

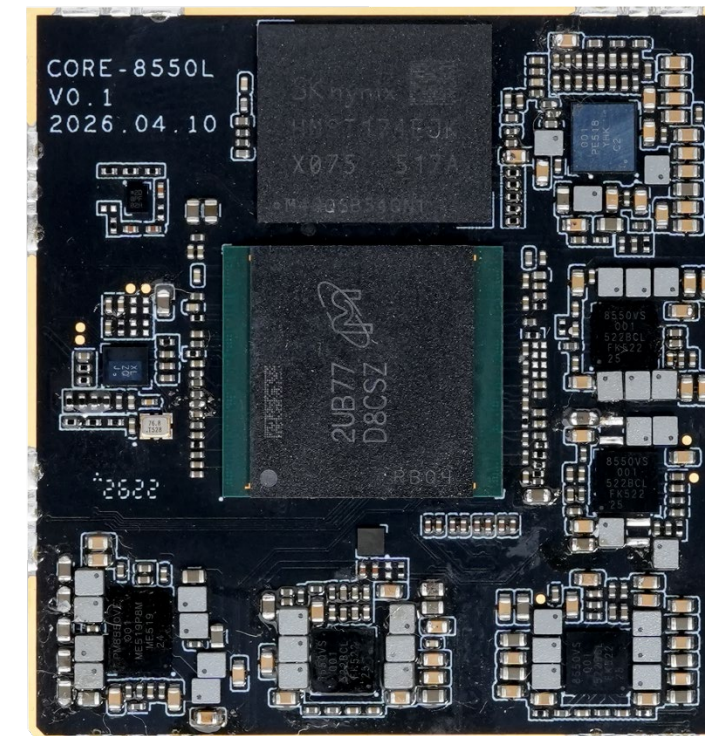


CORE-8550L

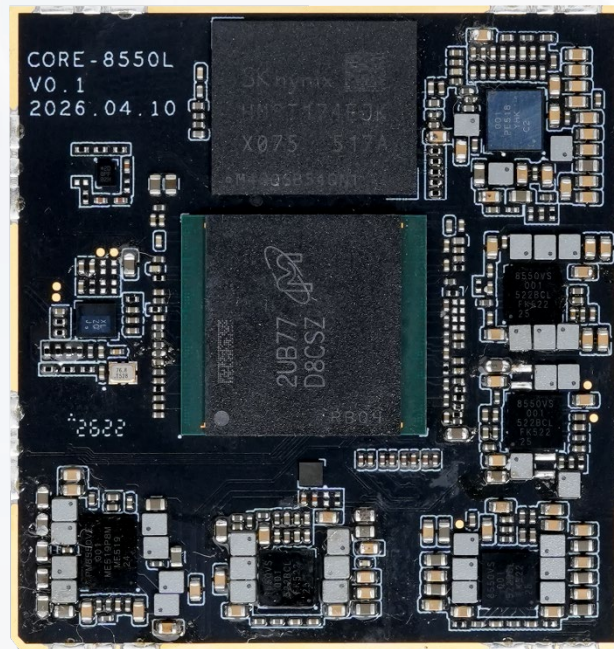
| Qualcomm QCS8550 SoM

V0.1 2026-10-13

FIREFLY TECHNOLOGY



Product features



High-performance AI processor QCS8550

Features an hexa-core 64-bit high-performance Qualcomm Kryo CPU (QCS8550), based on the ARM architecture with a maximum frequency of up to 3.36GHz, delivering robust support for high-performance computing and multitasking.



Supports 8K Video Codec

Supports 8K@60fps/4K@240fps video decoding and 8K@30fps/4K@120fps video encoding; its powerful video codec capability enables 8K ultra-high-definition display with finer image quality.



Powerful Image Processing Capability

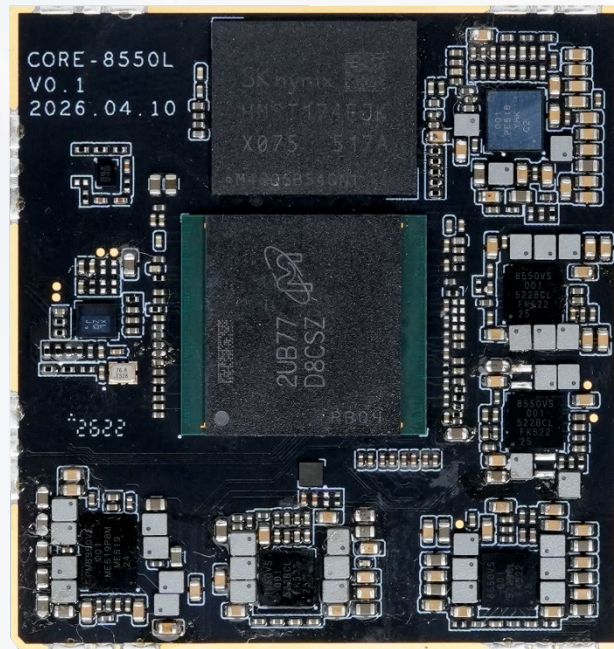
Integrated with the Adreno 740 GPU, it fully supports ray tracing technology and is compatible with OpenGL ES 3.2, Vulkan 1.2, and full-profile OpenCL 3.0. Combined with Hexagon neural network direct acceleration, it delivers enhanced graphics processing and AI computing performance.



48TOPS Computing Power NPU

Integrated with a 48TOPS NPU, it supports INT4/INT8/INT16/FP16 mixed-precision computing, enabling intelligent data processing, speech recognition, and image analysis to meet the AI application requirements of edge computing for most terminal devices.

Product features



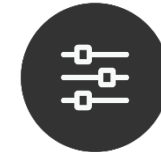
Up to 3 Camera Inputs

Onboard 8-channel MIPI-CSI interfaces, supporting multiple camera configurations including triple cameras with 36MP, dual cameras of 64MP+36MP, and single camera of 108MP, suitable for multi-vision and high-definition image acquisition scenarios.



532Pin LGA Package

The SoM adopts 532-Pin LGA package for enhanced transmission performance and stability. Compact in size at only 42 × 40 mm, it can be easily embedded into various complete devices to accelerate product integration.



Rich Expansion Interfaces

Equipped with PCIe4.0, USB3.1, MIPI-CSI, MIPI-DSI, SPI, I2C, I2S, UART and other expansion interfaces to meet peripheral expansion requirements in diverse scenarios.



Wide Range of Application Scenarios

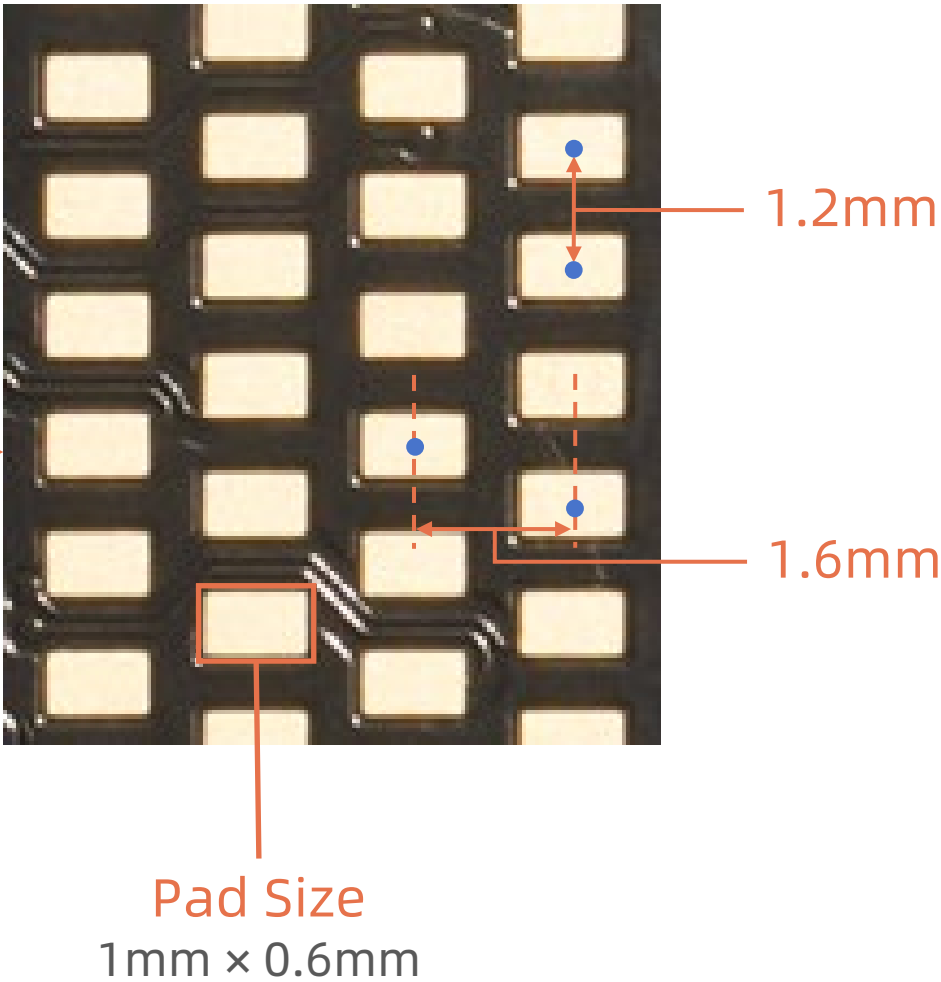
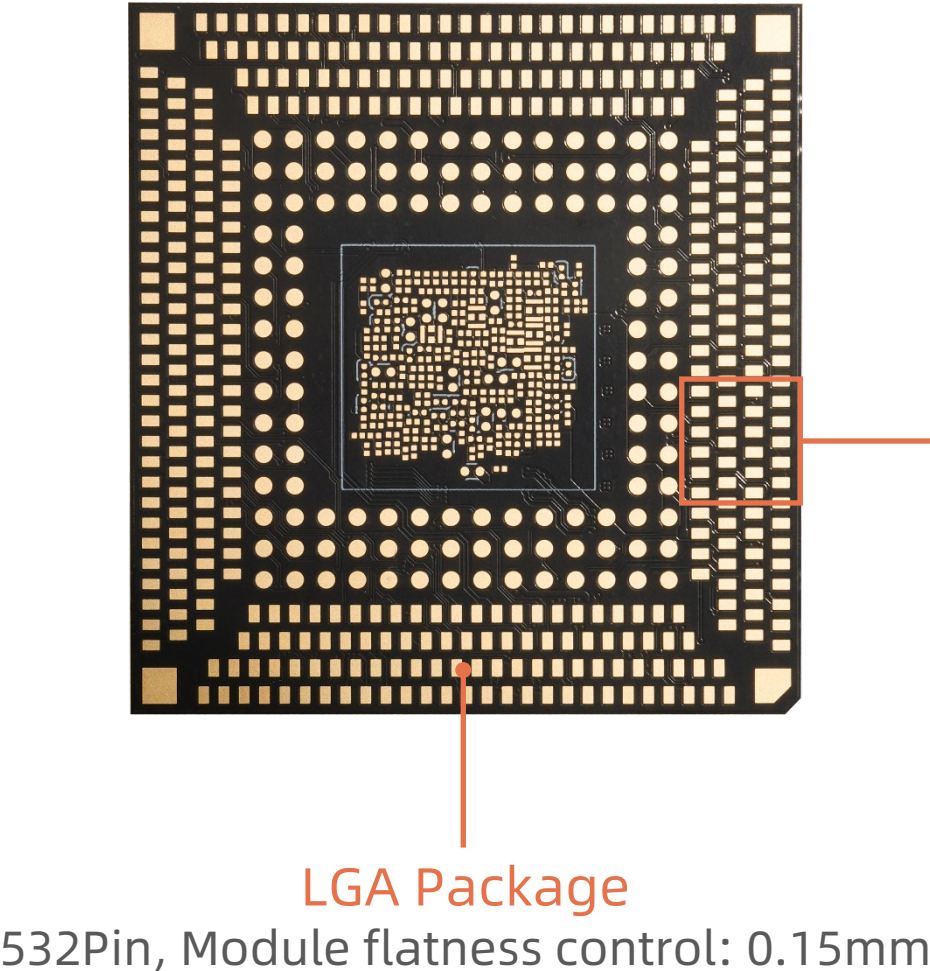
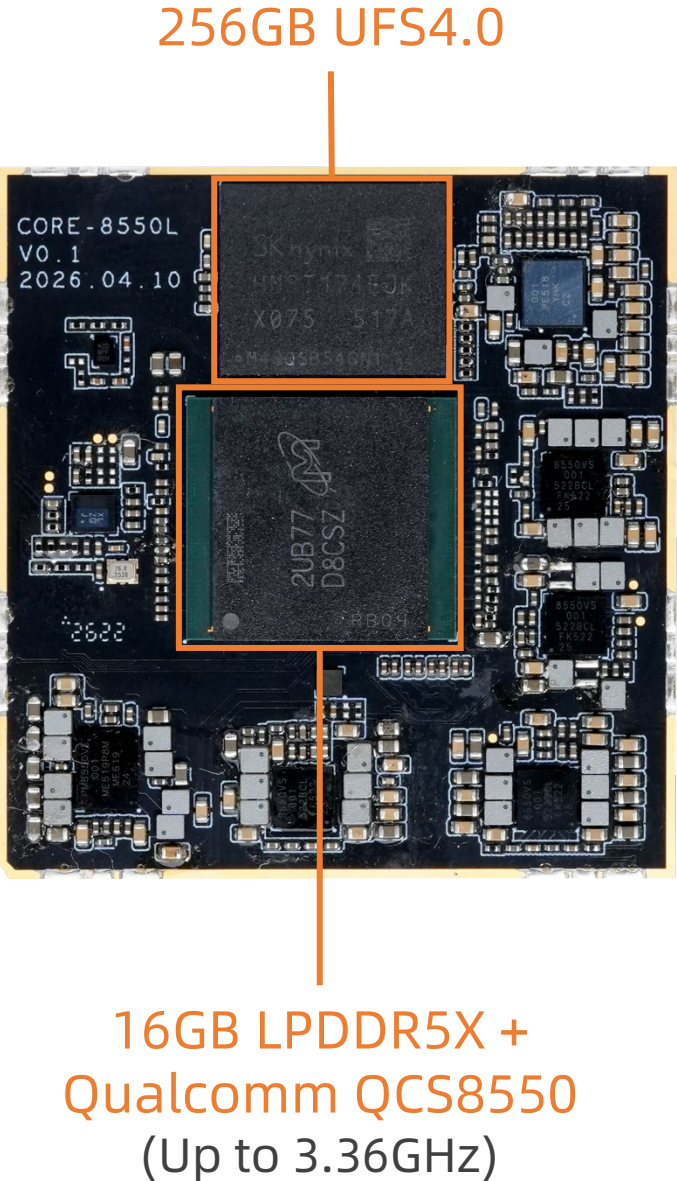
Widely applied in industries such as robots, drones, cameras, edge AI computing, industrial control, industrial hosts, intelligent security, cloud gaming, and smart home.

Specifications

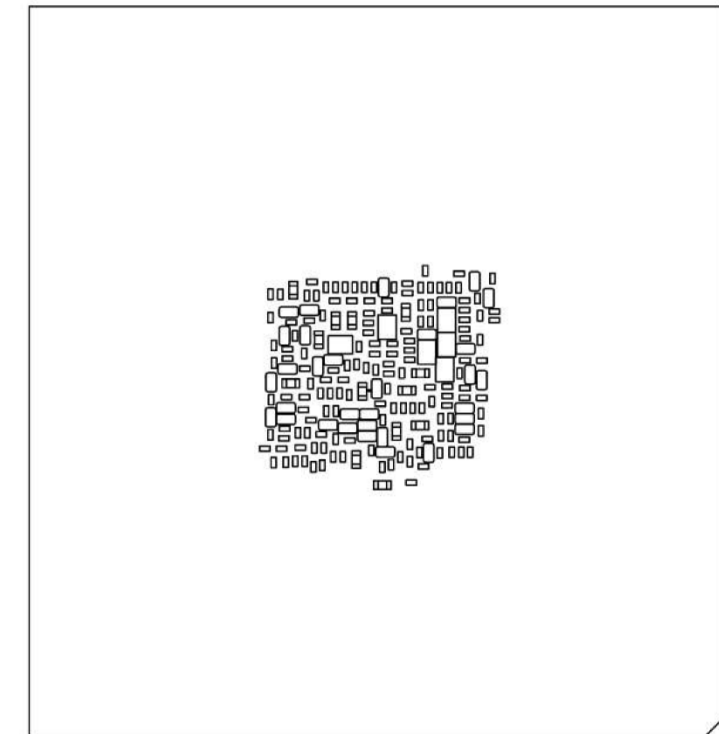
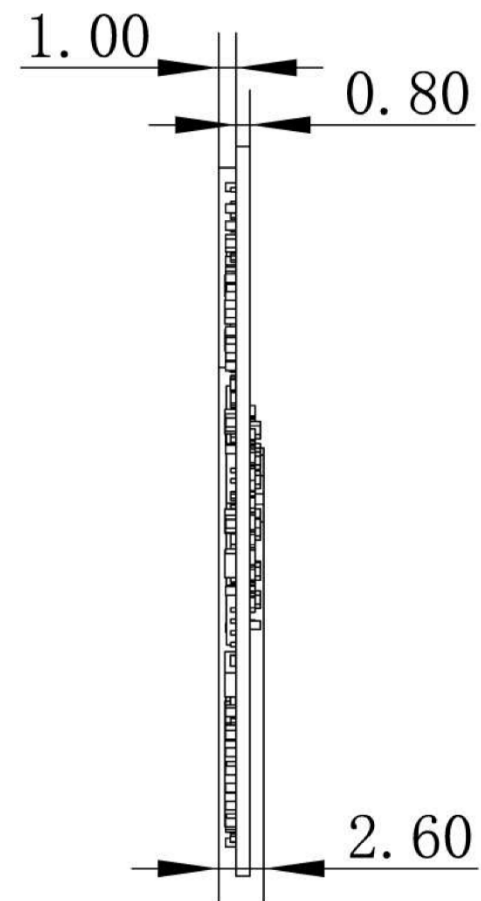
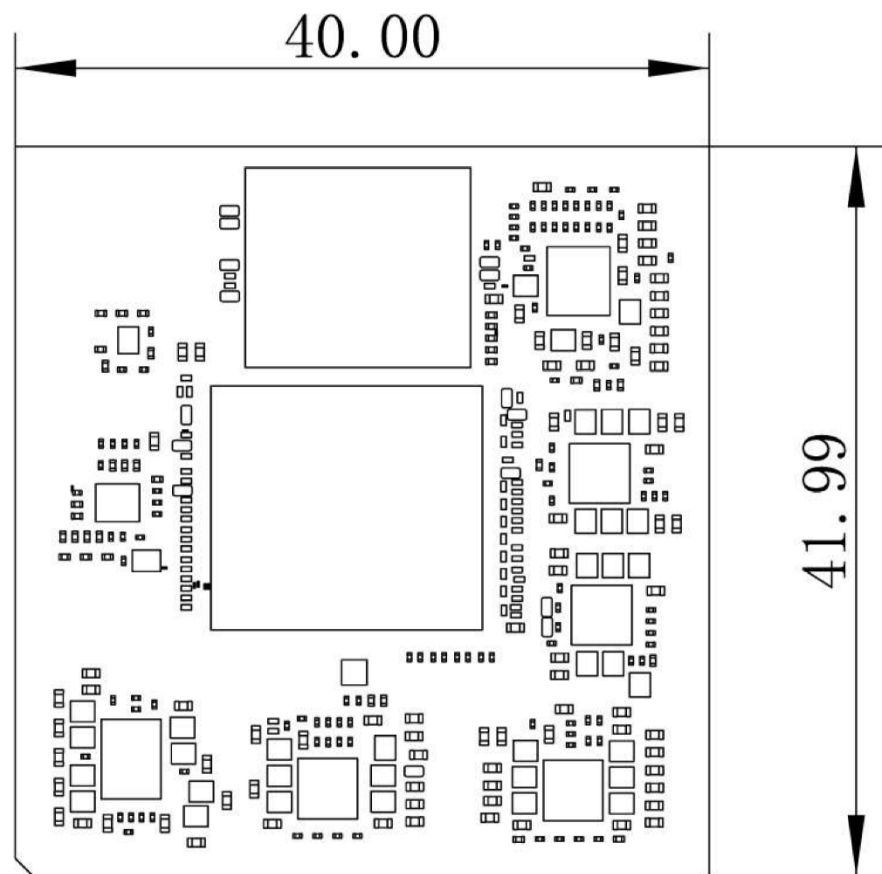


Specifications		
Basic Specifications	SOC	Qualcomm QCS8550
	CPU	Qualcomm Kryo® CPU: Hexa-core 64-bit (1×GoldPlus@3.2GHz + 2×Gold@2.8GHz + 3×Silver@2.0GHz), 4nm advanced process, maximum frequency up to 3.36GHz
	GPU	Adreno 740 GPU: Supports ray tracing technology, OpenGL ES 3.2, Vulkan 1.2, full-profile OpenCL 3.0, and Adreno NN Direct
	ISP	Equipped with Qualcomm Spectra™ Cognitive ISP (Image Signal Processor), featuring three 18-bit 36MP ISPs
	NPU	Dual eNPU V3: Equipped with 4 HVX (Hexagon Vector Extensions), 1 HMX (Hexagon Matrix Extension); Computing power up to 48TOPS (INT8), 12TOPS (FP16)
	Codec	Video decoding: 8K@60fps/4K@240fps H.265/H.264/VP9/AV1 Video encoding: 8K@30fps/4K@120fps H.265/H.264 Supports concurrent 4K@60fps decoding and 4K@60fps encoding for wireless display scenarios
	RAM	16GB LPDDR5X
	Storage	256GB UFS4.0
	Power	DC 3.8V (Supports 3.5V~4.4V wide voltage input)
	Power consumption	Normal: 2.66W(3.8V/700mA), Max: 10.26W(3.8V/2700mA), Min(Sleep): 0.114W(3.8V/30mA)
	OS	Ubuntu
	Software support	Supports on-premises deployment of large-scale parameter models based on the Transformer architecture, such as large language models (LLMs) including the Deepseek-R1 series, Gemma series, Llama series, Qwen series, Phi series, etc. Supports the QNN AI inference framework, as well as various deep learning frameworks including TensorFlow, TensorFlow Lite, PyTorch, Keras, PaddlePaddle, JAX, etc.
	Interface type	LGA package, total 532-Pin, 14-layer PCB design; Pad size: 1mm × 0.6mm; Module flatness control: 0.15mm
	Size	41.99mm × 40.0mm × 2.6mm
	Weight	≈7g
	Environment	Operating Temperature: -20°C ~ 60°C, Storage Temperature: -20°C ~ 70°C, Operating Humidity: 10% ~ 90%RH (No condensation)
Interface Specifications	Network	Ethernet, Wi-Fi / Bluetooth expandable via PCIe and USB interfaces
	Video input	6 × MIPI D/C PHY (4 lanes DPHY or 3 trios CPHY) + 2 × MIPI D/C PHY (2 lanes DPHY or 1 trio CPHY) Supports 36MP triple camera / 64MP + 36MP dual camera / 108MP single camera
	Video output	2 × MIPI-DSI (D-PHY 1.2 or C-PHY 1.2, 4 lanes, max resolution 4K@60Hz)
	Audio	2 × SoundWire, 4 × DMIC, 6 × I2S (each channel includes 2 data lanes, supporting full-duplex stereo or up to 4-channel transmit/receive applications), 1 × I2S (supports 4 data lanes, enabling up to 8-channel transmit/receive applications)
	PCIe	1 × PCIe3.0 (2lanes), 1 × PCIe4.0 (2lanes)
	USB	1 × USB3.1 Gen2 DRD
	Other interfaces	16 × QUPv3 Bus (QUPv3 can be flexibly configured as UART, SPI or I2C. Signals are multiplexed and cannot be used simultaneously; allocate resources according to practical application)

Interface description



Dimension





Interface definition

Notes1: Pin type: 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								
Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	I/O Pull	Function for Floor(CORE-8550JD4)	Default definition
A	AA1	AA1	J2	I	-		CSI7_C0_LN0_M	CSI7_C0_LN0_M
	AB1	AB1	J3	I	-		CSI7_B0_LN0_P	CSI7_B0_LN0_P
	AA2	AA2	K1	I	-		CSI7_B1_LN1_M	CSI7_B1_LN1_M
	AB2	AB2	K2	I	-		CSI7_A1_LN1_P	CSI7_A1_LN1_P
	AA3	AA3	J5	I	-		CSI7_A0_CLK_M	CSI7_A0_CLK_M
	AB3	AB3	J6	I	-		CSI7_NC_CLK_P	CSI7_NC_CLK_P
	AA4	AA4	K5	I	-		CSI7_A2_LN2_M	CSI7_A2_LN2_M
	AB4	AB4	K4	I	-		CSI7_C1_LN2_P	CSI7_C1_LN2_P
	AA5	AA5	L6	I	-		CSI7_C2_LN3_M	CSI7_C2_LN3_M
	AB5	AB5	L5	I	-		CSI7_B2_LN3_P	CSI7_B2_LN3_P
	AA6	AA6		G			GND	
	AB6	AB6	M2	I	-		CSI5_B0_LN0_P	CSI5_B0_LN0_P
	AA7	AA7	M1	I	-		CSI5_C0_LN0_M	CSI5_C0_LN0_M
	AB7	AB7	N5	I	-		CSI5_A1_LN1_P	CSI5_A1_LN1_P
	AA8	AA8	N4	I	-		CSI5_B1_LN1_M	CSI5_B1_LN1_M
	AB8	AB8	M4	I	-		CSI5_NC_CLK_P	CSI5_NC_CLK_P



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	I/O Pull	Function for Floor(CORE-8550JD4)	Default definition
A	AA9	AA9	M3	I	-		CSI5_A0_CLK_M	CSI5_A0_CLK_M
	AB9	AB9	P5	I	-		CSI5_C1_LN2_P	CSI5_C1_LN2_P
	AA10	AA10	P4	I	-		CSI5_A2_LN2_M	CSI5_A2_LN2_M
	AB10	AB10	P2	I	-		CSI5_B2_LN3_P	CSI5_B2_LN3_P
	AA11	AA11	P1	I	-		CSI5_C2_LN3_M	CSI5_C2_LN3_M
	AB11	AB11		G			GND	
	AA12	AA12	T1	I	-		CSI4_B0_LN0_P	CSI4_B0_LN0_P
	AB12	AB12	T2	I	-		CSI4_C0_LN0_M	CSI4_C0_LN0_M
	AA13	AA13	U2	I	-		CSI4_A1_LN1_P	CSI4_A1_LN1_P
	AB13	AB13	U3	I	-		CSI4_B1_LN1_M	CSI4_B1_LN1_M
	AA14	AA14	R2	I	-		CSI4_NC_CLK_P	CSI4_NC_CLK_P
	AB14	AB14	R3	I	-		CSI4_A0_CLK_M	CSI4_A0_CLK_M
	AA15	AA15	V1	I	-		CSI4_C1_LN2_P	CSI4_C1_LN2_P
	AB15	AB15	V2	I	-		CSI4_A2_LN2_M	CSI4_A2_LN2_M
	AA16	AA16	W2	I	-		CSI4_B2_LN3_P	CSI4_B2_LN3_P
	AB16	AB16	W3	I	-		CSI4_C2_LN3_M	CSI4_C2_LN3_M
	AA17	AA17		G			GND	



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	I/O Pull	Function for Floor(CORE-8550JD4)	Default definition
A	AB17	AB17	PMK8550.13	I/O	-		PMK_REFCLK4	CLK4_RF
	AA18	AA18	AD5	I/O	-		SDC2_CLK	SDC2_CLK
	AB18	AB18	AD6	I/O	-		SDC2_DATA1	SDC2_DATA_1
	AA19	AA19	AE5	I/O	-		SDC2_DATA0	SDC2_DATA_0
	AB19	AB19	AF5	I/O	-		SDC2_DATA3	SDC2_DATA_3
	AA20	AA20	AF6	I/O	-		SDC2_DATA2	SDC2_DATA_2
	AB20	AB20	BA9	I/O	1.8V	DOWN	HIFI_DAC_I2S_WS_GPIO129	GPIO129
	AA21	AA21	AE6	I/O	-		SDC2_CMD	SDC2_CMD
	AB21	AB21	AY11	I/O	1.8V	DOWN	HIFI_DAC_I2S_SCK_GPIO126	GPIO_126
	AA22	AA22	BA10	I/O	1.8V	DOWN	HIFI_DAC_I2S_DATA1_GPIO128	GPIO_128
	AB22	AB22	AY12	I/O	1.8V	DOWN	HIFI_DAC_I2S_MCLK_GPIO125	GPIO_125
	AA23	AA23	AY10	I/O	1.8V	DOWN	HIFI_DAC_I2S_DATA0_GPIO127	GPIO_127
	AB23	AB23		G			GND	
	AA24	AA24		G			GND	
	AB24	AB24	-	P	-		VPH_PWR	
	AA25	AA25	-	P	-		VPH_PWR	
	AB25	AB25	-	P	-		VPH_PWR	



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	I/O Pull	Function for Floor(CORE-8550JD4)	Default definition
A	AA26	AA26	-	P	-		VPH_PWR	
	AB26	AB26	-	P	-		VPH_PWR	
	AA27	AA27	-	P	-		VPH_PWR	
	A1	A1		G			GND	
	B1	B1		G			GND	
	C1	C1		G			GND	
	D1	D1		G			GND	
	AD1	AD1	AY37	I/O	1.8V	DOWN	FP_SPI_MISO	GPIO_36
	AC1	AC1	AP2	O	1.8V	DOWN	USB0_CC_DIR	GPIO_11
	AD2	AD2	BA36	I/O	1.8V	DOWN	FP_SPI_CS_N	GPIO_39
	AC2	AC2	BB28	I/O	1.8V	DOWN	SM_GPIO_179_UPD_Power_EN2	GPIO_179
	AD3	AD3	AJ4	I/O	1.8V	DOWN	SM_GPIO_77_HMT_BT_UART_RFR	GPIO_77
	AC3	AC3	AY36	I/O	-		FP_SPI_MOSI	GPIO_37
	AD4	AD4	AH4	I/O	1.8V	DOWN	SM_GPIO_79_HMT_BT_UART_RX	GPIO_79
	AC4	AC4	BA37	I/O	-		FP_SPI_SCK	GPIO_38
	AD5	AD5	AH5	I/O	1.8V	UP	SM_GPIO_78_HMT_BT_UART_TX	GPIO_78
	AC5	AC5	AY38	I/O	-		FP_WUHB_INT_N	GPIO_41



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	I/O Pull	Function for Floor(CORE-8550JD4)	Default definition
A	AD6	AD6	AJ5	I/O	1.8V	DOWN	SM_GPIO_76_HMT_BT_UART_CTS	GPIO_76
	AC6	AC6	BA35	I/O	-		FP_INT_N	GPIO_40
	AD7	AD7	AC1	I	-		CAM_MCLK1	GPIO_101
	AC7	AC7	BA34	I/O	1.8V	DOWN	SM_GPIO_42	GPIO_42
	AD8	AD8	AP1	I	-		CAM_MCLK7	GPIO_107
	AC8	AC8	AP3	I/O	1.8V	DOWN	SM_GPIO_10	GPIO_10
	AD9	AD9	AB38	I/O	1.8V	DOWN	SM_GPIO_140	GPIO_140
	AC9	AC9	AK1	I	-		CAM_MCLK6	GPIO_106
	AD10	AD10	AT38	I/O	-		NFC_ESE_SPI_MISO	GPIO_32
	AC10	AC10	AB1	I	-		CAM_MCLK0	GPIO_10
	AD11	AD11	AU38	I/O	-		NFC_ESE_SPI_CS_N	GPIO_35
	AC11	AC11		G			GND	
	AD12	AD12	AG1	I	-		CAM_MCLK5	GPIO_105
	AC12	AC12	AF1	I	-		CAM_MCLK4	GPIO_104
	AD13	AD13	AC4	I/O	1.8V	DOWN	SM_GPIO_73	GPIO_73
	AC13	AC13	BB38	I/O	1.8V	DOWN	SM_GPIO_148	GPIO_148
	AD14	AD14	PM-8550-0-FOWPSP110B-MT-01-0.23	O	-		PM_CBL_PWR_N	GPIO_05



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	I/O Pull	Function for Floor(CORE-8550JD4)	Default definition
A	AC14	AC14	PM-8550-0-FOWPSP110B-MT-01-0.57	I/O	1.8V	DOWN	PM8550_GPIO_01	GPIO_01
	AD15	AD15	AL1	I/O	1.8V	DOWN	SM_GPIO_72	GPIO_72
	AC15	AC15	AJ3	I/O	1.8V	DOWN	SM_GPIO_82	GPIO_82
	AD16	AD16	AM1	I/O	1.8V	DOWN	CCI_I2C_SCL5	GPIO_1
	AC16	AC16	BB17	I/O	1.8V	DOWN	SM_GPIO_198	GPIO_198
	AD17	AD17	AN1	I/O	1.8V	DOWN	CCI_I2C_SDA5	GPIO_0
	AC17	AC17	BA20	I/O	1.8V	DOWN	SM_GPIO_188	GPIO_188
	AD18	AD18	AE2	I/O	1.8V	DOWN	SM_GPIO_71_UART_RX	GPIO_71
	AC18	AC18	PMK8550.23	I/O	1.8V	DOWN	PMK8550_PWM_GPIO_05	GPIO_05
	AD19	AD19	AF2	I/O	1.8V	DOWN	SM_GPIO_70_UART_TX	GPIO_70
	AC19	AC19	AR3	I/O	1.8V	DOWN	SM_PCIE1_RESET_N	GPIO_97
	AD20	AD20		G			GND	
	AC20	AC20	AR2	O	1.8V	UP	SM_PCIE1_CLK_REQ_N	GPIO_98
	AD21	AD21		G			GND	
	AC21	AC21		G			GND	
	AD22	AD22		G			GND	
	AC22	AC22	-	P	-		VPH_PWR	



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
A	AC23	AC23	-	P	-		VPH_PWR	
B	BA1	BA1	AY5	O	-		SOM_PCIE0_RX1_P	PCIE0_RX1_P
	BB1	BB1	BA4	O	-		SOM_PCIE0_RX1_M	PCIE0_RX1_M
	BA2	BA2	AT4	I	-		SOM_PCIE0_TX1_P	PCIE0_TX1_P
	BB2	BB2	AU5	I	-		SOM_PCIE0_TX1_M	PCIE0_TX1_M
	BA3	BA3	AY4	O	-		SOM_PCIE0_RX0_P	PCIE0_RX0_P
	BB3	BB3	AY3	O	-		SOM_PCIE0_RX0_M	PCIE0_RX0_M
	BA4	BA4	AR5	I	-		SOM_PCIE0_TX0_P	PCIE0_TX0_P
	BB4	BB4	AT5	I	-		SOM_PCIE0_TX0_M	PCIE0_TX0_M
	BA5	BA5	AU4	I	-		SOM_PCIE0_REFCLK_P	PCIE0_REFCLK_P
	BB5	BB5	AV4	I	-		SOM_PCIE0_REFCLK_M	PCIE0_REFCLK_M
	BA6	BA6		G			GND	
	BB6	BB6		G			GND	
	BA7	BA7	AW1	I	-		SOM_PCIE1_REFCLK_P	PCIE1_REFCLK_P
	BB7	BB7	AY1	I	-		SOM_PCIE1_REFCLK_M	PCIE1_REFCLK_M
	BA8	BA8	AU2	I	-		SOM_PCIE1_TX0_P	PCIE1_TX0_P
	BB8	BB8	AV2	I	-		SOM_PCIE1_TX0_M	PCIE1_TX0_M



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
B	BA9	BA9	BB2	O	-		SOM_PCIE1_RX0_P	PCIE1_RX0_P
	BB9	BB9	BA2	O	-		SOM_PCIE1_RX0_M	PCIE1_RX0_M
	BA10	BA10	AV1	I	-		SOM_PCIE1_TX1_P	PCIE1_TX1_P
	BB10	BB10	AW2	I	-		SOM_PCIE1_TX1_M	PCIE1_TX1_M
	BA11	BA11	BB3	O	-		SOM_PCIE1_RX1_M	PCIE1_RX1_M
	BB11	BB11	BC2	O	-		SOM_PCIE1_RX1_P	PCIE1_RX1_P
	BA12	BA12		G			GND	
	BB12	BB12		G			GND	
	BA13	BA13		G			GND	
	BB13	BB13	AP4	I	1.8V	DOWN	SM_PCIE0_RESET_N	GPIO_94
	BA14	BA14		G			GND	
	BB14	BB14	BB13	I/O	1.8V	DOWN	AON_CCI_I2C_SDA3	GPIO_208
	BA15	BA15	BC13	I	1.8V	DOWN	AON_CCI_I2C_SCL3	GPIO_209
	BB15	BB15	Y35	I/O	1.8V	DOWN	SM_GPIO_162	GPIO_162
	BA16	BA16	BA13	I/O	1.8V	DOWN	SM_GPIO_186	GPIO_186
	BB16	BB16	AH3	I/O	1.8V	DOWN	SM_GPIO_64	GPIO_64
	BA17	BA17	BB16	I/O	1.8V	DOWN	SM_GPIO_200	GPIO_200



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
B	BB17	BB17	BB17	I/O	1.8V	DOWN	SM_GPIO_194	GPIO_194
	BA18	BA18	BC17	I/O	1.8V	DOWN	SM_GPIO_199	GPIO_199
	BB18	BB18	AM3	I/O	1.8V	DOWN	SM_GPIO_60	GPIO_60
	BA19	BA19	AY20	I/O	1.8V	DOWN	SM_GPIO_189	GPIO_189
	BB19	BB19	AY27	I/O	1.8V	DOWN	SM_GPIO_177_DMIC45_CLK	GPIO_177
	BA20	BA20	BB25	I/O	1.8V	DOWN	SM_GPIO_167_SWR_TX_DATA1	GPIO_167
	BB20	BB20	PMK8550.1	O	-		PMK_REFCLK2	CLK2_RF
	BA21	BA21	BA28	I/O	1.8V	DOWN	SM_GPIO_174_DMIC23_DATA	GPIO_174
	BB21	BB21	PM-8550-0-FOWPSP110B-MT-01-0.14	O	-		PM8550_AMUX_3	AMUX_3
	BA22	BA22	AY29	I/O	1.8V	DOWN	SM_GPIO_171_DMIC01_CLK	GPIO_171
	BB22	BB22	AK4	I/O	1.8V	DOWN	SM_GPIO_58	GPIO_58
	BA23	BA23	AY32	I/O	1.8V	DOWN	SM_GPIO_86	GPIO_86
	BB23	BB23	BB36	I/O	1.8V	DOWN	SM_GPIO_47_UART_RX	GPIO_47
	BA24	BA24	BD36	I/O	1.8V	DOWN	SM_GPIO_24	GPIO_24
	BB24	BB24	AG5	I/O	1.2V	DOWN	SM_GPIO_93	GPIO_93
	BA25	BA25	AG4	I/O	1.8V	DOWN	SM_GPIO_92	GPIO_92
	BB25	BB25	AC5	I/O	1.8V	DOWN	SM_GPIO_120	GPIO_120



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
B	BA26	BA26	AL4	I/O	1.8V	DOWN	SM_GPIO_56	GPIO_56
	BB26	BB26	AY33	I/O	1.2V	DOWN	SM_GPIO_135	GPIO_135
	BA27	BA27	BA33	I/O	1.2V	DOWN	SM_GPIO_134	GPIO_134
	BB27	BB27	BC34	I/O	1.2V	DOWN	SM_GPIO_130	GPIO_130
	BA28	BA28	BB34	I/O	1.2V	DOWN	SM_GPIO_131	GPIO_131
	BB28	BB28	BB35	I	1.8V	DOWN	DEBUG_UART_RX	GPIO_27
	BA29	BA29	Y37	I/O	1.8V	DOWN	SM_GPIO_160	GPIO_160
	BC1	BC1	-	G			GND	
	BC2	BC2	-	G			GND	
	BD1	BD1	AY15	I/O	1.8V	DOWN	SM_GPIO_205	GPIO_205
	BC3	BC3	BC15	I/O	1.8V	DOWN	SM_GPIO_201	GPIO_201
	BD2	BD2	AY16	I/O	1.8V	DOWN	SM_GPIO_203	GPIO_203
	BC4	BC4	BA16	I/O	1.8V	DOWN	SM_GPIO_202	GPIO_202
	BD3	BD3	AY18	I/O	1.8V	DOWN	SM_GPIO_193	GPIO_193
	BC5	BC5	AY17	I/O	1.8V	DOWN	SM_GPIO_195	GPIO_195
	BD4	BD4	AY25	I/O	1.8V	DOWN	SM_GPIO_175_SWR_WSA_CLK	GPIO_175
	BC6	BC6	AY19	I/O	1.8V	DOWN	SM_GPIO_191	GPIO_191



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
B	BD5	BD5	BA24	I/O	1.8V	DOWN	SM_GPIO_181_I2S2_DAT1	GPIO_181
	BC7	BC7	BA25	I/O	1.8V	DOWN	SM_GPIO_176_SWR_WSA_DATA	GPIO_176
	BD6	BD6	AD1	I	1.8V	DOWN	CAM_MCLK2	GPIO_102
	BC8	BC8	AL2	I/O	1.8V	DOWN	SM_GPIO_63_FAST_BOOT_1	GPIO_63
	BD7	BD7	AC3	I/O	1.8V	DOWN	SM_GPIO_117	GPIO_117
	BC9	BC9	BA26	I/O	1.8V	DOWN	SM_GPIO_183	GPIO_183
	BD8	BD8	AN3	I/O	1.8V	DOWN	SM_GPIO_12	GPIO_12
	BC10	BC10	AF3	I/O	1.8V	DOWN	SM_GPIO_68	GPIO_68
	BD9	BD9	BB19	I/O	1.8V	DOWN	SM_GPIO_196	GPIO_196
	BC11	BC11	AR1	I/O	1.8V	DOWN	SM_GPIO_109	GPIO_109
	BD10	BD10	AY13	I/O	1.8V	DOWN	SM_GPIO_187	GPIO_187
	BC12	BC12	PM-8550-0-FOWPSP110B-MT-01-0.53	I	-		FLASH_LED1	FLASH_LED1
	BD11	BD11	BB18	I/O	1.8V	DOWN	SM_GPIO_197	GPIO_197
	BC13	BC13	Y36	I/O	1.8V	DOWN	SM_GPIO_163	GPIO_163
	BD12	BD12	BA19	I/O	1.8V	DOWN	SM_GPIO_190	GPIO_190
	BC14	BC14	BA18	I/O	1.8V	DOWN	SM_GPIO_192	GPIO_192
	BD13	BD13	BC23	I/O	1.8V	DOWN	SM_GPIO_108	GPIO_108



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
B	BC15	BC15	W37	I/O	1.8V	DOWN	SM_GPIO_159	GPIO_159
	BD14	BD14	BB26	I/O	1.8V	DOWN	SM_GPIO_166_SWR_TX_DATA0	GPIO_166
	BC16	BC16	AG2	I/O	1.8V	DOWN	SM_GPIO_67	GPIO_67
	BD15	BD15	BA27	I/O	1.8V	DOWN	SM_GPIO_178_DMIC45_DATA	GPIO_178
	BC17	BC17	BC25	I/O	1.8V	DOWN	SM_GPIO_168_SWR_RX_CLK	GPIO_168
	BD16	BD16	AY28	I/O	1.8V	DOWN	SM_GPIO_173_DMIC23_CLK	GPIO_173
	BC18	BC18	BB27	I/O	1.8V	DOWN	SM_GPIO_165_SWR_TX_CLK	GPIO_165
	BD17	BD17	AY31	I/O	1.8V	DOWN	SM_GPIO_88	GPIO_88
	BC19	BC19	BA29	I/O	1.8V	DOWN	SM_GPIO_172_DMIC01_DATA	GPIO_172
	BD18	BD18	PM-8550-0-FOWPSP110B-MT-01-0.4	O	-		PM8550_AMUX_5	AMUX_5
	BC20	BC20	BA31	I/O	1.8V	DOWN	SM_GPIO_87	GPIO_87
	BD19	BD19	BD35	I/O	1.8V	DOWN	SM_GPIO_25	GPIO_25
	BC21	BC21	AM4	O	1.8V	UP	SM_PCIE0_CLK_REQ_N	GPIO_95
	BD20	BD20	BC36	I/O	1.8V	DOWN	SM_GPIO_46_UART_TX	GPIO_46
	BC22	BC22	AK5	I/O	1.8V	DOWN	SM_GPIO_59	GPIO_59
	BD21	BD21	BC38	I/O	1.8V	DOWN	SM_GPIO_44_UART_CTS	GPIO_44
	BC23	BC23	BC37	I/O	1.8V	DOWN	SM_GPIO_45_UART_RFR	GPIO_45



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
B	BD22	BD22	BB37	I/O	1.8V	DOWN	SM_GPIO_149	GPIO_149
	BC24	BC24	BA32	I/O	1.2V	DOWN	SM_GPIO_136	GPIO_136
	BC25	BC25	BB33	I/O	1.2V	DOWN	SM_GPIO_132	GPIO_132
	BC26	BC26		G			GND	
	BC27	BC27	BC35	O	1.8V	DOWN	DEBUG_UART_TX	GPIO_26
C	CA1	CA1	PM-8550-0-FOWPSP110B-MT-01-0.81	O	-		VREG_L13B_3P0	VREG_L13
	CB1	CB1	PM-8550-0-FOWPSP110B-MT-01-0.54	I	-		PMIC_BBAT	VCOIN
	CA2	CA2	PM-8550-0-FOWPSP110B-MT-01-0.105	O	-		VREG_L11B_SNS	VREG_L11_S
	CB2	CB2	PM-8550-0-FOWPSP110B-MT-01-0.71	O	-		VREG_L14B_3P2	VREG_L14
	CA3	CA3	PM-8550-0-FOWPSP110B-MT-01-0.105	O	-		VREG_L11B_SNS	VREG_L11_S
	CB3	CB3		G			GND	
	CA4	CA4	AT37	I/O	1.8V	DOWN	SDC4_DATA_0	GPIO_89
	CB4	CB4	AW36	I/O	1.8V	DOWN	SDC4_CMD	GPIO_51
	CA5	CA5	AV37	I/O	1.8V	DOWN	SDC4_DATA_3	GPIO_49
	CB5	CB5	AW37	O	1.8V	DOWN	SDC4_CLK	GPIO_50
	CA6	CA6	AU36	I/O	1.8V	DOWN	SDC4_DATA_1	GPIO_90
	CB6	CB6	AU37	I/O	1.8V	DOWN	SDC4_DATA_2	GPIO_48



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
C	CA7	CA7	AA5	I/O	1.8V	DOWN	SM_GPIO_119	GPIO_119
	CB7	CB7	AE1	I	1.8V	DOWN	CAM_MCLK3	GPIO_103
	CA8	CA8	AL5	I/O	1.8V	DOWN	SM_GPIO_57	GPIO_57
	CB8	CB8	PM-8550VS-0-WLPSP77-MT-01-0.14	I/O	-		PM8010_1_RESET_N	GPIO_05
	CA9	CA9		G			GND	
	CB9	CB9	AE39	I/O	-		USB0_DP_AUX_N	USB0_DP_AUX_M
	CA10	CA10	AF39	I/O	-		USB0_DP_AUX_P	USB0_DP_AUX_P
	CB10	CB10	AL39	O	-		USB0_SS_RX1_M	USB0_SS_RX1_M
	CA11	CA11	AK39	O	-		USB0_SS_RX1_P	USB0_SS_RX1_P
	CB11	CB11	AK38	O	-		USB0_SS_RX0_M	USB0_SS_RX0_M
	CA12	CA12	AJ39	O	-		USB0_SS_RX0_P	USB0_SS_RX0_P
	CB12	CB12	AH38	I	-		USB0_SS_TX0_P	USB0_SS_TX0_P
	CA13	CA13	AG38	I	-		USB0_SS_TX0_M	USB0_SS_TX0_M
	CB13	CB13	AG39	I	-		USB0_SS_TX1_P	USB0_SS_TX1_P
	CA14	CA14	AF38	I	-		USB0_SS_TX1_M	USB0_SS_TX1_M
	CB14	CB14		G			GND	
	CA15	CA15		G			GND	



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
C	CB15	CB15	U38	O	-		QLINK0_L4_M	QLINK0_L4_M
	CA16	CA16	T38	O	-		QLINK0_L4_P	QLINK0_L4_P
	CB16	CB16	R38	O	-		QLINK0_CLK_M	QLINK0_CLK_M
	CA17	CA17	T39	O	-		QLINK0_CLK_P	QLINK0_CLK_P
	CB17	CB17	P39	O	-		QLINK0_L0_M	QLINK0_L0_M
	CA18	CA18	N39	O	-		QLINK0_L0_P	QLINK0_L0_P
	CB18	CB18	M39	O	-		QLINK0_L2_M	QLINK0_L2_M
	CA19	CA19	N38	O	-		QLINK0_L2_P	QLINK0_L2_P
	CB19	CB19	L38	O	-		QLINK0_L1_M	QLINK0_L1_M
	CA20	CA20	K38	O	-		QLINK0_L1_P	QLINK0_L1_P
	CB20	CB20	K39	O	-		QLINK0_L3_M	QLINK0_L3_M
	CA21	CA21	J38	O	-		QLINK0_L3_P	QLINK0_L3_P
	CB21	CB21		G			GND	
	CA22	CA22	D28	I/O	1.8V	DOWN	I2C_HUB0_SDA_GPIO20	GPIO_20
	CB22	CB22	D27	I/O	1.8V	DOWN	I2C_HUB0_SCL_GPIO21	GPIO_21
	CA23	CA23	B27	I/O	1.8V	DOWN	SM_GPIO_4	GPIO_4
	CB23	CB23	AA3	I	1.8V	DOWN	CCI_I2C_SCL0	GPIO_111



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
C	CA24	CA24	C26	I/O	1.8V	DOWN	SM_GPIO_15	GPIO_15
	CB24	CB24	C25	I/O	1.8V	DOWN	I2C_HUB0_SCL_GPIO19	GPIO_19
	CA25	CA25	B25	I/O	1.8V	DOWN	I2C_HUB0_SDA_GPIO18	GPIO_18
	CB25	CB25	C23	I/O	1.8V	DOWN	I2C_HUB0_SCL_GPIO17	GPIO_17
	CA26	CA26	B23	I/O	1.8V	DOWN	I2C_HUB0_SDA_GPIO16	GPIO_16
	CB26	CB26	C24	I/O	1.8V	DOWN	I2C_HUB0_SCL_GPIO85	GPIO_85
	CA27	CA27	B24	I/O	1.8V	DOWN	I2C_HUB0_SDA_GPIO84	GPIO_84
	CD1	CD1	PM-8550-0-FOWPSP110B-MT-01-0.102	O	-		VREG_L16B_2P8	VREG_L16
	CC1	CC1	PM-8550-0-FOWPSP110B-MT-01-0.103	O	-		VREG_L5B_3P1	VREG_L5
	CD2	CD2	AM2	I/O	1.8V	DOWN	SM_GPIO_61	GPIO_61
	CC2	CC2	PM-8550-0-FOWPSP110B-MT-01-0.104	O	-		VREG_L9B_2P9	VREG_L9
	CD3	CD3	BB32	I/O	1.8V	DOWN	SM_GPIO_133	GPIO_133
	CC3	CC3	PM-8550VS-0-WLPSP77-MT-01-0.10	I/O	-		PM8010_2_RESET_N	GPIO_06
	CD4	CD4	AY38	I/O	1.8V	DOWN	SM_GPIO_54	GPIO_54
	CC4	CC4	BA38	I/O	1.8V	DOWN	SM_GPIO_52	GPIO_52
	CD5	CD5	AY39	I/O	1.8V	DOWN	SM_GPIO_55	GPIO_55
	CC5	CC5	B26	I/O	1.8V	DOWN	SM_GPIO_14	GPIO_14



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
C	CD6	CD6	AW39	I/O	1.8V	DOWN	SM_GPIO_30	GPIO_30
	CC6	CC6	C27	I/O	1.8V	DOWN	SM_GPIO_5	GPIO_5
	CD7	CD7		G			GND	
	CC7	CC7	PTN3222DUK.B3	I/O	-		USB0_SS_DM	DN
	CD8	CD8	AE37	I/O	1.8V	DOWN	SM_GPIO_147	GPIO_147
	CC8	CC8	PTN3222DUK.33	I/O	-		USB0_SS_DP	DP
	CD9	CD9	AD37	I/O	1.8V	DOWN	SM_GPIO_145	GPIO_145
	CC9	CC9	AD36	I/O	1.8V	DOWN	SM_GPIO_146	GPIO_146
	CD10	CD10	PMK8550.7	O	-		PMK_REFCLK3	CLK3_RF
	CC10	CC10	AC35	I/O	1.8V	DOWN	SM_GPIO_143	GPIO_143
	CD11	CD11	AB5	I/O	1.8V	DOWN	SM_GPIO_3	GPIO_3
	CC11	CC11	AC36	I/O	1.8V	DOWN	SM_GPIO_142	GPIO_142
	CD12	CD12	AD38	I/O	1.8V	DOWN	SM_GPIO_144_FAST_BOOT_0	GPIO_144
	CC12	CC12	AC38	I/O	1.8V	DOWN	SM_GPIO_153	GPIO_153
	CD13	CD13		G			GND	
	CC13	CC13	AB39	I/O	1.8V	DOWN	SM_GPIO_152	GPIO_152
	CD14	CD14	AA38	I/O	1.8V	DOWN	SM_GPIO_151_BOOT_CONFIG_4	GPIO_151



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
C	CC14	CC14	AA39	I/O	1.8V	DOWN	SM_GPIO_155	GPIO_155
	CD15	CD15	Y39	I/O	1.8V	DOWN	SM_GPIO_154_BOOT_CONFIG_5	GPIO_154
	CC15	CC15	Y38	I/O	1.8V	DOWN	SM_GPIO_161_BOOT_CONFIG_1	GPIO_161
	CD16	CD16	AA36	I/O	1.8V	DOWN	SM_GPIO164_WDOG_DISABLE	GPIO164
	CC16	CC16	AA37	I/O	1.8V	DOWN	SM_GPIO_150_BOOT_CONFIG_3	GPIO_150
	CD17	CD17	W38	I/O	1.8V	DOWN	SM_GPIO_156	GPIO_156
	CC17	CC17	W39	I/O	1.8V	DOWN	SM_GPIO_157	GPIO_157
	CD18	CD18	AH1	I	-		CCI_I2C_SCL4	GPIO_75
	CC18	CC18	V39	I/O	1.8V	DOWN	SM_GPIO_158_BOOT_CONFIG_2	GPIO_158
	CD19	CD19	AD3	I	-		CCI_I2C_SCL2	GPIO_115
	CC19	CC19	AJ1	I/O	-		CCI_I2C_SDA4	GPIO_74
	CD20	CD20		G			GND	
	CC20	CC20	AD2	I/O	-		CCI_I2C_SDA2	GPIO_114
	CD21	CD21	B29	I/O	1.8V	DOWN	SM_GPIO_8	GPIO_8
	CC21	CC21	AA2	I/O	-		CCI_I2C_SDA0	GPIO_110
	CD22	CD22	C28	I/O	1.8V	DOWN	SM_GPIO_7	GPIO_7
	CC22	CC22	AV38	I/O	1.8V	DOWN	NFC_I2C_I3C_SCL_GPIO29	GPIO_29



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
C	CC23	CC23	AV39	I/O	1.8V	DOWN	NFC_I2C_I3C_SDA_GPIO28	GPIO_28
D	DA1	DA1	PM-8550-0-FOWPSP110B-MT-01-0.52	I	-		FLASH_LED2	FLASH_LED2
	DB1	DB1	PM-8550-0-FOWPSP110B-MT-01-0.51/61	I	-		FLASH_LED3	FLASH_LED3
	DA2	DA2		G			GND	
	DB2	DB2	C12	I	-		CSI0_B0_LN0_P	CSI0_B0_LN0_P
	DA3	DA3	B12	I	-		CSI0_C0_LN0_M	CSI0_C0_LN0_M
	DB3	DB3	E11	I	-		CSI0_A1_LN1_P	CSI0_A1_LN1_P
	DA4	DA4	D11	I	-		CSI0_B1_LN1_M	CSI0_B1_LN1_M
	DB4	DB4	E12	I	-		CSI0_NC_CLK_P	CSI0_NC_CLK_P
	DA5	DA5	D12	I	-		CSI0_A0_CLK_M	CSI0_A0_CLK_M
	DB5	DB5	E10	I	-		CSI0_C1_LN2_P	CSI0_C1_LN2_P
	DA6	DA6	D10	I	-		CSI0_A2_LN2_M	CSI0_A2_LN2_M
	DB6	DB6	C10	I	-		CSI0_B2_LN3_P	CSI0_B2_LN3_P
	DA7	DA7	B10	I	-		CSI0_C2_LN3_M	CSI0_C2_LN3_M
	DB7	DB7		G			GND	
	DA8	DA8	C8	I	-		CSI1_B0_LN0_P	CSI1_B0_LN0_P
	DB8	DB8	B8	I	-		CSI1_C0_LN0_M	CSI1_C0_LN0_M



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
D	DA9	DA9	E7	I	-		CSI1_A1_LN1_P	CSI1_A1_LN1_P
	DB9	DB9	D7	I	-		CSI1_B1_LN1_M	CSI1_B1_LN1_M
	DA10	DA10	E8	I	-		CSI1_NC_CLK_P	CSI1_NC_CLK_P
	DB10	DB10	D8	I	-		CSI1_A0_CLK_M	CSI1_A0_CLK_M
	DA11	DA11	E6	I	-		CSI1_C1_LN2_P	CSI1_C1_LN2_P
	DB11	DB11	D6	I	-		CSI1_A2_LN2_M	CSI1_A2_LN2_M
	DA12	DA12	C6	I	-		CSI1_B2_LN3_P	CSI1_B2_LN3_P
	DB12	DB12	B6	I	-		CSI1_C2_LN3_M	CSI1_C2_LN3_M
	DA13	DA13		G			GND	
	DB13	DB13	C4	I	-		CSI2_B0_LN0_P	CSI2_B0_LN0_P
	DA14	DA14	D4	I	-		CSI2_C0_LN0_M	CSI2_C0_LN0_M
	DB14	DB14	C3	I	-		CSI2_A1_LN1_P	CSI2_A1_LN1_P
	DA15	DA15	D3	I	-		CSI2_B1_LN1_M	CSI2_B1_LN1_M
	DB15	DB15	B4	I	-		CSI2_NC_CLK_P	CSI2_NC_CLK_P
	DA16	DA16	A4	I	-		CSI2_A0_CLK_M	CSI2_A0_CLK_M
	DB16	DB16	B2	I	-		CSI2_C1_LN2_P	CSI2_C1_LN2_P
	DA17	DA17	C2	I	-		CSI2_A2_LN2_M	CSI2_A2_LN2_M



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
D	DB17	DB17	C1	I	-		CSI2_B2_LN3_P	CSI2_B2_LN3_P
	DA18	DA18	D1	I	-		CSI2_C2_LN3_M	CSI2_C2_LN3_M
	DB18	DB18		G			GND	
	DA19	DA19	F2	I	-		CSI3_B0_LN0_P	CSI3_B0_LN0_P
	DB19	DB19	F1	I	-		CSI3_C0_LN0_M	CSI3_C0_LN0_M
	DA20	DA20	G5	I	-		CSI3_A1_LN1_P	CSI3_A1_LN1_P
	DB20	DB20	G4	I	-		CSI3_B1_LN1_M	CSI3_B1_LN1_M
	DA21	DA21	F4	I	-		CSI3_NC_CLK_P	CSI3_NC_CLK_P
	DB21	DB21	F3	I	-		CSI3_A0_CLK_M	CSI3_A0_CLK_M
	DA22	DA22	H5	I	-		CSI3_C1_LN2_P	CSI3_C1_LN2_P
	DB22	DB22	H4	I	-		CSI3_A2_LN2_M	CSI3_A2_LN2_M
	DA23	DA23	H2	I	-		CSI3_B2_LN3_P	CSI3_B2_LN3_P
	DB23	DB23	H1	I	-		CSI3_C2_LN3_M	CSI3_C2_LN3_M
	DA24	DA24		G			GND	
	DB24	DB24	T5	O	-		CSI6_C0_LN0_M	CSI6_C0_LN0_M
	DA25	DA25	T4	O	-		CSI6_B0_LN0_P	CSI6_B0_LN0_P
	DB25	DB25	U6	O	-		CSI6_B1_LN1_M	CSI6_B1_LN1_M



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
D	DA26	DA26	U5	O	-		CSI6_A1_LN1_P	CSI6_A1_LN1_P
	DB26	DB26	R6	O	-		CSI6_A0_CLK_M	CSI6_A0_CLK_M
	DA27	DA27	R5	O	-		CSI6_NC_CLK_P	CSI6_NC_CLK_P
	DB27	DB27	V5	O	-		CSI6_A2_LN2_M	CSI6_A2_LN2_M
	DA28	DA28	V4	O	-		CSI6_C1_LN2_P	CSI6_C1_LN2_P
	DB28	DB28	W6	O	-		CSI6_C2_LN3_M	CSI6_C2_LN3_M
	DA29	DA29	W5	O	-		CSI6_B2_LN3_P	CSI6_B2_LN3_P
	DC1	DC1	BB10	I/O	1.8V	DOWN	MI2S2_I2S_DATA1	GPIO_124
	DC2	DC2	BA12	I	1.8V	DOWN	MI2S2_I2S_DATA0	GPIO_122
	DD1	DD1	BB31	I/O	1.8V	DOWN	SM_GPIO_137	GPIO_137
	DC3	DC3	BA11	I	1.8V	DOWN	MI2S2_I2S_WS	GPIO_123
	DD2	DD2	AB37	I/O	1.8V	DOWN	SM_GPIO_139	GPIO_139
	DC4	DC4	BB12	I	1.8V	DOWN	MI2S2_I2S_SCK	GPIO_121
	DD3	DD3	E26	I	-		SM_JTAG_SRST_N	JTAG_SRST_N
	DC5	DC5	D26	I	-		SM_JTAG_TRST_N	JTAG_TRST_N
	DD4	DD4	E25	I	-		SM_JTAG_TMS	JTAG_TMS
	DC6	DC6	D25	I	-		SM_JTAG_TCK	JTAG_TCK



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
D	DD5	DD5	D24	O	-		SM_JTAG_TDO	JTAG_TDO
	DC7	DC7	E24	I	-		SM_JTAG_TDI	JTAG_TDI
	DD6	DD6	D21	O	-		DSI0_C2_LN3_P	DSI0_C2_LN3_P
	DC8	DC8		G			GND	
	DD7	DD7	B21	O	-		DSI0_A2_LN2_P	DSI0_A2_LN2_P
	DC9	DC9	E21	O	-		DSI0_NC_LN3_M	DSI0_NC_LN3_M
	DD8	DD8	D22	O	-		DSI0_NC_CLK1_P	DSI0_NC_CLK1_P
	DC10	DC10	C21	O	-		DSI0_B2_LN2_M	DSI0_B2_LN2_M
	DD9	DD9	D20	O	-		DSI0_B1_CLK_P	DSI0_B1_CLK0_P
	DC11	DC11	E22	O	-		DSI0_NC_CLK1_M	DSI0_NC_CLK1_M
	DD10	DD10	C19	O	-		DSI0_C0_LN1_P	DSI0_C0_LN1_P
	DC12	DC12	E20	O	-		DSI0_C1_CLK_M	DSI0_C1_CLK0_M
	DD11	DD11	E19	O	-		DSI0_A0_LN0_P	DSI0_A0_LN0_P
	DC13	DC13	B19	O	-		DSI0_A1_LN1_M	DSI0_A1_LN1_M
	DD12	DD12		G			GND	
	DC14	DC14	D19	O	-		DSI0_B0_LN0_M	DSI0_B0_LN0_M
	DD13	DD13	D17	O	-		DSI1_B0_LN0_M	DSI1_B0_LN0_M



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
D	DC15	DC15	E17	O	-		DSI1_A0_LN0_P	DSI1_A0_LN0_P
	DD14	DD14	B17	O	-		DSI1_A1_LN1_M	DSI1_A1_LN1_M
	DC16	DC16	C17	O	-		DSI1_C0_LN1_P	DSI1_C0_LN1_P
	DD15	DD15	D16	O	-		DSI1_C1_CLK_M	DSI1_C1_CLK0_M
	DC17	DC17	E16	O	-		DSI1_B1_CLK_P	DSI1_B1_CLK0_P
	DD16	DD16	E14	I	-		DSI1_NC_CLK1_M	DSI1_NC_CLK1_M
	DC18	DC18	D14	I	-		DSI1_NC_CLK1_P	DSI1_NC_CLK1_P
	DD17	DD17	D15	O	-		DSI1_B2_LN2_M	DSI1_B2_LN2_M
	DC19	DC19	E15	O	-		DSI1_A2_LN2_P	DSI1_A2_LN2_P
	DD18	DD18	C15	O	-		DSI1_C2_LN3_P	DSI1_C2_LN3_P
	DC20	DC20	B15	O	-		DSI1_C2_LN3_P	DSI1_C2_LN3_P
	DD19	DD19	BA7	I/O	-		SM_RESIN_N_1V2	RESIN_N
	DC21	DC21	AY26	I/O	1.8V	DOWN	SM_GPIO_182_UPD_RESET	GPIO_182
	DD20	DD20		G			GND	
	DC22	DC22		G			GND	
	DD21	DD21	AY14	I/O	1.8V	DOWN	SM_GPIO_185	GPIO_185
	DC23	DC23	BA14	I/O	1.8V	DOWN	SM_GPIO_184	GPIO_184



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
D	DD22	DD22	BB24	I/O	1.8V	DOWN	SM_GPIO_169_SWR_RX_DATA0	GPIO_169
	DC24	DC24	AA4	I/O	1.8V	DOWN	SM_GPIO_118	GPIO_118
	DC25	DC25	AH2	I/O	1.8V	DOWN	SM_GPIO_65	GPIO_65
	DC26	DC26	BA15	I/O	1.8V	DOWN	SM_GPIO_204	GPIO_204
	DC27	DC27		G			GND	
E	EF13	EF13	PM-8550VS-0-WLPSP77-MT-01-0.62/63 PM-8550-0-FOWPSP110B-MT-01-0.97	O	-		VREG_S6G_1P86	VSW_S6
	EF14	EF14						
	EG13	EG13						VIN_1P8_SYS
	EG14	EG14	PM-8550VS-0-WLPSP77-MT-01-0.67	O	-		VREG_S4G_1P25	VDD_L1/VDD_L3
	EH13	EH13		G			GND	
	EH14	EH14	PM-8550VS-0-WLPSP77-MT-01-0.32	I/O	-		EXT_PRT_RESET_N	GPIO_04
	EJ13	EJ13	G	G			GND	
	EJ14	EJ14	BB6	I	-		SM_RESOUT_N_1V2	RESOUT_N
	EP13	EP13	PM-8550VS-0-WLPSP77-MT-01-0.38	O	-		VREG_BOB1	VBOB
	EP14	EP14						
	EQ13	EQ13						
	EQ14	EQ14						



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
E	EP7	EP7	PM-8550-0-FOWPSP110B-MT-01-0.87	O	-		VREG_L12B_SNS	VREG_L12_S
	EQ7	EQ7						
	EP9	EP9	PM-8550-0-FOWPSP110B-MT-01-0.109	O	-		VREG_L10B_1P8	VREG_L10
	EQ9	EQ9						
	EP10	EP10	PM-8550-0-FOWPSP110B-MT-01-0.107	O	-		VREG_L12B_1P8	VREG_L12
	EQ11	EQ11						
	EP11	EP11	PM-8550-0-FOWPSP110B-MT-01-0.106	O	-		VREG_L11B_1P2	VREG_L11
	EQ12	EQ12						
	EP5	EP5	PM-8550-0-FOWPSP110B-MT-01-0.80	O	-		VREG_L15B_1P8	VREG_L15
	EQ4	EQ4						
	EL13	EL13	AR38	I/O	1.8V	DOWN	SM_GPIO_91	GPIO_91
	EA13	EA13	AE3	I/O	1.8V	DOWN	SM_GPIO_69	GPIO_69
	EA14	EA14	AB2	I/O	1.8V	DOWN	CCI_I2C_SDA1	GPIO_112
	EB13	EB13	BB23	I/O	1.8V	DOWN	SM_GPIO_170_SWR_RX_DATA1	GPIO_170
	EA7	EA7	PM-8550VS-0-WLPSP77-MT-01-0.69/70	O	-		VREG_S1G_1P25	VSW_S1
	EA8	EA8						
	EA9	EA9	PM-8550VS-0-WLPSP77-MT-01-0.42/43	O	-		VREG_S2G_0P85	VSW_S2



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
E	EA10	EA10	PM-8550VS-0-WLPSP77-MT-01-0.42/43	O	-		VREG_S2G_0P85	VSW_S2
	EA11	EA11		G			GND	
	EA12	EA12	C29	I/O	1.8V	DOWN	SM_GPIO_9	GPIO_9
	EB1	EB1	AW20	O	-		VREG_1P2_SYS	VDD_PX0
	EB2	EB2						
	ED1	ED1	PMK8550.28	O	-		VREG_1P8_SYS	VDD_1P8_SYS
	ED2	ED2						
	EA6	EA6	PM-8550-0-FOWPSP110B-MT-01-0.95	O	-		VREG_L8B_1P8	VREG_L8
	EB3	EB3	AV35/AK35/AB7/AG6/AV7/AW15/AW23/AP35/AU35/T34/F17/F6	I	-		VREG_L3G_1P2	VDD_PX5/VDD_PX10/VDD_PX14
	EB7	EB7	-	G			GND	
	EP8	EP8	PM-8550-0-FOWPSP110B-MT-01-0.100	O	-		VREG_L1B_1P8	VREG_L1
	EQ8	EQ8	PM-8550-0-FOWPSP110B-MT-01-0.91	O	-		VREG_L6B_1P8	VREG_L6
	EP12	EP12	PM-8550-0-FOWPSP110B-MT-01-0.84	O	-		VREG_L7B_1P8	VREG_L7
	EQ10	EQ10	PM-8550-0-FOWPSP110B-MT-01-0.108	O	-		VREG_L4B_1P8	VREG_L4
	EB14	EB14	AB3	I	1.8V	DOWN	CCI_I2C_SCL1	GPIO_113
	EA2	EA2	AU39	I/O	1.8V	DOWN	NFC_ESE_SPI_CLK	GPIO_34
	EA3	EA3	AT38	I/O	1.8V	DOWN	NFC_ESE_SPI_MOSI	GPIO_33



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
E	EA4	EA4	AW38	I/O	1.8V	DOWN	SM_GPIO_31	GPIO_31
	EA5	EA5	BB14	I/O	1.8V	DOWN	I2C_HUB0_SCL_GPIO207	GPIO_207
	EC14	EC14		G			GND	
	ED14	ED14		G			GND	
	EE13	EE13	AK3	I/O	1.8V	DOWN	SM_GPIO_80	GPIO_80
	EE14	EE14	AG3	I/O	1.8V	DOWN	SM_GPIO_66	GPIO_66
	EK2	EK2	BB8	O	-		SM_PS_HOLD_1V2	PS_HOLD
	EL1	EL1	PMK8550.11	I	-		PM_RESIN_N	RESIN_N
	EL2	EL2	PMK8550.17	O	-		PM_KPD_PWR_N	KEP_PWR_N
	EL14	EL14	AY24	I/O	1.8V	DOWN	SM_GPIO_180_I2S2_DAT0	GPIO_180
	EM1	EM1	AY34	O	1.8V	DOWN	FORCE_USB_BOOT	GPIO_43
	EM2	EM2	AN4	I	1.8V	DOWN	SM_PCIE0_WAKE_N	GPIO_96
	EM14	EM14	BA39	I/O	1.8V	DOWN	SM_GPIO_53	GPIO_53
	EN1	EN1	AN2	I/O	1.8V	DOWN	SM_GPIO_13	GPIO_13
	EN2	EN2	PMK8550.41	I/O	-		PMK_SLEEP_CLK_1P8	GPIO_03
	EN6	EN6	PM-8550-0-FOWPSP110B-MT-01-0.73	I/O	1.8V	DOWN	PM8550_GPIO_11	GPIO_11
	EN7	EN7	PM-8550-0-FOWPSP110B-MT-01-0.44	I/O	1.8V	DOWN	PM8550_GPIO_10	GPIO_10



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
E	EN8	EN8	PM-8550-0-FOWPSP110B-MT-01-0.34	I/O	1.8V	DOWN	PM8550_GPIO_09	GPIO_09
	EN9	EN9	PM-8550-0-FOWPSP110B-MT-01-0.72	I/O	1.8V	DOWN	PM8550_GPIO_08	GPIO_08
	EN10	EN10	PM-8550-0-FOWPSP110B-MT-01-0.86	I/O	1.8V	DOWN	PM8550_GPIO_04	GPIO_04
	EN11	EN11	PM-8550-0-FOWPSP110B-MT-01-0.77	I/O	1.8V	DOWN	PM8550_GPIO_03	GPIO_03
	EN12	EN12		G			GND	
	EP6	EP6	PM-8550-0-FOWPSP110B-MT-01-0.5	O	-		PM8550_AMUX_4	AMUX_4
	EQ5	EQ5	PM-8550-0-FOWPSP110B-MT-01-0.80	O	-		VREG_L15B_1P8	VREG_L15
	EQ6	EQ6	PMK8550.19	O	-		PMK_REFCLK5	CLK5_RF
	EN13	EN13	PM-8550-0-FOWPSP110B-MT-01-0.27	I	-		RGB_GREEN	RGB_G
	EN14	EN14	PM-8550-0-FOWPSP110B-MT-01-0.26	I	-		RGB_BLUE	RGB_B
	EM13	EM13	PM-8550-0-FOWPSP110B-MT-01-0.35	I	-		RGB_RED	RGB_R
	EA1	EA1		G			GND	
	EB4	EB4		G			GND	
	EB5	EB5	BB15	I/O	1.8V	DOWN	I2C_HUB0_SDA_GPIO206	GPIO_206
	EB6	EB6		G			GND	
	EB12	EB12	PM-8550-0-FOWPSP110B-MT-01-0.58	I/O			PM8550_GPIO_02	GPIO_02
	EB11	EB11		G			GND	



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
E	EB10	EB10		G			GND	
	EB9	EB9		G			GND	
	EB8	EB8		G			GND	
	EN3	EN3		G			GND	
	EN4	EN4		G			GND	
	EN5	EN5		G			GND	
	EP4	EP4		G			GND	
	EQ3	EQ3		G			GND	
	EK13	EK13	BB7	I	-		SLEEP_CLK	SLEEP_CLK
	EK14	EK14	PMK8550.12	O	-		FAULT_N	FAULT_N
	EC3	EC3		G			GND	
	EC2	EC2		G			GND	
	EC1	EC1		G			GND	
	EE1	EE1		G			GND	
	EE2	EE2		G			GND	
	EF1	EF1		G			GND	
	EF2	EF2	PMK8550.14	O	-		PMK_REFCLK9	CLK9_RF



Interface definition

Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
E	EG1	EG1		G			GND	
	EG2	EG2	PMK8550.2	O	-		PMK_REFCLK1	CLK1_RF
	EH1	EH1		G			GND	
	EH2	EH2	PMK8550.3	O	-		PMK_REFCLK7	CLK7_RF
	EJ1	EJ1		G			GND	
	EJ2	EJ2		G			GND	
	EK1	EK1		G			GND	
	EP1	EP1		G			GND	
	EP2	EP2	AC37	I/O	1.8V	DOWN	SM_GPIO_141	GPIO_141
	EP3	EP3	AB4	I/O	1.8V	DOWN	SM_GPIO_2	GPIO_2
	EQ1	EQ1	B28	I/O	1.8V	DOWN	SM_GPIO_6	GPIO_6
	EQ2	EQ2	AB36	I/O	1.8V	DOWN	SM_GPIO_138	GPIO_138
	EC12	EC12	AL3	I/O	1.8V	DOWN	SM_GPIO_62	GPIO_62
	EC13	EC13	AJ2	I/O	1.8V	DOWN	SM_GPIO_83	GPIO_83
	ED13	ED13	AK2	I/O	1.8V	DOWN	SM_GPIO_81	GPIO_81
	EC4	EC4		G			GND	
	EC5	EC5	PM-8550-0-FOWPSP110B-MT-01-0.58	I	-		PM_KYPD_VOLP_N	GPIO_06

Interface definition



Part	Pin	CORE-8550L Core board Pin definition	8550L Pin Number	Pin type	IO Power domain	IO Pull	Function for Floor(MB-JD4-QCS8550)	Default definition
E	EC6	EC6	BA22	I	-		PMIC_SPMI_CLK	SPMI0_CLK
	EC7	EC7	AY22	I/O	-		PMIC_SPMI_DATA	SPMI_DATA
	EC8	EC8	PM-8550-0-FOWPSP110B-MT-01-0.43	I	-		SDC2_CD_N	GPIO_12
	EC9	EC9	AT1	I	1.8V	DOWN	SM_PCIE1_WAKE_N	GPIO_99
	EC10	EC10	AN6/AP5	I	-		VREG_L3C_0P9	VDD_A_PCIE_1_CORE
	EC11	EC11						



FIREFLY TECHNOLOGY



Contact Us
(+86)18688117175



E-mail
global@t-firefly.com



Website
www.t-firefly.com



Address
Room 2101, Hongyu Building, #57 Zhongshan 4Rd, East District,
Zhongshan, Guangdong, China.