

IDO-SOM5301-S1 核心板规格书

1、产品概述

1.1 产品特点

1.2 产品图片

1.3 适用场景

2、硬件参数规格

2.1 基本参数

2.2 工作环境

2.3 系统支持

3、PCB 尺寸和电气参数

3.1 PCB尺寸

3.2 电气参数

3.2.1 主电源输入

3.2.2 IO电源选择

4、采购型号

5、引脚定义说明

5.1 核心板引脚示意图

5.2 核心板引脚列表



IDO-SOM5301-S1

核心板规格书

深圳触觉智能科技有限公司
www.industio.cn

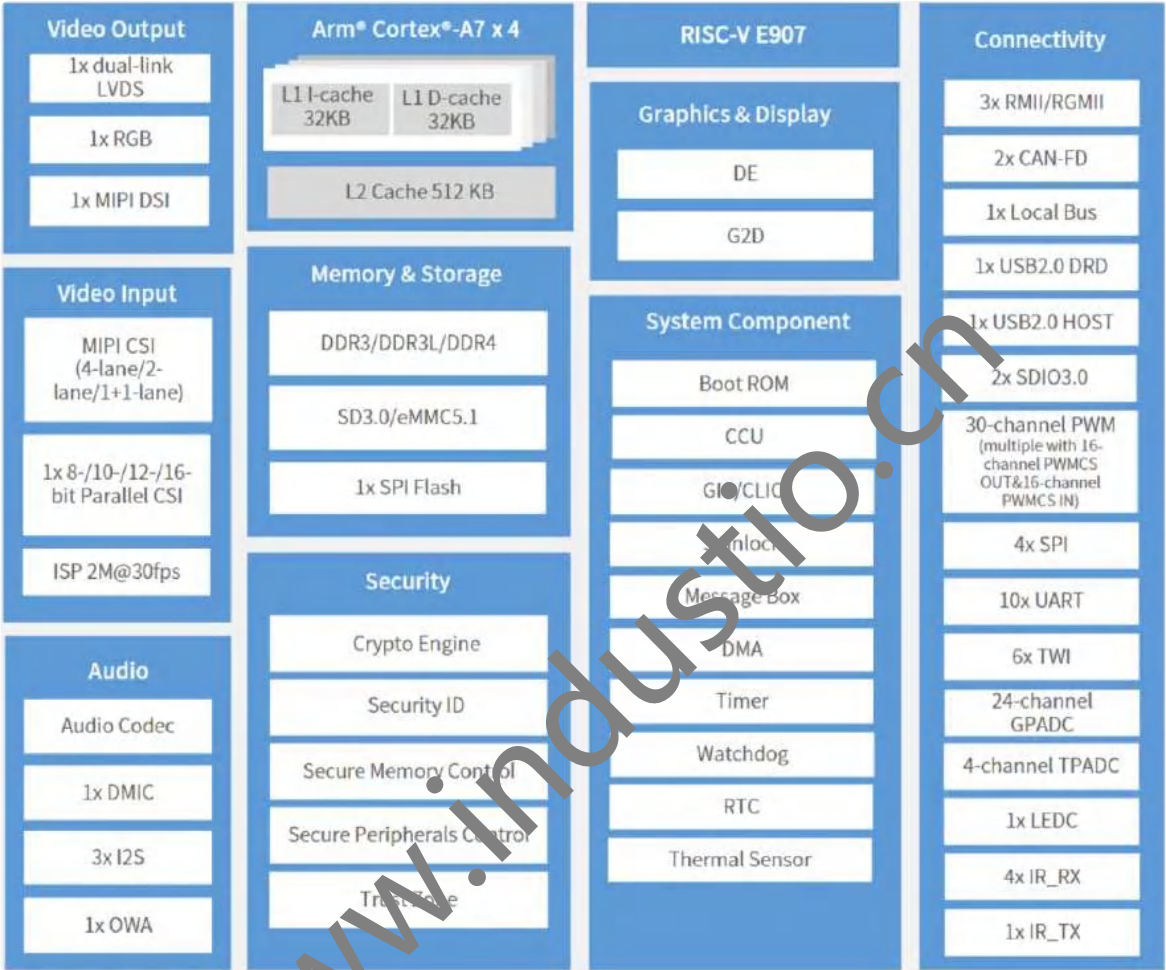
文档修订历史

版本	PCBA版本	修订内容	修订	审核	日期
S1.0	1.0	创建文档	WJY	IDO	2025/09/04

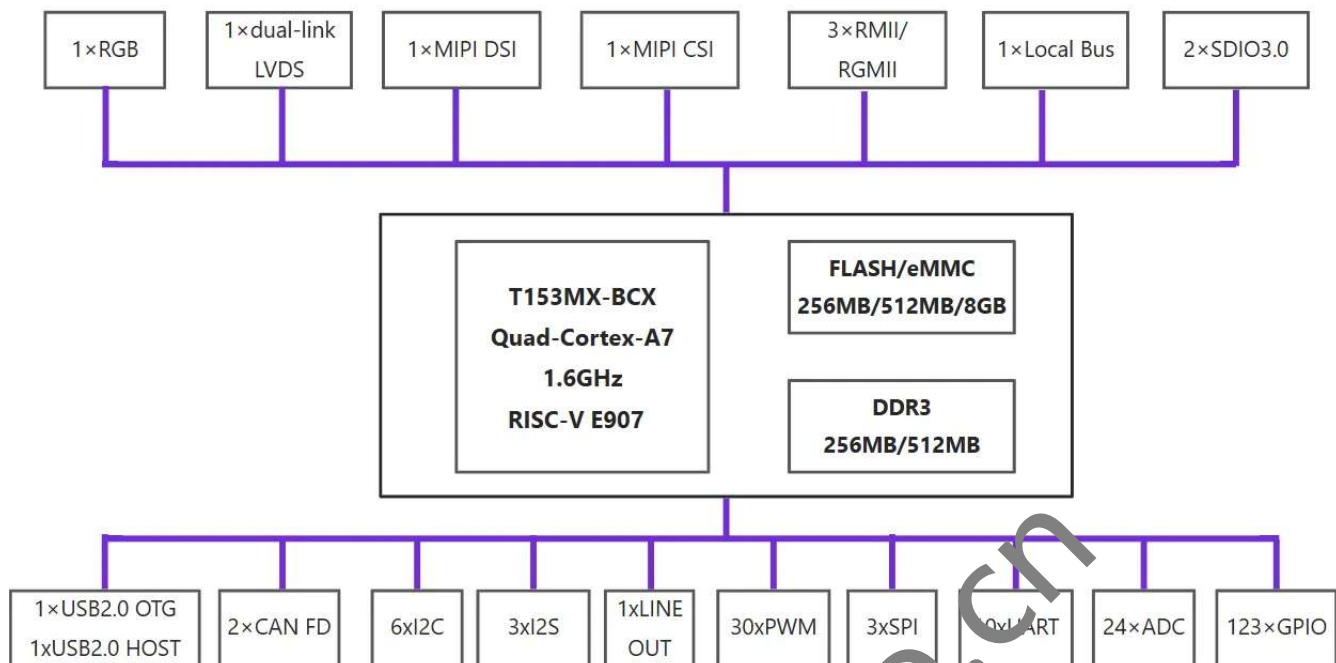
1、产品概述

IDO-SOM5301-S1是触觉智能基于全志科技T153四核ARM Cortex-A7 + RISC-V E907异构多核处理器设计的全国产工业核心板，Cortex-A7核心主频高达1.6GHz。

核心板引出3x GMAC、2x CAN FD、2x USB 2.0、10x UART、3x SPI、3x SMHC、Local Bus、LVDS Display、LCD Display、MIPI DSI、2x MIPI CSI、Parallel CSI等接口，内置2M@30fps ISP。适用于工业PLC、工业HMI、工业网关、数据采集、配网DTU等场景。T153 SoC 内部框图，如下图所示：



IDO-SOM5301-S1核心板进行了严格的电源完整性和信号完整性仿真设计，通过各项电磁兼容、温度冲击、高温高湿老化、长时间存储压力等测试，稳定可靠，批量供货。用户仅需设计外围电路即可快速实现项目的稳定量产，IDO-SOM5301-S1模块逻辑框图，如下图所示：



1.1 产品特点

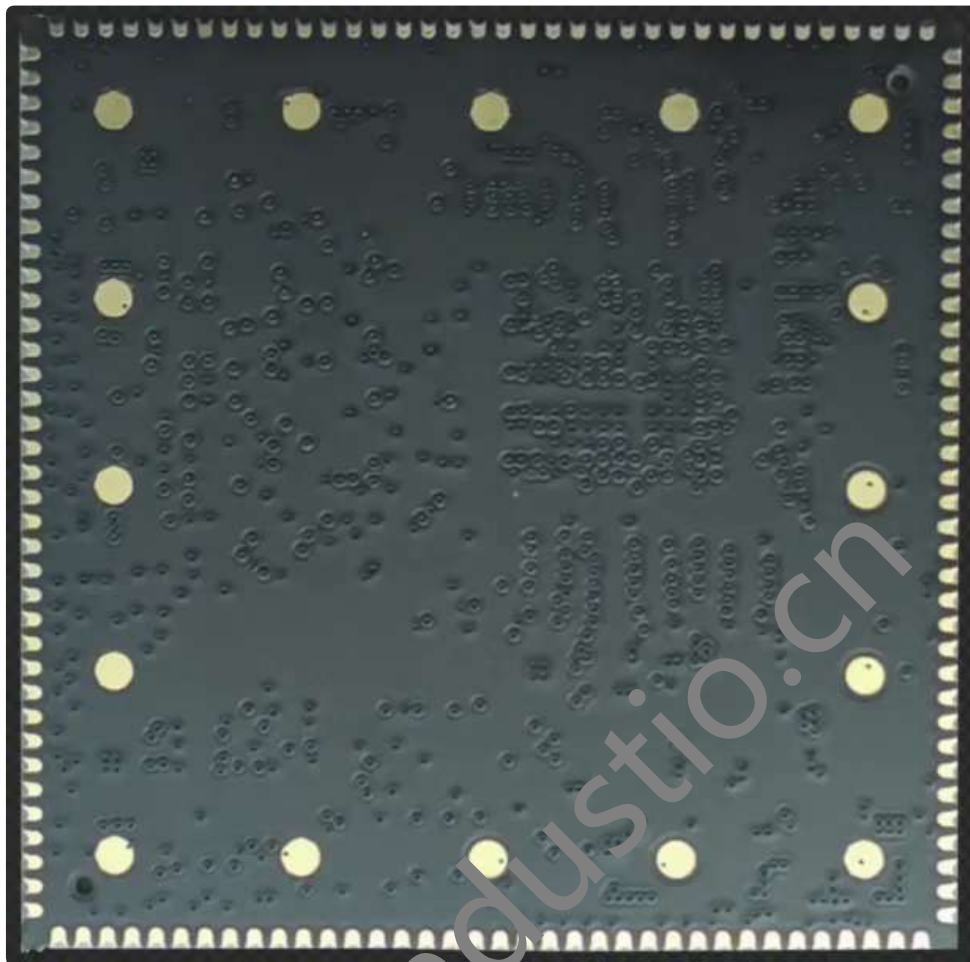
1. 处理器采用4核Arm Cortex-A7，频率最高1.6GHz；
2. 3.8*3.8CM超小尺寸邮票孔LCC+LGA封装160Pin，8层板沉金工艺；
3. 独特的叠层设计，PCB背面完整平面无走线，优异的EMC性能和稳定性。
4. -40℃~+85℃工业级工作温度。

1.2 产品图片

IDO-SOM5301-S1核心板正面，如下图所示：



IDO-SOM5301-S1核心板背面，如下图所示：



1.3 适用场景

IDO-SOM5301-S1 采用了面向工业应用的四核处理器T153，可广泛应用在适用于可编程逻辑控制器(PLC)、人机界面(HMI)、机器人、工业网关等应用等行业领域。

2、硬件参数规格

2.1 基本参数

基本参数如下图所示：

基本参数	
SOC	Allwinner T153MX-BCX
CPU	4x ARM Cortex-A7，主频高达1.6GHz
MCU	1x RISC-V E907，主频高达600MHz

ISP	2M@30fps（离线模式），1M@30fps（在线模式），支持RAW8/10/12
内存	256MB/512MB DDR3
存储	256MB/512MB SPI NAND FLASH 8GB eMMC eMMC 与 FLASH 二选一
硬件参数	
视频输入	1 × MIPI CSI Interface（支持4Lane/2Lane模式；up to 1.0 Gbit/s per lane）
视频输出	1 × RGB(up to 1920x1080@60fps) 1 × dual-link LVDS(up to 1920x1080@60fps) 1 × 4-lane MIPI DSI output（up to 1920x1080@60fps and 1.0 Gbit/s per lane）
音频	1 × LINEOUTP/N 3 × I2S 1 × 8-channel DMIC（up to 8 KHz-48 KHz sampling rate） 1 × OWA input
USB	1 × USB2.0 OTG 1 × USB2.0 Host
网络	3x RMII/RGMII
扩展接口	1x Local Bus, 8/16/32bit位宽 2 × SDIO 3.0 10 × UART, 波特率高达10Mbps 4 × SPI, 支持主从模式 2x CAN FD, 支持CAN 2.0A和CAN 2.0B协议, 通信速率高达10Mbps 6 × I2C 4x TPADC(Touch Panel ADC) 30 × PWM, 支持红外输入, 时钟计数 24x GPADC(General Purpose ADC), 12bit分辨率 123 × GPIO 注：各接口之间存在引脚复用关系。
其他	
核心板尺寸	38mm X 38mm X 3mm

接口类型	160Pin LCC（邮票孔144PIN）+LGA（背面焊盘16PIN）封装
PCB规格	1.5mm 多层PCB，沉金工艺

2.2 工作环境

工作环境如下表所示：

工作环境	
工作环境温度	-40℃~+85℃
工作环境湿度	0%~90% RH（无凝露）

2.3 系统支持

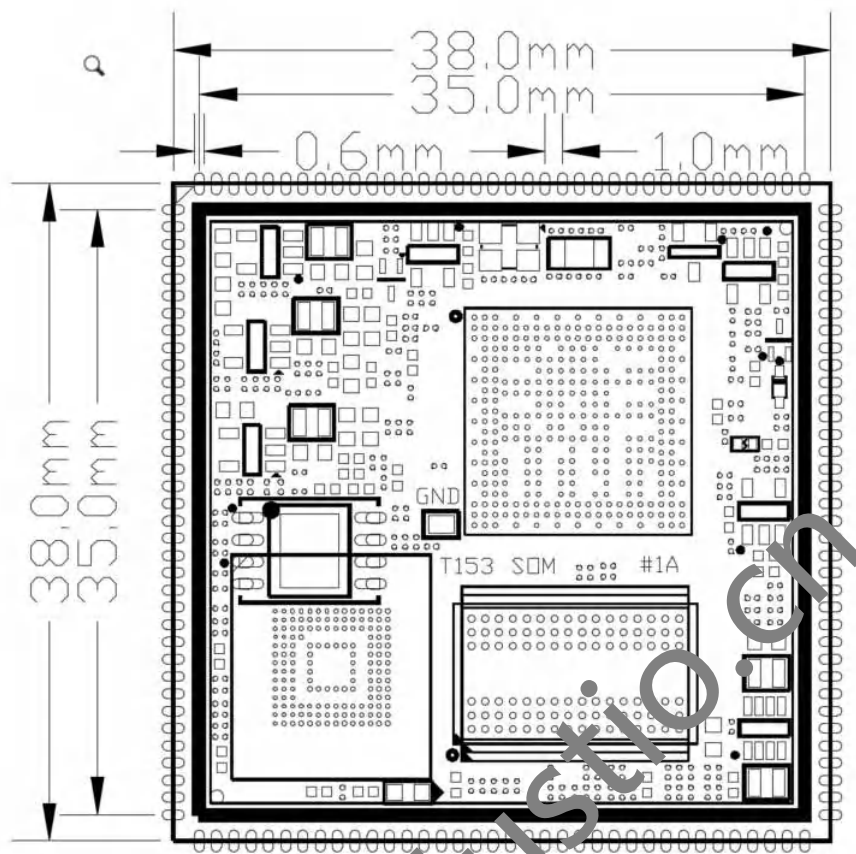
系统支持如下表所示：

序号	操作系统	支持	说明
1	Linux	✓	/

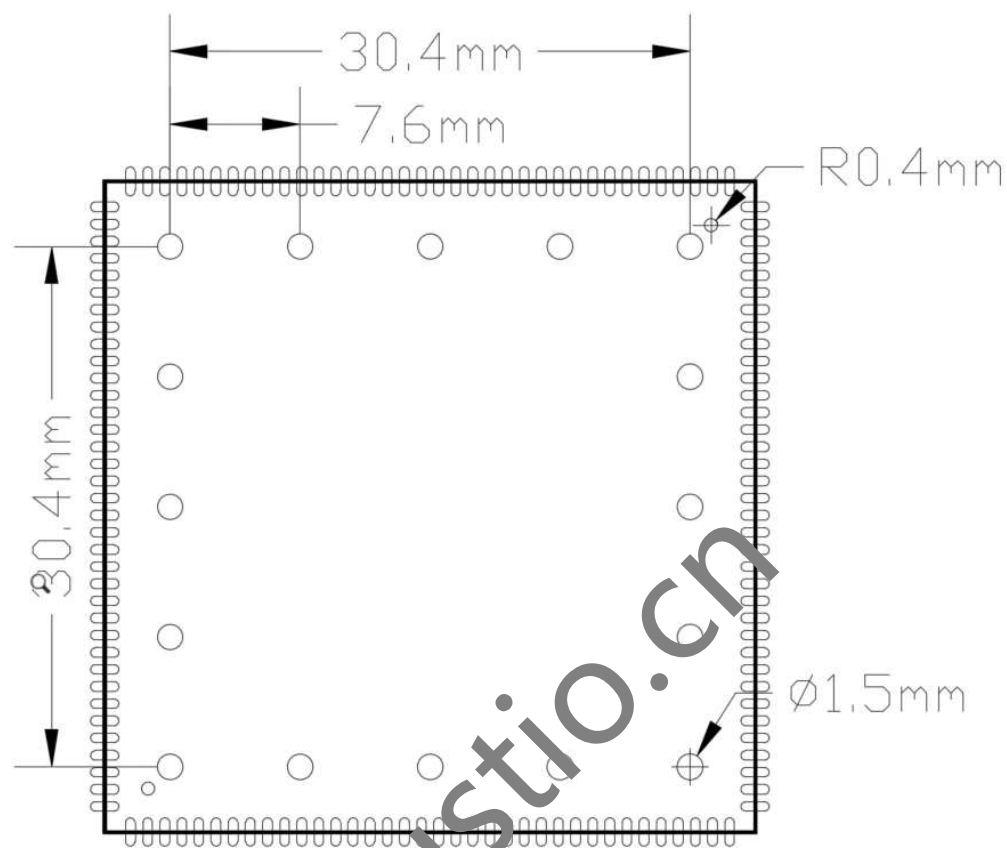
3、PCB 尺寸和电气参数

3.1 PCB尺寸

IDO-SOM5301-S1核心板正面尺寸，如下表所示：



IDO-SOM5301-S1核心板背面尺寸，如下图所示。



3.2 电气参数

3.2.1 主电源输入

电源输入如下表所示：

电源名称	最小电压	标称值	最大电压	峰值电流	待机电流	关机电流
VCC_5V-SYS	4.5V	5.0V	5.5V	5V/330mA	5V/5mA	<1mA

3.2.2 IO电源选择

网络名称	悬空	接地	备注
VCC-PG_SEL	VCC-PG电源域电压 3.3V	VCC-PG电源域电压 1.8V	VCC-PG电源域电压选择
VCC-PE/VCC-PK_SEL	VCC-PE与VCC-PK 电源域电压 3.3V	VCC-PE与VCC-PK 电源域电压 1.8V	VCC-PE与VCC-PK 电源域电压选择

4、采购型号

常规采购型号如下表所示:

采购型号	DDR3	FLASH/eMMC	标称工作温度
IDO-SOM5301-S1-D256N256-I	256MB	256MB	-40℃ ~ +85℃
IDO-SOM5301-S1-D512N512-I	512MB	512MB	-40℃ ~ +85℃
IDO-SOM5301-S1-D512E8-I	512MB	8GB	-40℃ ~ +85℃

5、引脚定义说明

5.1 核心板引脚示意图



5.2 核心板引脚列表

Num	Pin Name	BGA32 7 Ball	Signal Name		Power Rail	Comment
			Signal Name	Mode		
1	VCC_5V-SYS1		VCC_5V-SYS			
2	VCC_5V-SYS2		VCC_5V-SYS			
3	GND0		GND			
4	GND1		GND			
5	FEL	E2	FEL			
6	LINEOUTN	B12	LINEOUTN			
7	LINEOUTP	C12	LINEOUTP			
8	GND2		GND			
9	AP-CK32K-OUT	A11	AP-CK32K-OUT		1.8V	
10	PF3/SDC0-CMD/JTAG-DO/DMIC-DATA0/IR3-RX/PF-CS0/RJTAG-DO/IR3-RX/PF-EINT3	C6	PF3		1.8V	
			SDC0-CMD	Default		
			JTAG-DO			
			DMIC-DATA0			
			SPI3-CS0			
			RJTAG-DO			
			IR3-RX			
			PF-EINT3			
11	PF5/SDC0-D2/JTAG-CK/DMIC-DATA2/SPI3-MISO/RJTAG-CK/PF-EINT5	B5	PF5		1.8V	
			SDC0-D2	Default		
			JTAG-CK			

			DMIC-DATA2			
			SPI3-MISO			
			RJTAG-CK			
			PF-EINT5			
12	PF4/SDC0-D3/UART0-RX/DMIC-DATA1/SPI3-MOSI/IR-TX/PF-EINT4	A5	PF4		Default 1.8V	
			SDC0-D3			
			UART0-RX			
			DMIC-DATA1			
			SPI3-MOSI			
			IR-TX			
			PF-EINT4			
13	PF1/SDC0-D0/JTAG-DI/UART1-RX/RJTAG-DI/IR1-RX/LBUS-DRQ1/PF-EINT1	C7	PF1		Default 1.8V	
			SDC0-D0			
			JTAG-DI			
			UART1-RX			
			RJTAG-DI			
			IR1-RX			
			LBUS-DRQ1			
14	PF2/SDC0-CLK/UART0-TX/DMIC-CLK/SPI3-CLK/IR2-RX/PF-EINT2	B6	PF2		Default 1.8V	
			SDC0-CLK			
			UART0-TX			
			DMIC-CLK			

			SPI3-CLK			
			IR2-RX			
			PF-EINT2			
15	PF0/SDC0-D1/JTAG-MS/UART1-TX/RJTAG-MS/IR0-RX/LBUS-DRQ0/PF-EINT0	B7	PF0		1.8V	
			SDC0-D1	Default		
			JTAG-MS			
			UART1-TX			
			RJTAG-MS			
			IR0-RX			
			LBUS-DRQ0			
			PF-EINT0			
16	PF6/DMIC-DATA3/PF-EINT6	A7	PF6		1.8V	
			DMIC-DATA3	Default		
			PF-EINT6			
17	PJ0/PWM2-0/I2S2-MCLK/TWI4-SCK/RGMII0-RXD1/RMII0-RXD1/DMIC-CLK/UART5-TX/PJ-EINT0	C2	PJ0		3.3V	
			PWM2-0			
			I2S2-MCLK			
			TWI4-SCK			
			RGMII0-RXD1			
			RMII0-RXD1	Default		
			DMIC-CLK			
			UART5-TX			
			PJ-EINT0			

18	PJ1/PWM2-1/I2S2-BCLK/TWI4-SDA/RGMII0-RXD0/RMII0-RXD0/DMIC-DATA0/UART5-RX/PJ-EINT1	C1	PJ1		3.3V	
			PWM2-1			
			I2S2-BCLK			
			TWI4-SDA			
			RGMII0-RXD0			
			RMII0-RXD0	Default		
			DMIC-DATA0			
			UART5-RX			
			PJ-EINT1			
19	PJ2/PWM2-2/I2S2-LRCK/RGMII0-RXCTL/RMII0-CRS-DV/DMIC-DATA1/UART5-RTS/PJ-EINT2	C1	PJ2		3.3V	
			PWM2-2			
			I2S2-LRCK			
			RGMII0-RXCTL			
			RMII0-CRS-DV	Default		
			DMIC-DATA1			
			UART5-RTS			
			PJ-EINT2			
20	PJ3/PWM2-3/I2S2-DOUT0/I2S2-DIN1/RGMII0-CLKIN/RMII0-RXER/DMIC-DATA2/UART5-CTS/PJ-EINT3	B1	PJ3		3.3V	
			PWM2-3			
			I2S2-DOUT0			
			I2S2-DIN1			
			RGMII0-CLKIN			
			RMII0-RXER	Default		

			DMIC-DATA2		
			UART5-CTS		
			PJ-EINT3		
21	PJ4/PWM2-4/I2S2-DIN0/I2S2-DOUT1/RGMII0-TXD1/RMII0-TXD1/DMIC-DATA3/UART7-TX/PJ-EINT4	A3	PJ4		3.3V
			PWM2-4		
			I2S2-DIN0		
			I2S2-DOUT1		
			RGMII0-TXD1		
			RMII0-TXD1	Default	
			DMIC-DATA3		
			UART7-TX		
			PJ-EINT4		
22	PJ5/PWM2-5/I2S2-DIN2/I2S2-DOUT2/RGMII0-TXD0/RMII0-TXD0/UART7-RX/PJ-EINT5	B3	PJ5		3.3V
			PWM2-5		
			I2S2-DIN2		
			I2S2-DOUT2		
			RGMII0-TXD0		
			RMII0-TXD0	Default	
			UART7-RX		
			PJ-EINT5		
23	PJ6/PWM2-6/I2S2-DIN3/I2S2-DOUT3/RGMII0-TXCK/RMII0-TXCK/UART7-RTS/PJ-EINT6	A2	PJ6		3.3V
			PWM2-6		
			I2S2-DIN3		
			I2S2-DOUT3		

			RGMII0-TXCK			
			RMII0-TXCK	Default		
			UART7-RTS			
			PJ-EINT6			
24	PJ7/PWM2-7/I2S1-MCLK/RGMII0-TXCTL/RMII0-TXEN/UART7-CTS/PJ-EINT7	B2	PJ7		3.3V	
			PWM2-7			
			I2S1-MCLK			
			RGMII0-TXCTL			
			RMII0-TXEN	Default		
			UART7-CTS			
			PJ-EINT7			
25	PJ8/PWM2-8/I2S1-BCLK/LEDC/RGMII0-MDC/UART2-TX/PJ-EINT8	B4	PJ8		3.3V	
			PWM2-8			
			I2S1-BCLK			
			LEDC			
			RGMII0-MDC	Default		
			UART2-TX			
			PJ-EINT8			
26	PJ10/PWM2-10/I2S1-DOUT0/I2S1-DIN1/RGMII0-EPHY-25/50M/UART2-RTS/PJ-EINT10	E1	PJ10	Default	3.3V	
			PWM2-10			
			I2S1-DOUT0			
			I2S1-DIN1			
			RGMII0-EPHY-25			

			50M		
			UART2-RTS		
			PJ-EINT10		
27	PJ13/PWM2-13/CAN0-RX0/IR1-RX/RGMII0-RXCK/RMII0-NUL/TWI0-SDA/UART9-RX/PJ-EINT13	D3	PJ13	Default	3.3V
			PWM2-13		
			CAN0-RX0		
			IR1-RX		
			RGMII0-RXCK		
			RMII0-NUL		
			TWI0-SDA		
			UART9-RX		
			PJ-EINT13		
28	PJ12/PWM2-12/CAN0-TX0/IR0-RX/RGMII0-RXD2/RMII0-NUL/TWI0-SCK/UART9-TX/PJ-EINT12	D2	PJ12	Default	3.3V
			PWM2-12		
			CAN0-TX0		
			IR0-RX		
			RGMII0-RXD2		
			RMII0-NUL		
			TWI0-SCK		
			UART9-TX		
			PJ-EINT12		
29	PJ9/PWM2-9/I2S1-LRCK/IR-TX/RGMII0-MDIO/UART2-RX/PJ-EINT9	C4	PJ9		3.3V
			PWM2-9		
			I2S1-LRCK		

			IR-TX			
			RGMII0-MDIO	Default		
			UART2-RX			
			PJ-EINT9			
30	PJ14/CAN1-TX0/IR2-RX/RGMII0-TXD3/RMII0-NULL/TWI5-SCK/UART9-RTS/PJ-EINT14	1A2	PJ14	Default	3.3V	
			CAN1-TX0			
			IR2-RX			
			RGMII0-TXD3			
			RMII0-NULL			
			TWI5-SCK			
			UART9-RTS			
			PJ-EINT14			
31	PJ15/CAN1-RX0/IR3-RX/RGMII0-TXD2/RMII0-NULL/TWI5-SDA/UART9-CTS/PJ-EINT15	1A1	PJ15	Default	3.3V	
			CAN1-RX0			
			IR3-RX			
			RGMII0-TXD2			
			RMII0-NULL			
			TWI5-SDA			
			UART9-CTS			
			PJ-EINT15			
32	PJ11/PWM2-11/I2S1-DIN0/I2S1-DOU1/RGMII0-RXD3/RMII0-NULL/UART2-CTS/PJ-EINT11	E3	PJ11	Default	3.3V	
			PWM2-11			
			I2S1-DIN0			

			I2S1-DOUT1		
			RGMII0-RXD3		
			RMII0-NULL		
			UART2-CTS		
			PJ-EINT11		
33	PB2/UART2-RTS/SPI3-MOSI/JTAG-DO/TWI2-SCK/RJTAG-DO/RGMII2-RXCTL/RMII2-CRS-DV/PB-EINT2	G2	PB2	Default	3.3V
			UART2-RTS		
			SPI3-MOSI		
			JTAG-DO		
			TWI2-SCK		
			RJTAG-DO		
			RGMII2-RXCTL		
			RMII2-CRS-DV		
			PB-EINT2		
34	PB3/UART2-CTS/SPI3-MISO/JTAG-DI/TWI2-SDA/RJTAG-DI/RGMII2-CLKIN/RMII2-RXER/PB-EINT3	G1	PB3	Default	3.3V
			UART2-CTS		
			SPI3-MISO		
			JTAG-DI		
			TWI2-SDA		
			RJTAG-DI		
			RGMII2-CLKIN		
			RMII2-RXER		
			PB-EINT3		

35	PB1/UART2-RX/SPI3-CLK/JTAG-CK/PWM0-7/RJTAG-CK/RGMII2-RXD0/RMII2-RXD0/PB-EINT1	G3	PB1	Default	3.3V	
			UART2-RX			
			SPI3-CLK			
			JTAG-CK			
			PWM0-7			
			RJTAG-CK			
			RGMII2-RXD0			
			RMII2-RXD0			
			PB-EINT1			
36	PB0/UART2-TX/SPI3-CS0/JTAG-MS/PWM0-6/RJTAG-MS/RGMII2-RXD1/RMII2-RXD1/PB-EINT0	H2	PB0	Default	3.3V	
			UART2-TX			
			SPI3-CS0			
			JTAG-MS			
			PWM0-6			
			RJTAG-MS			
			RGMII2-RXD1			
			RMII2-RXD1			
			PB-EINT0			
37	PB7/OWA-IN/I2S0-DOUT0/I2S0-DIN1/PWM1-3/CAN1-TX0/UART8-CTS/TWI0-SDA/RGMII2-TXCTL/RMII2-TXEN/PB-EINT7	J3	PB7	Default	3.3V	
			OWA-IN			
			I2S0-DOUT0			
			I2S0-DIN1			
			PWM1-3			

			CAN1-TX0			
			UART8-CTS			
			TWI0-SDA			
			RGMII2-TXCTL			
			RMII2-TXEN			
			PB-EINT7			
38	PB4/TWI1-SCK/I2S0-MCLK/SPI3-CS1/PWM1-0/IR0-RX/UART8-TX/RGMII2-TXD1/RMII2-TXD1/PB-EINT4	J2	PB4	Default	3.3V	
			TWI1-SCK			
			I2S0-MCLK			
			SPI3-CS1			
			PWM1-0			
			IR0-RX			
			UART8-TX			
			RGMII2-TXD1			
			RMII2-TXD1			
			PB-EINT4			
39	PB5/TWI1-SDA/I2S0-BCLK/SPI3-CS2/PWM1-1/IR1-RX/UART8-RX/RGMII2-TXD0/RMII2-TXD0/PB-EINT5	J1	PB5	Default	3.3V	
			TWI1-SDA			
			I2S0-BCLK			
			SPI3-CS2			
			PWM1-1			
			IR1-RX			
			UART8-RX			
			RGMII2-TXD0			

			RMII2-TXD0		
			PB-EINT5		
40	PB6/I2S0-LRCK/PWM1-2/IR-TX/UART8-RTS/TWI0-SCK/RGMII2-TXCK/RMII2-TXCK/PB-EINT6	H3	PB6	Default	3.3V
			I2S0-LRCK		
			PWM1-2		
			IR-TX		
			UART8-RTS		
			TWI0-SCK		
			RGMII2-TXCK		
			RMII2-TXCK		
			PB-EINT6		
			PB9		
41	PB9/UART0-TX/I2S0-DIN2/I2S0-DOUT2/TWI0-SCK/UART8-DSR/PB-EINT9	K3	UART0-TX	Default	3.3V
			I2S0-DIN2		
			I2S0-DOUT2		
			TWI0-SCK		
			UART8-DSR		
			PB-EINT9		
42	PB10/UART0-RX/I2S0-DIN3/I2S0-DOUT3/PWM0-1/TWI0-SDA/UART8-DTR/PB-EINT10	L1	PB10		3.3V
			UART0-RX	Default	
			I2S0-DIN3		
			I2S0-DOUT3		
			PWM0-1		

			TWI0-SDA		
			UART8-DTR		
			PB-EINT10		
43	PB11/TWI5-SCK/UART7-RTS/SPI3-CS0/PWM0-2/WATCHDOG-SIG/UART8-RI/RGMII2-MDC/PB-EINT11	F3	PB11	Default	3.3V
			TWI5-SCK		
			UART7-RTS		
			SPI3-CS0		
			PWM0-2		
			WATCHDOG-SIG		
			UART8-RI		
			RGMII2-MDC		
			PB-EINT11		
44	PB12/TWI5-SDA/UART7-CTS/SPI3-CLK/PWM0-3/PLL-LOCK-DBG/RGMII2-MDIO/PB-EINT12	F2	PB12	Default	3.3V
			TWI5-SDA		
			UART7-CTS		
			SPI3-CLK		
			PWM0-3		
			PLL-LOCK-DBG		
			RGMII2-MDIO		
			PB-EINT12		
45	PB13/TWI4-SCK/UART7-TX/SPI3-MOSI/PWM0-4/IR2-RX/CLK-FANOUT0/RGMII2-EPHY-25/50M/PB-EINT13	1B1	PB13	Default	3.3V
			TWI4-SCK		
			UART7-TX		

			SPI3-MOSI			
			PWM0-4			
			IR2-RX			
			CLK-FANOUT0			
			RGMII2-EPHY-25			
			50M			
			PB-EINT13			
46	PB14/TWI4-SDA/UART7- RX/SPI3-MISO/PWM0-5/IR3- RX/CLK-FANOUT1/PB- EINT14/PB-EINT14	1B2	PB14	Default	3.3V	
			TWI4-SDA	It		
			UART7-RX			
			SPI3-MISO			
			PWM0-5			
			IR3-RX			
			CLK-FANOUT1			
			PB-EINT14			
			PB-EINT14			
47	GND		GND			
48	PG6/UART1-TX/TWI4- SCK/UART9-CTS/RGMII1- RXD1/RMII1-RXD1/I2S2- MCLK/PG-EINT6	M3	PG6		VCC	
			UART1-TX		-PG	
			TWI4-SCK			
			UART9-CTS			
			RGMII1-RXD1	Default		
			RMII1-RXD1	It		
			I2S2-MCLK			

			PG-EINT6			
49	PG7/UART1-RX/TWI4-SDA/UART9-RTS/RGMII1-RXD0/RMII1-RXD0/I2S2-BCLK/PG-EINT7	M2	PG7		VCC -PG	
			UART1-RX			
			TWI4-SDA			
			UART9-RTS			
			RGMII1-RXD0	Default		
			RMII1-RXD0			
			I2S2-BCLK			
			PG-EINT7			
50	PG0/SDC1-CLK/UART8-TX/RGMII1-RXD3/RMII1-NULL/PG-EINT0	N3	PG0		VCC -PG	
			SDC1-CLK			
			UART8-TX			
			RGMII1-RXD3	Default		
			RMII1-NULL			
			PG-EINT0			
51	PG4/SDC1-D2/CAN0-TX0/RGMII1-TXD2/RMII1-NULL/PG-EINT4	R1	PG4		VCC -PG	
			SDC1-D2			
			CAN0-TX0			
			RGMII1-TXD2	Default		
			RMII1-NULL			
			PG-EINT4			
52	PG3/SDC1-D1/UART8-CTS/RGMII1-TXD3/RMII1-NULL/PG-EINT3	N1	PG3		VCC -PG	
			SDC1-D1			

			UART8-CTS			
			RGMII1-TXD3	Default		
			RMII1-NULL			
			PG-EINT3			
53	PG5/SDC1-D3/CAN0-RX0/RGMII1-EPHY-25/50M/PG-EINT5	P3	PG5	Default	VCC-PG	
			SDC1-D3			
			CAN0-RX0			
			RGMII1-EPHY-25			
			50M			
			PG-EINT5			
54	PG1/SDC1-CMD/UART8-RX/RGMII1-RXD2/RMII1-NULL/PG-EINT1	P2	PG1		VCC-PG	
			SDC1-CMD			
			UART8-RX			
			RGMII1-RXD2	Default		
			RMII1-NULL			
			PG-EINT1			
55	PG2/SDC1-D0/UART8-RTS/RGMII1-RXCK/RMII1-NULL/PG-EINT2	N2	PG2		VCC-PG	
			SDC1-D0			
			UART8-RTS			
			RGMII1-RXCK	Default		
			RMII1-NULL			
			PG-EINT2			
56	PG8/UART1-RTS/TWI5-	L3	PG8		VCC	

	SCK/UART9-TX/RGMII1-RXCTL/RMII1-CRS-DV/I2S2-LRCK/PG-EINT8		UART1-RTS		-PG	
			TWI5-SCK			
			UART9-TX			
			RGMII1-RXCTL	Default		
			RMII1-CRS-DV			
			I2S2-LRCK			
			PG-EINT8			
57	PG9/UART1-CTS/TWI5-SDA/UART9-RX/RGMII1-CLKIN/RMII1-RXER/I2S2-DOUT0/I2S2-DIN1/PG-EINT9	1J2	PG9		VCC -PG	
			UART1-CTS			
			TWI5-SDA			
			UART9-RX			
			RGMII1-CLKIN	Default		
			RMII1-RXER			
			I2S2-DOUT0			
			I2S2-DIN1			
58	PG12/UART4-RTS/I2S1-LRCK/RGMII1-TXCK/RMII1-TXCK/DMIC-DATA0/PG-EINT12	1G3	PG12		VCC -PG	
			UART4-RTS			
			I2S1-LRCK			
			RGMII1-TXCK	Default		
			RMII1-TXCK			
			DMIC-DATA0			
			PG-EINT12			

59	PG13/UART4-CTS/I2S1-DOUT0/I2S1-DIN1/RGMII1-TXCTL/RMII1-TXEN/DMIC-DATA1/PG-EINT13	1H3	PG13		1.8V/ 3.3V	
			UART4-CTS			
			I2S1-DOUT0			
			I2S1-DIN1			
			RGMII1-TXCTL	Default		
			RMII1-TXEN			
			DMIC-DATA1			
			PG-EINT13			
60	PG10/UART4-TX/I2S1-MCLK/TWI2-SCK/RGMII1-TXD1/RMII1-TXD1/I2S2-DIN0/I2S2-DOUT1/PG-EINT10	1H2	PG10		VCC -PG	
			UART4-TX			
			I2S1-MCLK			
			TWI2-SCK			
			RGMII1-TXD1	Default		
			RMII1-TXD1			
			I2S2-DIN0			
			I2S2-DOUT1			
61	PG11/UART4-RX/I2S1-BCLK/TWI2-SDA/RGMII1-TXD0/RMII1-TXD0/DMIC-CLK/PG-EINT11	1J3	PG11		VCC -PG	
			UART4-RX			
			I2S1-BCLK			
			TWI2-SDA			
			RGMII1-TXD0	Default		
			RMII1-TXD0			

			DMIC-CLK			
			PG-EINT11			
62	PG15/CAN1-RX0/RGMII1-MDIO/DMIC-DATA3/LBUS-DRQ1/PG-EINT15	1G1	PG15			
			CAN1-RX0			
			RGMII1-MDIO	Default	VCC-PG	
			DMIC-DATA3			
			LBUS-DRQ1			
			PG-EINT15			
63	PG14/CAN1-TX0/I2S1-DIN0/I2S1-DOUT1/RGMII1-MDC/DMIC-DATA2/LBUS-DRQ0/PG-EINT14	1G2	PG14			
			CAN1-TX0			
			I2S1-DIN0			
			I2S1-DOUT1			
			RGMII1-MDC	Default	VCC-PG	
			DMIC-DATA2			
			LBUS-DRQ0			
			PG-EINT14			
64	GND4		GND			
65	PD23/PWM2-7/UART3-CTS/TWI4-SDA/TWI0-SDA/CSI1-XHS/LBUS-DRQ1/PWMCS-I7/PD-EINT23	1J13	PD23	Default	3.3V	
			PWM2-7			
			UART3-CTS			
			TWI4-SDA			
			TWI0-SDA			
			CSI1-XHS			

	I4/RGMII2-TXD3/RMII2-NULL/PD-EINT20		LCD-HSYNC			
			PWM2-4			
			UART3-TX			
			TWI5-SCK			
			LBUS-WR			
			PWMCS-I4			
			RGMII2-TXD3			
			RMII2-NULL			
			PD-EINT20			
69	PD17/LCD-D23/LVDS1-CKN/PWM2-1/UART3-CTS/UART8-RI/LBUS-LD5/PWMCS-I1/RGMII2-RXD3/RMII2-NULL/PD-EINT17	U19	PD17	Default	3.3V	
			LCD-D23			
			LVDS1-CKN			
			PWM2-1			
			UART3-CTS			
			UART8-RI			
			LBUS-LD5			
			PWMCS-I1			
			RGMII2-RXD3			
			RMII2-NULL			
			PD-EINT17			
70	PD16/LCD-D22/LVDS1-CKP/PWM2-0/UART3-RTS/UART8-DTR/LBUS-LD4/PWMCS-I0/RGMII2-EPHY-25/50M/PD-EINT16	U20	PD16	Default	3.3V	
			LCD-D22			
			LVDS1-CKP			
			PWM2-0			

			UART3-RTS			
			UART8-DTR			
			LBUS-LD4			
			PWMCS-I0			
			RGMII2-EPHY-25			
			50M			
			PD-EINT16			
71	PD18/LCD-CLK/LVDS1-D3P/TWI5-SCK/PWM2-2/CAN0-TX0/LBUS-LD6/PWMCS-I2/RGMII2-RXD2/RMII2-NULL/PD-EINT18	T19	PD18	Default	3.3V	
			LCD-CLK			
			LVDS1-D3P			
			TWI5-SCK			
			PWM2-2			
			CAN0-TX0			
			LBUS-LD6			
			PWMCS-I2			
			RGMII2-RXD2			
			RMII2-NULL			
			PD-EINT18			
72	PD19/LCD-DE/LVDS1-D3N/TWI5-SDA/PWM2-3/CAN0-RX0/LBUS-LD7/PWMCS-I3/RGMII2-RXCK/RMII2-NULL/PD-EINT19	U21	PD19	Default	3.3V	
			LCD-DE			
			LVDS1-D3N			
			TWI5-SDA			
			PWM2-3			
			CAN0-RX0			

				LBUS-LD7			
				PWMCS-I3			
				RGMII2-RXCK			
				RMII2-NULL			
				PD-EINT19			
73	PD15/LCD-D21/LVDS1-D2N/SPI1-WP<DBI-TE>/PWM1-7/UART3-RX/UART8-DSR/LBUS-LD3/PWMCS-OF/PD-EINT15	V19		PD15	Default	3.3V	
				LCD-D21			
				LVDS1-D2N			
				SPI1-WP<DBI-TE>			
				PWM1-7			
				UART3-RX			
				UART8-DSR			
				LBUS-LD3			
				PWMCS-OF			
				PD-EINT15			
74	PD14/LCD-D20/LVDS1-D2P/SPI1-HOLD<DBI-DCX/DBI-WRX>/PWM1-6/UART3-TX/UART8-DCD/LBUS-LD2/PWMCS-OE/PD-EINT14	V20		PD14	Default	3.3V	
				LCD-D20			
				LVDS1-D2P			
				SPI1-HOLD<DBI-DCX			
				DBI-WRX>			
				PWM1-6			
				UART3-TX			
				UART8-DCD			
				LBUS-LD2			

			PWMCS-OE		
			PD-EINT14		
75	PD13/LCD-D19/LVDS1-D1N/SPI1-MISO<DBI-SDI/DBI-TE/DBI-DCX>/PWM1-5/DMIC-DATA3/UART8-CTS/LBUS-LD1/PWMCS-OD/PD-EINT13	W20	PD13	Default	3.3V
			LCD-D19		
			LVDS1-D1N		
			SPI1-MISO<DBI-SDI		
			DBI-TE		
			DBI-DCX>		
			PWM1-5		
			DMIC-DATA3		
			UART8-CTS		
			LBUS-LD1		
			PWMCS-OD		
			PD-EINT13		
77	PD11/LCD-D15/LVDS1-D0N/SPI1-CLK<DBI-SCLK>/PWM1-3/DMIC-DATA1/UART8-RX/LBUS-LD31/PWMCS-OB/LBUS-READY0/PD-EINT11	Y20	PD11	Default	3.3V
			LCD-D15		
			LVDS1-D0N		
			SPI1-CLK<DBI-SCLK>		
			PWM1-3		
			DMIC-DATA1		
			UART8-RX		
			LBUS-LD31		
			PWMCS-OB		

			LBUS-READY0			
			PD-EINT11			
78	PD10/LCD-D14/LVDS1-D0P/SPI1-CS0<DBI-CSX>/PWM1-2/DMIC-DATA0/UART8-TX/LBUS-LD30/PWMCS-OA/LBUS-READY1/PD-EINT10	Y21	PD10	Default		
			LCD-D14			
			LVDS1-D0P			
			SPI1-CS0<DBI-CSX>			
			PWM1-2			
			DMIC-DATA0		3.3V	
			UART8-TX			
			LBUS-LD30			
			PWMCS-OA			
			LBUS-READY1			
			PD-EINT10			
79	GND5		GND		3.3V	
80	PD1/LCD-D3/LVDS0-D0N/DSI-D0N/PWM0-1/UART2-RTS/UART9-RX/LBUS-LD21/PWMCS-O1/RGMII2-RXD0/RMII2-RXD0/PD-EINT1	R19	PD1	Default	3.3V	
			LCD-D3			
			LVDS0-D0N			
			DSI-D0N			
			PWM0-1			
			UART2-RTS			
			UART9-RX			
			LBUS-LD21			
			PWMCS-O1			
			RGMII2-RXD0			

			RMII2-RXD0		
			PD-EINT1		
81	PD0/LCD-D2/LVDS0-D0P/DSI-D0P/PWM0-0/UART2-CTS/UART9-TX/LBUS-LD20/PWMCS-00/RGMII2-RXD1/RMII2-RXD1/PD-EINT0	R20	PD0	Default	3.3V
			LCD-D2		
			LVDS0-D0P		
			DSI-D0P		
			PWM0-0		
			UART2-CTS		
			UART9-TX		
			LBUS-LD20		
			PWMCS-00		
			RGMII2-RXD1		
			RMII2-RXD1		
			PD-EINT0		
82	PD5/LCD-D7/LVDS0-D2N/DSI-CKN/PWM0-5/UART4-RTS/UART6-RX/LBUS-LD25/PWMCS-05/LBUS-CS3/RGMII2-TXD0/RMII2-TXD0/PD-EINT5	P20	PD5	Default	3.3V
			LCD-D7		
			LVDS0-D2N		
			DSI-CKN		
			PWM0-5		
			UART4-RTS		
			UART6-RX		
			LBUS-LD25		
			PWMCS-05		
			LBUS-CS3		

			RGMII2-TXD0			
			RMII2-TXD0			
			PD-EINT5			
83	PD4/LCD-D6/LVDS0-D2P/DSI-CKP/PWM0-4/UART4-CTS/UART6-TX/LBUS-LD24/PWMCS-O4/RGMII2-TXD1/RMII2-TXD1/PD-EINT4	N19	PD4	Default	3.3V	
			LCD-D6			
			LVDS0-D2P			
			DSI-CKP			
			PWM0-4			
			UART4-CTS			
			UART6-TX			
			LBUS-LD24			
			PWMCS-O4			
			RGMII2-TXD1			
			RMII2-TXD1			
			PD-EINT4			
84	PD3/LCD-D5/LVDS0-D1N/DSI-D1N/PWM0-3/UART2-RX/UART9-CTS/LBUS-LD23/PWMCS-O3/RGMII2-CLKIN/RMII2-RXER/PD-EINT3	R21	PD3	Default	3.3V	
			LCD-D5			
			LVDS0-D1N			
			DSI-D1N			
			PWM0-3			
			UART2-RX			
			UART9-CTS			
			LBUS-LD23			
			PWMCS-O3			

			RGMII2-CLKIN		
			RMII2-RXER		
			PD-EINT3		
85	PD2/LCD-D4/LVDS0-D1P/DSI-D1P/PWM0-2/UART2-TX/UART9-RTS/LBUS-LD22/PWMCS-O2/RGMII2-RXCTL/RMII2-CRS-DV/PD-EINT2	P19	PD2	Default	3.3V
			LCD-D4		
			LVDS0-D1P		
			DSI-D1P		
			PWM0-2		
			UART2-TX		
			UART9-RTS		
			LBUS-LD22		
			PWMCS-O2		
			RGMII2-RXCTL		
			RMII2-CRS-DV		
			PD-EINT2		
86	PD7/LCD-D11/LVDS0-CKN/DSI-D2N/PWM0-7/UART4-RX/UART6-CTS/LBUS-LD27/PWMCS-O7/LBUS-READY3/RGMII2-TXCTL/RMII2-TXEN/PD-EINT7	N20	PD7	Default	3.3V
			LCD-D11		
			LVDS0-CKN		
			DSI-D2N		
			PWM0-7		
			UART4-RX		
			UART6-CTS		
			LBUS-LD27		
			PWMCS-O7		

			LBUS-READY3		
			RGMII2-TXCTL		
			RMII2-TXEN		
			PD-EINT7		
87	PD6/LCD-D10/LVDS0-CKP/DSI-D2P/PWM0-6/UART4-TX/UART6-RTS/LBUS-LD26/PWMCS-O6/LBUS-CS2/RGMII2-TXCK/RMII2-TXCK/PD-EINT6	N21	PD6	Default	3.3V
			LCD-D10		
			LVDS0-CKP		
			DSI-D2P		
			PWM0-6		
			UART4-TX		
			UART6-RTS		
			LBUS-LD26		
			PWMCS-O6		
			LBUS-CS2		
			RGMII2-TXCK		
			RMII2-TXCK		
			PD-EINT6		
88	PD9/LCD-D13/LVDS0-D3N/DSI-D3N/PWM1-1/DMIC-CLK/CAN1-RX0/LBUS-LD29/PWMCS-O9/LBUS-READY2/RGMII2-MDIO/PD-EINT9	M19	PD9	Default	3.3V
			LCD-D13		
			LVDS0-D3N		
			DSI-D3N		
			PWM1-1		
			DMIC-CLK		
			CAN1-RX0		

			LBUS-LD29			
			PWMCS-O9			
			LBUS-READY2			
			RGMII2-MDIO			
			PD-EINT9			
89	PD8/LCD-D12/LVDS0-D3P/DSI-D3P/PWM1-0/CAN1-TX0/LBUS-LD28/PWMCS-O8/LBUS-DE/RGMII2-MDC/PD-EINT8	M20	PD8	Default	3.3V	
			LCD-D12			
			LVDS0-D3P			
			DSI-D3P			
			PWM1-0			
			CAN1-TX0			
			LBUS-LD28			
			PWMCS-O8			
			LBUS-DE			
			RGMII2-MDC			
			PD-EINT8			
90	GND6		GND6			
91	PA20/GPADC1-6/NCSI-D12/LBUS-WAIT/PA-EINT20	1G14	PA20	Default	3.3V	
			GPADC1-6			
			NCSI-D12			
			LBUS-WAIT			
			PA-EINT20			
92	PA22/GPADC1-8/NCSI-D14/LBUS-CS2/PA-EINT22	1G13	PA22	Default	3.3V	

			GPADC1-8		
			NCSI-D14		
			LBUS-CS2		
			PA-EINT22		
93	PA21/GPADC1-7/NCSI-D13/LBUS-CS3/SPI2-CS1/PA-EINT21	1F14	PA21	Default	3.3V
			GPADC1-7		
			NCSI-D13		
			LBUS-CS3		
			SPI2-CS1		
			PA-EINT21		
94	PA23/GPADC1-9/NCSI-D15/LBUS-DE/PA-EINT23	1F12	PA23	Default	3.3V
			GPADC1-9		
			NCSI-D15		
			LBUS-DE		
			PA-EINT23		
95	PA9/GPADC0-5/RGMII0-TXD0/RMII0-TXD0/NCSI-D1/LBUS-DP1/PWMCS-IB/LBUS-LBE3/LCD-D9/PA-EINT9	G21	PA9	Default	3.3V
			GPADC0-5		
			RGMII0-TXD0		
			RMII0-TXD0		
			NCSI-D1		
			LBUS-DP1		
			PWMCS-IB		
			LBUS-LBE3		

			LCD-D9			
			PA-EINT9			
96	PA8/GPADC0-4/RGMII0-TXD1/RMII0-TXD1/NCSI-D0/LBUS-DP0/PWMCS-IA/LCD-D8/PA-EINT8	G19	PA8	Default	3.3V	
			GPADC0-4			
			RGMII0-TXD1			
			RMII0-TXD1			
			NCSI-D0			
			LBUS-DP0			
			PWMCS-IA			
			LCD-D8			
			PA-EINT8			
97	PA17/GPADC1-3/RGMII0-RXCK/RMII0-NUL/NCSI-D9/LBUS-LD13/TWI3-SDA/PA-EINT17	K20	PA17	Default	3.3V	
			GPADC1-3			
			RGMII0-RXCK			
			RMII0-NUL			
			NCSI-D9			
			LBUS-LD13			
			TWI3-SDA			
			PA-EINT17			
98	PA6/GPADC0-2/RGMII0-RXCTL/RMII0-CRS-DV/NCSI-MCLK/LBUS-CS1/PWMCS-I8/LCD-D0/PA-EINT6	K19	PA6	Default	3.3V	
			GPADC0-2			
			RGMII0-RXCTL			
			RMII0-CRS-DV			

			NCSI-MCLK			
			LBUS-CS1			
			PWMCS-I8			
			LCD-D0			
			PA-EINT6			
99	PA4/GPADC0-0/RGMII0-RXD1/RMII0-RXD1/NCSI-HSYNC/LBUS-CLK/PA-EINT4	J21	PA4	Default	3.3V	
			GPADC0-0			
			RGMII0-RXD1			
			RMII0-RXD1			
			NCSI-HSYNC			
			LBUS-CLK			
			PA-EINT4			
100	PA14/GPADC1-0/RGMII0-EPHY-25/50M/NCSI-D6/LBUS-LD10/UART6-TX/PA-EINT14	1D12	PA14	Default	3.3V	
			GPADC1-0			
			RGMII0-EPHY-25			
			50M			
			NCSI-D6			
			LBUS-LD10			
			UART6-TX			
			PA-EINT14			
101	PA12/GPADC0-8/RGMII0-MDC/NCSI-D4/LBUS-LD8/PWMCS-IE/PA-EINT12	1F13	PA12	Default	3.3V	
			GPADC0-8			
			RGMII0-MDC			

			NCSI-D4			
			LBUS-LD8			
			PWMCS-IE			
			PA-EINT12			
102	PA13/GPADC0-9/RGMII0-MDIO/NCSI-D5/LBUS-LD9/PWMCS-IF/PA-EINT13	1D13	PA13	Default	3.3V	
			GPADC0-9			
			RGMII0-MDIO			
			NCSI-D5			
			LBUS-LD9			
			PWMCS-IF			
			PA-EINT13			
103	PA11/GPADC0-7/RGMII0-TXCTL/RMII0-TXEN/NCSI-D3/LBUS-LBE1/PWMCS-ID/LCD-D17/PA-EINT11	G20	PA11	Default	3.3V	
			GPADC0-7			
			RGMII0-TXCTL			
			RMII0-TXEN			
			NCSI-D3			
			LBUS-LBE1			
			PWMCS-ID			
			LCD-D17			
			PA-EINT11			
104	PA10/GPADC0-6/RGMII0-TXCK/RMII0-TXCK/NCSI-D2/LBUS-LBE0/PWMCS-IC/LCD-D16/PA-EINT10	H19	PA10	Default	3.3V	
			GPADC0-6			
			RGMII0-TXCK			

			RMII0-TXCK			
			NCSI-D2			
			LBUS-LBE0			
			PWMCS-IC			
			LCD-D16			
			PA-EINT10			
105	PA19/GPADC1-5/RGMII0-TXD2/RMII0-NULL/NCSI-D11/LBUS-LD15/PA-EINT19	F20	PA19	Default	3.3V	
			GPADC1-5			
			RGMII0-TXD2			
			RMII0-NULL			
			NCSI-D11			
			LBUS-LD15			
			PA-EINT19			
106	PA18/GPADC1-4/RGMII0-TXD3/RMII0-NULL/NCSI-D10/LBUS-LD14/PA-EINT18	F19	PA18	Default	3.3V	
			GPADC1-4			
			RGMII0-TXD3			
			RMII0-NULL			
			NCSI-D10			
			LBUS-LD14			
			PA-EINT18			
107	PA7/GPADC0-3/RGMII0-CLKIN/RMII0-RXER/NCSI-PCLK/LBUS-CS0/PWMCS-I9/LCD-D1/PA-EINT7	1D14	PA7	Default	3.3V	
			GPADC0-3			
			RGMII0-CLKIN			

			RMII0-RXER			
			NCSI-PCLK			
			LBUS-CS0			
			PWMCS-I9			
			LCD-D1			
			PA-EINT7			
108	PA5/GPADC0-1/RGMII0-RXD0/RMII0-RXD0/NCSI-VSYNC/LBUS-ALE/PA-EINT5	J20	PA5	Default	3.3V	
			GPADC0-1			
			RGMII0-RXD0			
			RMII0-RXD0			
			NCSI-VSYNC			
			LBUS-ALE			
			PA-EINT5			
109	PA16/GPADC1-2/RGMII0-RXD2/RMII0-NULL/NCSI-D8/LBUS-LD12/TWI3-SCK/PA-EINT16	J19	PA16	Default	3.3V	
			GPADC1-2			
			RGMII0-RXD2			
			RMII0-NULL			
			NCSI-D8			
			LBUS-LD12			
			TWI3-SCK			
			PA-EINT16			
110	PA15/GPADC1-1/RGMII0-RXD3/RMII0-NULL/NCSI-D7/LBUS-LD11/UART6-RX/PA-EINT15	H20	PA15	Default	3.3V	
			GPADC1-1			

			RGMII0-RXD3			
			RMII0-NULL			
			NCSI-D7			
			LBUS-LD11			
			UART6-RX			
			PA-EINT15			
111	VCC-PE/VCC-PK_SEL		VCC-PE/VCC-PK_SEL			
112	PA3/GPADC2-3/TP-Y2/LBUS-DP3/PA-EINT3	E20	PA3	Default	3.3V	
			GPADC2-3			
			TP-Y2			
			LBUS-DP3			
			PA-EINT3			
113	PA2/GPADC2-2/TP-Y1/LBUS-DP2/PA-EINT2	1C12	PA2	Default	3.3V	
			GPADC2-2			
			TP-Y1			
			LBUS-DP2			
			PA-EINT2			
114	PA0/GPADC2-0/TP-X1/LBUS-READY3/LBUS-LBE2/PA-EINT0	1C13	PA0	Default	3.3V	
			GPADC2-0			
			TP-X1			
			LBUS-READY3			
			LBUS-LBE2			
			PA-EINT0			

115	PA1/GPADC2-1/TP-X2/LBUS-READY2/LBUS-DP1/PA-EINT1	1C14	PA1	Default	3.3V	
			GPADC2-1			
			TP-X2			
			LBUS-READY2			
			LBUS-DP1			
			PA-EINT1			
116	AP-RESET	C11	AP-RESET		3.3V	
117	PE0/MCSI0-MCLK/NCSI-D8/CLK-FANOUT1/DMIC-CLK/SDC3-CLK/PE-EINT0	C20	PE0	Default	VCC-PE	
			MCSI0-MCLK			
			NCSI-D8			
			CLK-FANOUT1			
			DMIC-CLK			
			SDC3-CLK			
118	PE1/TWI1-SCK/NCSI-D9/SPI2-CS0/DMIC-DATA0/PE-EINT1	D19	PE1	Default	VCC-PE	
			TWI1-SCK			
			NCSI-D9			
			SPI2-CS0			
			DMIC-DATA0			
			PE-EINT1			
119	PE2/TWI1-SDA/PWM0-3/NCSI-D10/SPI2-CLK/DMIC-DATA1/PE-EINT2	E21	PE2		VCC-PE	
			TWI1-SDA	Default		
			PWM0-3			

			NCSI-D10			
			SPI2-CLK			
			DMIC-DATA1			
			PE-EINT2			
120	PE6/TWI3-SCK/UART5-RX/NCSI-D14/UART6-CTS/SPI2-HOLD/SDC3-D0/PE-EINT6	1A14	PE6	Default	VCC-PE	
			TWI3-SCK			
			UART5-RX			
			NCSI-D14			
			UART6-CTS			
			SPI2-HOLD			
			SDC3-D0			
			PE-EINT6			
121	PE5/MCSI1-MCLK/UART5-TX/NCSI-D13/UART6-RTS/SPI2-WP/SDC3-CMD/PE-EINT5	C21	PE5	Default	VCC-PE	
			MCSI1-MCLK			
			UART5-TX			
			NCSI-D13			
			UART6-RTS			
			SPI2-WP			
			SDC3-CMD			
			PE-EINT5			
122	PE3/TWI2-SCK/UART5-RTS/NCSI-D11/UART6-TX/SPI2-MOSI/DMIC-DATA2/PE-EINT3	E19	PE3	Default	VCC-PE	
			TWI2-SCK			
			UART5-RTS			

			NCSI-D11			
			UART6-TX			
			SPI2-MOSI			
			DMIC-DATA2			
			PE-EINT3			
123	PE4/TWI2-SDA/UART5-CTS/NCSI-D12/UART6-RX/SPI2-MISO/DMIC-DATA3/PE-EINT4	1A13	PE4	Default	VCC-PE	
			TWI2-SDA			
			UART5-CTS			
			NCSI-D12			
			UART6-RX			
			SPI2-MISO			
			DMIC-DATA3			
			PE-EINT4			
124	PE7/TWI3-SDA/PWM0-2/NCSI-D15/SPI2-CS1/SDC3-D1/PE-EINT7	D20	PE7	Default	VCC-PE	
			TWI3-SDA			
			PWM0-2			
			NCSI-D15			
			SPI2-CS1			
			SDC3-D1			
			PE-EINT7			
125	PE8/MCSI2-MCLK/PWM0-4/CSI0-XVS-FSYNC/CLK-FANOUT0/SPI2-CS2/SDC3-D2/PE-EINT8	B21	PE8	Default	VCC-PE	
			MCSI2-MCLK			
			PWM0-4			

			CSIO-XVS-FSYNC			
			CLK-FANOUT0			
			SPI2-CS2			
			SDC3-D2			
			PE-EINT8			
126	PE9/TCON-FSYNC0<TCON-LCD0>/PWM0-5/CSI1-XVS-FSYNC/SDC3-D3/PE-EINT9	C19	PE9	Default	VCC-PE	
			TCON-FSYNC0<TCON-LCD0>			
			PWM0-5			
			CSI1-XVS-FSYNC			
			SDC3-D3			
			PE-EINT9			
127	VCC-PG_SEL		VCC-PG_SEL			
128	GND7		GND			
129	PK5/MCSIA-D1N/MCSIA-D1N/MCSIC-D0N/TWI1-SDA/SPI1-MISO/NCSI-D5/LBUS-LD16/LBUS-CS2/LCD-D17	A20	PK5	Default	VCC-PK	
			MCSIA-D1N			
			MCSIA-D1N			
			MCSIC-D0N			
			TWI1-SDA			
			SPI1-MISO			
			NCSI-D5			
			LBUS-LD16			
			LBUS-CS2			
			LCD-D17			

130	PK4/MCSIA-D1P/MCSIA-D1P/MCSIC-D0P/TWI1-SCK/SPI1-MOSI/NCSI-D4/LBUS-LD17/I2S1-DIN0/LBUS-CS3/LCD-D16	B20	PK4		VCC -PK	
			MCSIA-D1P	Default		
			MCSIA-D1P			
			MCSIC-D0P			
			TWI1-SCK			
			SPI1-MOSI			
			NCSI-D4			
			LBUS-LD17			
			I2S1-DIN0			
			LBUS-CS3			
			LCD-D16			
			PK4			
131	PK1/MCSIA-CKN/MCSIA-CKN/MCSIA-CKN/UART7-RX/TWI1-SDA/NCSI-D1/LBUS-READY0/I2S1-BCLK/LBUS-DRQ1/LCD-D1	A19	MCSIA-CKN	Default	VCC -PK	
			MCSIA-CKN			
			MCSIA-CKN			
			UART7-RX			
			TWI1-SDA			
			NCSI-D1			
			LBUS-READY0			
			I2S1-BCLK			
			LBUS-DRQ1			
			LCD-D1			
			PK1			
132	PK0/MCSIA-CKP/MCSIA-CKP/MCSIA-CKP/UART7-TX/TWI1-SCK/NCSI-	B19	PK0		VCC -PK	

	D0/LBUS-READY1/I2S1-MCLK/LBUS-DRQ0/LCD-D0		MCSIA-CKP	Default	
			MCSIA-CKP		
			MCSIA-CKP		
			UART7-TX		
			TWI1-SCK		
			NCSI-D0		
			LBUS-READY1		
			I2S1-MCLK		
			LBUS-DRQ0		
			LCD-D0		
			PK2		
133	PK2/MCSIA-D0P/MCSIA-D0P/MCSIA-D0P/UART7-RTS/SPI1-CS0/NCSI-D2/LBUS-LD19/I2S1-LRCK/LBUS-LBE3/LCD-D8	C18	MCSIA-D0P	Default	VCC-PK
			MCSIA-D0P		
			MCSIA-D0P		
			UART7-RTS		
			SPI1-CS0		
			NCSI-D2		
			LBUS-LD19		
			I2S1-LRCK		
			LBUS-LBE3		
			LCD-D8		
134	PK3/MCSIA-D0N/MCSIA-D0N/MCSIA-D0N/UART7-CTS/SPI1-CLK/NCSI-	B18	PK3		VCC-PK
			MCSIA-D0N	Default	

	D3/LBUS-LD18/I2S1-DOUT0/LBUS-DE/LCD-D9		MCSIA-D0N		
			MCSIA-D0N		
			UART7-CTS		
			SPI1-CLK		
			NCSI-D3		
			LBUS-LD18		
			I2S1-DOUT0		
			LBUS-DE		
			LCD-D9		
135	PK6/MCSIA-D2P/MCSIB-D1P/MCSIC-CKP/MCSI0-MCLK/SPI1-WP/NCSI-D6/LBUS-LD15/UART3-RTS/RGMII0-RXD3/RMII0-NULL	B7	PK6	Default	VCC-PK
			MCSIA-D2P		
			MCSIB-D1P		
			MCSIC-CKP		
			MCSI0-MCLK		
			SPI1-WP		
			NCSI-D6		
			LBUS-LD15		
			UART3-RTS		
			RGMII0-RXD3		
			RMII0-NULL		
136	PK7/MCSIA-D2N/MCSIB-D1N/MCSIC-CKN/TWI2-SCK/SPI1-HOLD/NCSI-D7/LBUS-LD14/RGMII0-RXD2/RMII0-NULL	A17	PK7		VCC-PK
			MCSIA-D2N		
			MCSIB-D1N		
			MCSIC-CKN		

				TWI2-SCK	Default	
				SPI1-HOLD		
				NCSI-D7		
				LBUS-LD14		
				RGMII0-RXD2		
				RMII0-NULL		
137	PK10/MCSIB-CKP/MCSIB-CKP/TWI3-SCK/PWM0-6/NCSI-HSYNC/LBUS-WAIT/UART3-RX/LBUS-LBE2/RGMII0-TXD2/RMII0-NULL	C16		PK10		
				MCSIB-CKP		
				MCSIB-CKP		
				TWI3-SCK		
				PWM0-6		
				NCSI-HSYNC		VCC
				LBUS-WAIT		-PK
				UART3-RX	Default	
				LBUS-LBE2		
				RGMII0-TXD2		
				RMII0-NULL		
138	PK11/MCSIB-CKN/MCSIB-CKN/TWI3-SDA/PWM0-7/NCSI-VSYNC/LBUS-CS2/UART3-CTS/	B16		PK11	Default	VCC
				MCSIB-CKN		-PK
				MCSIB-CKN		
				TWI3-SDA		
				PWM0-7		
				NCSI-VSYNC		

			LBUS-CS2		
			UART3-CTS		
139	PK8/MCSIA-D3P/MCSIB-D0P/MCSIB-D0P/TWI2-SDA/SPI1-CS1/NCSI-PCLK/LBUS-LD13/CLK-FANOUT0/RGMII0-RXCK/RMII0=NULL	B15	PK8		
			MCSIA-D3P		
			MCSIB-D0P		
			MCSIB-D0P		
			TWI2-SDA	Default	VCC
			SPI1-CS1		-PK
			NCSI-PCLK		
			LBUS-LD13		
			CLK-FANOUT0		
			RGMII0-RXCK		
			RMII0=NULL		
140	PK9/MCSIA-D3N/MCSIB-D0N/MCSIB-D0N/MCSI1-MCLK/SPI1-CS2/NCSI-MCLK/LBUS-LD12/UART3-TX/CLK-FANOUT1/RGMII0-TXD3/RMII0=NULL	A15	PK9		VCC
			MCSIA-D3N		-PK
			MCSIB-D0N		
			MCSIB-D0N		
			MCSI1-MCLK		
			SPI1-CS2		
			NCSI-MCLK		
			LBUS-LD12		
			UART3-TX	Default	
			CLK-FANOUT1		
			RGMII0-TXD3		

			RMII0–NULL			
141	USB0–DM	B13	USB0–DM			
142	USB0–DP	C13	USB0–DP			
143	USB1–DM	B14	USB1–DM			
144	USB1–DP	C14	USB1–DP			
145	GND8		GND			
146	PWR–IRQ1	1A4	PWR–IRQ1			
147	PWR–IRQ0	C8	PWR–IRQ0			
148	GND9		GND			
149	GND10		GND			
150	GND11		GND			
151	GND12		GND			
152	GND13		GND			
153	GND14		GND			
154	GND15		GND			
155	GND16		GND			
156	GND17		GND			
157	GND18		GND			
158	PWR–IRQ2	1B5	I2C6_SCL_M1			
159	PWR–IRQ4	C9	SPI2_CSN1_M1			
160	AP–CK24M–OUT	B8	AP–CK24M–OUT			