO3_C2_d	B9	I/O	1.8V	DOWN	GMAC0_TXD3_M0	GMAC0_TXD3_M0
25	VO_LCDC_D8/VO_EBC_SDDO8/ETH0_TXD2_M0/SAI2_LRCK_M2/DSMC_INT3/FLEXBUS0_D10/FLEXBUS0_CSN_M2/UART11_CTSN_M0/SPI4_MOSI_M1/I2C9_SDA_M3/PWM2_CH1_M3/GPIO3_C3_d	1A8	I/O	1.8V	DOWN	GMAC0_TXD2_M0	GMAC0_TXD2_M0
27	VO_LCDC_D15/VO_EBC_SDDO15/ETH0_TXD1_M0/SPDIF_RX1_M0/DSMC_DATA9/FLEXBUS0_D1/UART9_RTSN_M1/PWM1_CH4_M3/GPIO3_B4_d	B10	I/O	1.8V	DOWN	GMAC0_TXD1_M0	GMAC0_TXD1_M0



# Interface definition

29	VO_LCDC_D14/VO_EBC_SDDO14/ETH0_TXD0_M0/SPDIF_TX1_M0/DSMC_DATA8/FLEXBUS0_D0/UART9_CTSN_M1/PWM1_CH5_M3/GPIO3_B5_d	1A9	I/O	1.8V	DOWN	GMAC0_TXD0_M0	GMAC0_TXD0_M0
31	VO_LCDC_D16/VO_EBC_SDCE0/ETH0_TXCTL_M0/PDM1_SDI0_M2/DSMC_DATA10/FLEXBUS0_D2/UART9_TX_M1/I2C8_SCL_M3/GPIO3_B3_d	A11	I/O	1.8V	DOWN	GMAC0_TXCTL_M0	GMAC0_TXCTL_M0
33	VO_LCDC_D13/VO_EBC_SDDO13/ETH0_TXCLK_M0/DSMC_DQS1/FLEXBUS0_CLK/SPI3_CSN0_M1/PWM0_CH1_M3/GPIO3_B6_d	B11	I/O	1.8V	DOWN	GMAC0_TXCLK_M0	GMAC0_TXCLK_M0
35	GND		G			GND	GND
37	SAI1_SDO0_M0/SAI4_SDI_M0/SPI3_CLK_M2/PWM2_CH6_M0/GPIO4_A7_d	A7	I/O	3.3V		PCIE0_RST	PCIE0_RST
39	GND		G			GND	GND
41	ISP_PRELIGHT_TRIG_M0/ETH1_MDC_M0/UART6_RTSN_M1/I2C9_SDA_M2/PWM2_CH4_M2/GPIO2_D4_d	1B13	I/O	1.8V		GMAC0_TXCLK_M0	GMAC0_TXCLK_M0
43	ISP_FLASH_TRIGOUT_M0/ETH1_MDIO_M0/UART6_CTSN_M1/I2C9_SCL_M2/PWM2_CH5_M2/GPIO2_D5_d	1B15	I/O	1.8V		GMAC1_MDIO_M0	GMAC1_MDIO_M0
45	GND		G			GND	GND
47	GND		G			GND	GND
49	PWM0_CH0_M3/SPI2_MOSI_M2/UART10_RX_M0/FLEXBUS0_D8/DSMC_CSN1/SAI4_MCLK_M1/ETH0_MCLK_M0/VO_EBC_SDCE3/VO_LCDC_D19/GPIO3_B0_d	B14	I/O	1.8V	DOWN	FAN_TACH	FAN_TACH
51	GND		G			GND	GND
53	VO_LCDC_D2/VO_EBC_SDDO2/ETH0_RXCLK_M0/SAI2_MCLK_M2/DSMC_CSN2/FLEXBUS0_D11/FLEXBUS1_CSN_M2/SPI4_CLK_M1/I3C1_SDA_PU_M2/GPIO3_D1_d	1A12	I/O	1.8V	DOWN	GMAC0_RXCLK_M0	GMAC0_RXCLK_M0
55	VO_LCDC_D20/VO_EBC_VCOM/ETH0_RXCTL_M0/PDM1_CLK1_M2/DSMC_DATA13/FLEXBUS0_D5/UART1_TX_M2/UART10_RTSN_M0/GPIO3_A7_d	B13	I/O	1.8V	DOWN	GMAC0_RXCTL_M0	GMAC0_RXCTL_M0
57	VO_LCDC_D17/VO_EBC_SDCE1/ETH0_RXD0_M0/PDM1_SDI1_M2/DSMC_DATA11/FLEXBUS0_D3/UART9_RX_M1/I2C8_SDA_M3/GPIO3_B2_d	A13	I/O	1.8V	DOWN	GMAC0_RXD0_M0	GMAC0_RXD0_M0
59	VO_LCDC_D18/VO_EBC_SDCE2/ETH0_RXD1_M0/PDM1_CLK0_M2/DSMC_DATA12/FLEXBUS0_D4/UART10_TX_M0/SPI4_CSN0_M1/PWM1_CH3_M3/GPIO3_B1_d	1A11	I/O	1.8V	DOWN	GMAC0_RXD1_M0	GMAC0_RXD1_M0
61	VO_LCDC_D0/VO_EBC_SDDO0/ETH0_RXD2_M0/SAI2_SDO_M2/DSMC_CSN0/FLEXBUS1_D2/UART2_CTSN_M2/I3C1_SCL_M2/PWM2_CH5_M3/GPIO3_D3_d	B12	I/O	1.8V	DOWN	GMAC0_RXD2_M0	GMAC0_RXD2_M0



# Interface definition

63	VO_LCDC_D1/VO_EBC_SDDO1/ETH0_RXD3_M0/SAI2_SDI_M2/DSMC_CSN3/FLEXBUS0_D12/FLEXBUS1_D15_M0/FLEXBUS0_CSN_M3/UART2_RTSN_M2/SPI4_CSN1_M1/I3C1_SDA_M2/PWM2_CH4_M3/GPIO3_D2_d	1A10	I/O	1.8V	DOWN	GMAC0_RXD3_M0	GMAC0_RXD3_M0
65	GND		G			GND	GND
67	VI_CIF_D4/ETH1_RXD3_M0/ETH0_PPSCLK_M1/SAI2_MCLK_M1/PDM1_CLK1_M0/UART9_TX_M0/SPI1_CSN1_M1/PWM1_CH1_M2/GPIO2_C1_d	1A15	I/O	1.8V	DOWN	GMAC1_RXD3_M0	GMAC1_RXD3_M0
69	VI_CIF_D5/ETH1_RXD2_M0/ETH0_PTP_REFCLK_M1/PDM1_SDI1_M0/UART9_RX_M0/PWM1_CH0_M2/GPIO2_C0_d	A17	I/O	1.8V	DOWN	GMAC1_RXD2_M0	GMAC1_RXD2_M0
71	CAM_CLK0_OUT_M1/ETH1_RXD1_M0/SAI4_MCLK_M3/UART6_TX_M1/I3C1_SCL_M0/PWM2_CH2_M2/GPIO2_D2_d	B17	I/O	1.8V	DOWN	GMAC1_RXD1_M0	GMAC1_RXD1_M0
73	ETH1_RXD0_M0/SAI4_SDO_M3/UART4_RX_M0/I2C6_SDA_M2/PWM2_CH1_M2/GPIO2_D1_d	1A16	I/O	1.8V	DOWN	GMAC1_RXD0_M0	GMAC1_RXD0_M0
75	VI_CIF_D3/ETH1_RXCLK_M0/ETH0_PPSTRIG_M1/SAI2_SCLK_M1/PDM1_SDI2_M0/UART11_CTSN_M1/SPI1_MOSI_M1/PWM1_CH2_M2/GPIO2_C2_d	1D15	I/O	1.8V	DOWN	GMAC1_RXCLK_M0	GMAC1_RXCLK_M0
77	ETH1_RXCTL_M0/UART6_RX_M1/I3C1_SDA_M0/PWM2_CH3_M2/GPIO2_D3_d	B18	I/O	1.8V	DOWN	GMAC1_RXCTL_M0	GMAC1_RXCTL_M0
79	GND		G			GND	GND
2	GND		G			GND	GND
4	GND		G			GND	GND
6	VI_CIF_D1/ETH1_TXD3_M0/SAI2_SDO_M1/PDM1_SDI0_M0/UART11_TX_M1/SPI1_CSN0_M1/PWM1_CH3_M2/GPIO2_C4_d	1A13	I/O	1.8V	DOWN	GMAC1_TXD3_M0	GMAC1_TXD3_M0
8	VI_CIF_D2/ETH1_TXD2_M0/SAI2_LRCK_M1/PDM1_SDI3_M0/UART11_RTSN_M1/SPI1_MISO_M1/PWM0_CH0_M2/GPIO2_C3_d	A15	I/O	1.8V	DOWN	GMAC1_TXD2_M0	GMAC1_TXD2_M0
10	ETH1_TXD1_M0/SAI4_LRCK_M3/UART4_RTSN_M0/I2C5_SDA_M2/PWM0_CH1_M2/GPIO2_C7_d	B15	I/O	1.8V	DOWN	GMAC1_TXD1_M0	GMAC1_TXD1_M0
12	ETH1_TXD0_M0/SAI4_SCLK_M3/UART4_CTSN_M0/I2C5_SCL_M2/PWM1_CH5_M2/GPIO2_C6_d	1A14	I/O	1.8V	DOWN	GMAC1_TXD0_M0	GMAC1_TXD0_M0
14	ETH1_TXCTL_M0/SAI4_SDI_M3/UART4_TX_M0/I2C6_SCL_M2/PWM2_CH0_M2/GPIO2_D0_d	B16	I/O	1.8V	DOWN	GMAC1_TXCTL_M0	GMAC1_TXCTL_M0
16	VI_CIF_D0/ETH1_TXCLK_M0/SAI2_SDI_M1/PDM1_CLK0_M0/UART11_RX_M1/SPI1_CLK_M1/PWM1_CH4_M2/GPIO2_C5_d	1C15	I/O	1.8V	DOWN	GMAC1_TXCLK_M0	GMAC1_TXCLK_M0



# Interface definition

18	GND		G			GND	GND
20	GND		G			GND	GND
22	GND		G			GND	GND
24	GND		G			GND	GND
26	GND		G			GND	GND
28	GND		G			GND	GND
30	GND		G			GND	GND
32	CAN0_TX_M2/I2C4_SCL_M1/UART6_TX_M0/SPI3_MOSI_M2/FLEXBUS0_D13_M1/PDM1_SDI3_M1/SAI4_SCLK_M0/GPIO4_A4_d	1C5	I/O	3.3V	DOWN	CAN0_TX_M2	CAN0_TX_M2
34	CAN0_RX_M2/I2C4_SDA_M1/UART6_RX_M0/SPI3_MISO_M2/FLEXBUS0_D14_M1/PDM1_CLK0_M1/SAI4_LRCK_M0/GPIO4_A6_d	1B5	I/O	3.3V	DOWN	CAN0_RX_M2	CAN0_RX_M2
36	SAI1_SCLK_M0/FLEXBUS1_CSN_M4/SPI3_CSN0_M2/UART5_RTSN_M1/I2C2_SCL_M2/PWM2_CH4_M1/GPIO4_A3_d	1C6	I/O	3.3V	DOWN	BL_PWM1	BL_PWM1 OUTPUT
38	PCIE1_CLKREQN_M2/I2C2_SDA_M2/UART5_CTSN_M1/SPI4_CSN1_M2/FLEXBUS1_D12_M1 SAI1_LRCK_M0/GPIO4_A5_d	1B6	I/O	3.3V	DOWN	GMAC1_RSTn	GMAC1_Reset OUTPUT, Active L
40	PWM2_CH5_M0/AUPLL_CLK_IN_M2/SAI4_MCLK_M0/SAI1_MCLK_M0/GPIO4_A2_d	1D6	I/O	3.3V	DOWN	GMAC0_RSTn	GMAC0_Reset OUTPUT, Active L
42	PWM2_CH7_M3/SPI3_CSN1_M1/UART5_RTSN_M0/FLEXBUS1_CSN_M1/FLEXBUS1_D12_M0/FLEXBUS0_D15_M0/DSMC_RESETN/SAI4_SCLK_M1/CAM_CLK0_OUT_M0/VO_EBC_SDOE/VO_LCDC_CLK/GPIO3_D7_d	1E7	I/O	1.8V	DOWN	CAM_CLK0_OUT_M0	CAM_CLK0_OUTPUT
44	SPI1_MOSI_M2/UART8_TX_M0/FLEXBUS1_D5/DSMC_DATA3/SAI1_LRCK_M1/VO_EBC_SDDO5/VO_LCDC_D5/GPIO3_C6_d	1D7	I/O	1.8V	DOWN	SPI1_MOSI_M2	SPI1_MOSI_M2
46	SPI1_CLK_M2/UART8_RTSN_M0/FLEXBUS1_D4/DSMC_DATA2/SAI1_SCLK_M1/VO_EBC_SDDO4/VO_LCDC_D4/GPIO3_C7_d	1C7	I/O	1.8V	DOWN	SPI1_CLK_M2	SPI1_CLK_M2
48	I2C7_SDA_M2/UART3_RX_M1/FLEXBUS0_CSN_M1/FLEXBUS1_D13_M0/FLEXBUS0_D14_M0/DSMC_INT2/SAI4_SDO_M1/CAM_CLK2_OUT_M0/SPDIF_TX0_M1/VO_POST_EMPTY/GPIO4_A1_d	1B7	I/O	1.8V	DOWN	I2C7_SDA_M2	I2C7_SDA_M2
50	PWM2_CH2_M3/SPI1_MISO_M2/UART8_RX_M0/FLEXBUS1_D6/DSMC_DATA4/SAI1_SDO0_M1/VO_EBC_SDDO6/VO_LCDC_D6/GPIO3_C5_d	1B9	I/O	1.8V	DOWN	SPI1_MISO_M2	SPI1_MISO_M2



# Interface definition

52	VO_LCDC_D7/VO_EBC_SDDO7/SAI1_SDO1_M1/DSMC_DATA5/FLEXBUS1_D7/UART11_TX_M0/SPI2_CSN0_M2/I2C5_SCL_M3/CAN0_TX_M3/GPIO3_C4_d	1D9	I/O	1.8V	DOWN	I2C5_SCL_M3	I2C5_SCL_M3
54	I2C4_SCL_M3/UART3_RTSN_M1/UART2_TX_M2/FLEXBUS1_D9/DSMC_DATA7/SAI1_SDO3_M1/ETH0_PPCLK_M0/VO_EBC_SDDO11/VO_LCDC_D11/GPIO3_C0_d	1E9	I/O	1.8V	DOWN	I2C4_SCL_M3	I2C4_SCL_M3
56	I2C3_SDA_M2/SPI3_MISO_M1/UART5_TX_M0/FLEXBUS1_D0/DSMC_CLKP/SAI1_SDI2_M1/VO_EBC_GDCLK/VO_LCDC_HSYNC/GPIO3_D5_d	1D10	I/O	1.8V	DOWN	CAM1_PWDN	CAM1_PWDN
58	PWM2_CH6_M3/SPI3_MOSI_M1/UART5_CTSN_M0/FLEXBUS1_CLK/DSMC_CLKN/SAI1_SDI3_M1/VO_EBC_SDCLK/VO_LCDC_VSYNC/GPIO3_D6_d	1C10	I/O	1.8V	DOWN	CAM1_RESET	CAM1_RESET OUTPUT, Active L
60	CAN0_RX_M3/I2C5_SDA_M3/SPI2_MISO_M2/UART11_RX_M0/FLEXBUS1_D8/DSMC_DATA6/SAI1_SDO2_M1/ETH0_PTP_REFCLK_M0/VO_EBC_SDDO10/VO_LCDC_D10/GPIO3_C1_d	1B10	I/O	1.8V	DOWN	I2C5_SDA_M3	I2C5_SDA_M3
62	MIPI_TE_M2/I2C7_SCL_M2/SPI1_CSN1_M2/UART3_TX_M1/FLEXBUS1_CSN_M3/FLEXBUS1_D14_M0/FLEXBUS0_D13_M0/DSMC_INT0/SAI4_LRCK_M1/CAM_CLK1_OUT_M0/SPDIF_RX0_M1/GPIO4_A0_d	1B12	I/O	1.8V	DOWN	I2C7_SCL_M2	I2C7_SCL_M2
64	PWM2_CH3_M3/SPI1_CSN0_M2/UART8_CTSN_M0/FLEXBUS1_D3/DSMC_DATA1/SAI1_MCLK_M1/VO_EBC_SDDO3/VO_LCDC_D3/GPIO3_D0_d	1C12	I/O	1.8V	DOWN	SPI1_CSN0_M2	SPI1_CSN0_M2
66	VO_LCDC_D12/VO_EBC_SDDO12/ETH0_PPSTRIG_M0/SAI1_SDI0_M1/DSMC_DQS0/FLEXBUS1_D10/FLEXBUS1_CSN_M0/UART2_RX_M2/UART3_CTSN_M1/I2C4_SDA_M3/GPIO3_B7_d	1D12	I/O	1.8V	DOWN	I2C4_SDA_M3	I2C4_SDA_M3
68	VO_LCDC_DEN/VO_EBC_SDLE/SAI1_SDI1_M1/DSMC_DATA0/FLEXBUS1_D1/UART5_RX_M0/SPI3_CLK_M1/I2C3_SCL_M2/GPIO3_D4_d	1E12	I/O	1.8V	DOWN	CAM2_PWDN	CAM2_PWDN
70	PWM1_CH0_M3/SPI2_CLK_M2/UART1_CTSN_M2/FLEXBUS0_CSN_M0/VO_EBC_SDSHR/VO_LCDC_D23/GPIO3_A4_d	1D13	I/O	1.8V	DOWN	CAM2_RESET	CAM2_RESET OUTPUT, Active L
72	GND		G			GND	GND
74	GND		G			GND	GND
76	GND		G			GND	GND
78	GND		G			GND	GND
80	GND		G			GND	GND



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