

Function	PinName	IOTyp e	Default IOState	Default Pull-up/-down	Multi2 (DDR4)	Multi3 (DDR3)	Multi4 (LPDDR3)	Multi5 (LPDDR4)	Multi6	PIN Power Domain	PIN Power Domain Voltage Range(V)	
DRAM	SDQ[31:0]	I/O			SDQ[31:0]	SDQ[31:0]	SDQ[31:0]	SDQ[31:0]		VCC-DRAM	1.5V/ 1.35V/ 1.2V/ 1.1V	
	SDQSP[3:0]	I/O			SDQSP[3:0]	SDQSP[3:0]	SDQSP[3:0]	SDQSP[3:0]				
	SDQSN[3:0]	I/O			SDQSN[3:0]	SDQSN[3:0]	SDQSN[3:0]	SDQSN[3:0]				
	SDQM[3:0]	I/O			SDQM[3:0]	SDQM[3:0]	SDQM[3:0]	SDQM[3:0]				
	SCK0P	O			SCK0P	SCK0P	SCK0P	SCK0P	SCK0P			
	SCK0N	O			SCK0N	SCK0N	SCK0N	SCK0N	SCK0N			
	SCKE[1:0]	O			SCKE[1:0]	SCKE[1:0]	SCKE[1:0]	SCKE[1:0]	SCKE[1:0]			
	SA0	O			SA0	SA0	SA0	SA0	SA0			
	SA1	O			SA1	SA1	SA1	SA1	SA1			
	SA2	O			SA2	SA2	SA2	SA2	SA2			
	SA3	O			SA3	SA3	SA3	SA3	SA3			
	SA4	O			SA4	SA4	SA4	SA4	SA4			
	SA5	O			SA5	SA5	SA5	SA5	SA5			
	SA6	O			SA6	SA6	SA6	SA6	/			
	SA7	O			SA7	SA7	SA7	SA7	/			
	SA8	O			SA8	SA8	SA8	SA8	/			
	SA9	O			SA9	SA9	SA9	SA9	/			
	SA10	O			SA10	SA10	SA10	/	/			
	SA11	O			SA11	SA11	SA11	/	/			
	SA12	O			SA12	SA12	SA12	/	/			
	SA13	O			SA13	SA13	SA13	/	/			
	SA14	O			SWE/SA14	SA14	SA14	/	/			
	SA15	O			SCAS/SA15	SA15	SA15	/	/			
	SA16	O			SRAS/SA16	SWE	SWE	/	/			
	SACT	O			SACT	SRAS	SRAS	/	/			
	SCS0	O			SCS0	SCS0	SCS0	SCS0	SCS0			
	SCS1	O			SCS1	SCS1	SCS1	SCS1	SCS1			
	SBA0	O			SBA0	SBA0	SBA0	/	/			
	SBA1	O			SBA1	SBA1	SBA1	/	/			
	SBG0	O			SBG0	SBA2	SBA2	/	/			
	SBG1	O			SBG1	SCAS	SCAS	/	/			
	SODT[1:0]	O			SODT[1:0]	SODT[1:0]	SODT[1:0]	SODT[1:0]	SODT[1:0]			
SRST	O			SRST	SRST	SRST	/	/				
SZQ	A			RZQ	RZQ	RZQ	RZQ	RZQ				
VCC-DRAM	P			VCC-DRAM	VCC-DRAM	VCC-DRAM	VCC-DRAM	VCC-DRAM				
VDD18-	P			VDD18-DRAM	VDD18-DRAM	VDD18-DRAM	VDD18-DRAM	VDD18-DRAM				
PA	PA0	I/O	DIS		RMII-RXD1		TWIO-SCK		PA-EINT0	VCC-PA	3.3V	
	PA1	I/O	DIS		RMII-RXD0		TWIO-SDA		PA-EINT1			
	PA2	I/O	DIS		RMII-CRS-DV		TW11-SCK		PA-EINT2			
	PA3	I/O	DIS		RMII-RXER		TW11-SDA		PA-EINT3			
	PA4	I/O	DIS		RMII-TXD1	STANDBY-STATE			PA-EINT4			
	PA5	I/O	DIS		RMII-TXD0	H-I2S0-DOUT0			PA-EINT5			
	PA6	I/O	DIS		RMII-TXCK	H-I2S0-MCLK			PA-EINT6			
	PA7	I/O	DIS		RMII-TXEN	H-I2S0-BCLK			PA-EINT7			
	PA8	I/O	DIS		MDC	H-I2S0-LRCK			PA-EINT8			

	PA9	I/O	DIS		MDIO	H-I2S0-DIN0			PA-EINT9
	PA10	I/O	DIS	up	TWI3-SCK				PA-EINT10
	PA11	I/O	DIS	up	TWI3-SDA				PA-EINT11
	PA12	I/O	DIS		PWM5		WATCHDOG-SIG		PA-EINT12
	VCC-PA	P							
PC	PC0	I/O	DIS	up	NAND-WE	SDC2-DS	SPI0-CLK		PC-EINT0
	PC1	I/O	DIS		NAND-ALE	SDC2-RST			PC-EINT1
	PC2	I/O	DIS		NAND-CLE		SPI0-MOSI		PC-EINT2
	PC3	I/O	bootless	up	NAND-CE1		SPI0-CS0	BOOT-SEL1	PC-EINT3
	PC4	I/O	bootless	up	NAND-CE0		SPI0-MISO	BOOT-SEL2	PC-EINT4
	PC5	I/O	bootless	up	NAND-RE	SDC2-CLK		BOOT-SEL3	PC-EINT5
	PC6	I/O	bootless	up	NAND-RB0	SDC2-CMD		BOOT-SEL4	PC-EINT6
	PC7	I/O	DIS	up	NAND-RB1		SPI0-CS1		PC-EINT7
	PC8	I/O	DIS		NAND-DQ7	SDC2-D3			PC-EINT8
	PC9	I/O	DIS		NAND-DQ6	SDC2-D4			PC-EINT9
	PC10	I/O	DIS		NAND-DQ5	SDC2-D0			PC-EINT10
	PC11	I/O	DIS		NAND-DQ4	SDC2-D5			PC-EINT11
	PC12	I/O	DIS		NAND-DQS				PC-EINT12
	PC13	I/O	DIS		NAND-DQ3	SDC2-D1			PC-EINT13
	PC14	I/O	DIS		NAND-DQ2	SDC2-D6			PC-EINT14
	PC15	I/O	DIS		NAND-DQ1	SDC2-D2	SPI0-WP		PC-EINT15
	PC16	I/O	DIS		NAND-DQ0	SDC2-D7	SPI0-HOLD		PC-EINT16
	VCC-PC	P							
PD	PD0	I/O	DIS		LCD-D0	LVDS0-V0P	TS0-CLK		PD-EINT0
	PD1	I/O	DIS		LCD-D1	LVDS0-V0N	TS0-ERR		PD-EINT1
	PD2	I/O	DIS		LCD-D2	LVDS0-V1P	TS0-SYNC		PD-EINT2
	PD3	I/O	DIS		LCD-D3	LVDS0-V1N	TS0-DVLD		PD-EINT3
	PD4	I/O	DIS		LCD-D4	LVDS0-V2P	TS0-D0		PD-EINT4
	PD5	I/O	DIS		LCD-D5	LVDS0-V2N	TS0-D1		PD-EINT5
	PD6	I/O	DIS		LCD-D6	LVDS0-CKP	TS0-D2		PD-EINT6
	PD7	I/O	DIS		LCD-D7	LVDS0-CKN	TS0-D3		PD-EINT7
	PD8	I/O	DIS		LCD-D8	LVDS0-V3P	TS0-D4		PD-EINT8
	PD9	I/O	DIS		LCD-D9	LVDS0-V3N	TS0-D5		PD-EINT9
	PD10	I/O	DIS		LCD-D10	LVDS1-V0P	TS0-D6		PD-EINT10
	PD11	I/O	DIS		LCD-D11	LVDS1-V0N	TS0-D7		PD-EINT11
	PD12	I/O	DIS		LCD-D12	LVDS1-V1P	SIM0-VPPEN		PD-EINT12
	PD13	I/O	DIS		LCD-D13	LVDS1-V1N	SIM0-VPPPP		PD-EINT13
	PD14	I/O	DIS		LCD-D14	LVDS1-V2P	SIM0-PWREN		PD-EINT14
	PD15	I/O	DIS		LCD-D15	LVDS1-V2N	SIM0-CLK		PD-EINT15
	PD16	I/O	DIS		LCD-D16	LVDS1-CKP	SIM0-DATA		PD-EINT16
	PD17	I/O	DIS		LCD-D17	LVDS1-CKN	SIM0-RST		PD-EINT17
	PD18	I/O	DIS		LCD-D18	LVDS1-V3P	SIM0-DET		PD-EINT18
	PD19	I/O	DIS		LCD-D19	LVDS1-V3N			PD-EINT19
	PD20	I/O	DIS		LCD-D20				PD-EINT20
	PD21	I/O	DIS		LCD-D21				PD-EINT21
	PD22	I/O	DIS		LCD-D22				PD-EINT22
	PD23	I/O	DIS		LCD-D23				PD-EINT23
	PD24	I/O	DIS		LCD-CLK				PD-EINT24
	PD25	I/O	DIS		LCD-DE				PD-EINT25
	PD26	I/O	DIS		LCD-HSYNC				PD-EINT26

	PD27	I/O	DIS		LCD-VSYNC				PD-EINT27
	PD28	I/O	DIS		PWM0				PD-EINT28
	VCC-LVDS	P							
	VCC-PD	P							
PE	PE0	I/O	DIS		NCSI-PCLK				PE-EINT1
	PE1	I/O	DIS		NCSI-MCLK				PE-EINT2
	PE2	I/O	DIS		NCSI-HSYNC				PE-EINT3
	PE3	I/O	DIS		NCSI-VSYNC				PE-EINT4
	PE4	I/O	DIS		NCSI-D0				PE-EINT5
	PE5	I/O	DIS		NCSI-D1				PE-EINT6
	PE6	I/O	DIS		NCSI-D2				PE-EINT7
	PE7	I/O	DIS		NCSI-D3				PE-EINT8
	PE8	I/O	DIS		NCSI-D4				PE-EINT9
	PE9	I/O	DIS		NCSI-D5				PE-EINT10
	PE10	I/O	DIS		NCSI-D6				PE-EINT11
	PE11	I/O	DIS		NCSI-D7				PE-EINT12
	PE12	I/O	DIS		NCSI-D8				PE-EINT13
	PE13	I/O	DIS		NCSI-D9				PE-EINT14
	PE14	I/O	DIS		NCSI-D10				PE-EINT15
	PE15	I/O	DIS		NCSI-D11				PE-EINT16
	PE16	I/O	DIS		NCSI-D12				PE-EINT17
	PE17	I/O	DIS		NCSI-D13				PE-EINT18
	PE18	I/O	DIS		NCSI-D14				PE-EINT19
	PE19	I/O	DIS		NCSI-D15				PE-EINT20
	PE20	I/O	DIS		NCSI-SCK			TWI2-SCK	PE-EINT21
	PE21	I/O	DIS		NCSI-SDA			TWI2-SDA	PE-EINT22
	PE22	I/O	DIS		CSI-FSIN0			TCON-TRIGO	PE-EINT23
	VCC-PE	P							
PF	PF0	I/O	DIS		SDC0-D1	JTAG-MS			PF-EINT0
	PF1	I/O	DIS		SDC0-D0	JTAG-DI			PF-EINT1
	PF2	I/O	DIS		SDC0-CLK	UART0-TX			PF-EINT2
	PF3	I/O	DIS	pull-up	SDC0-CMD	JTAG-DO			PF-EINT3
	PF4	I/O	DIS		SDC0-D3	UART0-RX			PF-EINT4
	PF5	I/O	DIS		SDC0-D2	JTAG-CK			PF-EINT5
	PF6	I/O	DIS	pull-up					PF-EINT6
PG	PG0	I/O	DIS		SDC1-CLK				PG-EINT0
	PG1	I/O	DIS	pull-up	SDC1-CMD				PG-EINT1
	PG2	I/O	DIS	pull-up	SDC1-D0				PG-EINT2
	PG3	I/O	DIS	pull-up	SDC1-D1				PG-EINT3
	PG4	I/O	DIS	pull-up	SDC1-D2				PG-EINT4
	PG5	I/O	DIS	pull-up	SDC1-D3				PG-EINT5
	PG6	I/O	DIS		UART1-TX		JTAG-MS		PG-EINT6
	PG7	I/O	DIS		UART1-RX		JTAG-CK		PG-EINT7
	PG8	I/O	DIS		UART1-RTS	PLL-LOCK-DBG	JTAG-DO		PG-EINT8
	PG9	I/O	DIS		UART1-CTS		JTAG-DI		PG-EINT9
	PG10	I/O	DIS		H-I2S2-MCLK	X32KFOUT			PG-EINT10
	PG11	I/O	DIS		H-I2S2-BCLK		BIST-RESULT0		PG-EINT11
	PG12	I/O	DIS		H-I2S2-LRCK		BIST-RESULT1		PG-EINT12
	PG13	I/O	DIS		H-I2S2-DOUT0	H-I2S2-DIN1	BIST-RESULT2		PG-EINT13
PG14	I/O	DIS		H-I2S2-DIN0	H-I2S2-DOUT1	BIST-RESULT3		PG-EINT14	

VCC-PE

3.3V/2.8V/1.8V

VCC-IO/VCC-PLL

3.3V/1.8V

VCC-PG

3.3V
/1.8V

	PG15	I/O	DIS		UART2-TX			TWI4-SCK	PG-EINT15		
	PG16	I/O	DIS		UART2-RX			TWI4-SDA	PG-EINT16		
	PG17	I/O	DIS		UART2-RTS	MCSI-SCK		TWI3-SCK	PG-EINT17		
	PG18	I/O	DIS		UART2-CTS	MCSI-SDA		TWI3-SDA	PG-EINT18		
	PG19	I/O	DIS			MCSI-MCLK	PWM1		PG-EINT19		
	VCC-PG	P									
PH	PH0	I/O	DIS		UART0-TX		PWM3	TWI1-SCK	PH-EINT0	VCC-IO	3.3V
	PH1	I/O	DIS		UART0-RX		PWM4	TWI1-SDA	PH-EINT1		
	PH2	I/O	DIS		UART5-TX	SPDIF-CLK	PWM2	TWI2-SCK	PH-EINT2		
	PH3	I/O	DIS		UART5-RX	SPDIF-IN	PWM1	TWI2-SDA	PH-EINT3		
	PH4	I/O	DIS			SPDIF-OUT		TWI3-SCK	PH-EINT4		
	PH5	I/O	DIS		UART2-TX	H-I2S3-MCLK	SPI1-CS0	TWI3-SDA	PH-EINT5		
	PH6	I/O	DIS		UART2-RX	H-I2S3-BCLK	SPI1-CLK	TWI4-SCK	PH-EINT6		
	PH7	I/O	DIS		UART2-RTS	H-I2S3-LRCK	SPI1-MOSI	TWI4-SDA	PH-EINT7		
	PH8	I/O	DIS		UART2-CTS	H-I2S3-DOUT0	SPI1-MISO	H-I2S3-DIN1	PH-EINT8		
	PH9	I/O	DIS			H-I2S3-DIN0	SPI1-CS1	H-I2S3-DOUT1	PH-EINT9		
	PH10	I/O	DIS			IR-RX	TCON-TRIG1		PH-EINT10		
	VCC-IO	P									
PI	PI0	I/O	DIS		RGMII-RXD3/RMII-NUL	DMIC-CLK	H-I2S0-MCLK	HDMI-SCL	PI-EINT0	VCC-PI	3.3V/2.8V/1.8V
	PI1	I/O	DIS		RGMII-RXD2/RMII-NUL	DMIC-DATA0	H-I2S0-BCLK	HDMI-SDA	PI-EINT1		
	PI2	I/O	DIS		RGMII-RXD1/RMII-RXD1	DMIC-DATA1	H-I2S0-LRCK	HDMI-CEC	PI-EINT2		
	PI3	I/O	DIS		RGMII-RXD0/RMII-RXD0	DMIC-DATA2	H-I2S0-DOUT0	H-I2S0-DIN1	PI-EINT3		
	PI4	I/O	DIS		RGMII-RXCK/RMII-NUL	DMIC-DATA3	H-I2S0-DIN0	H-I2S0-DOUT1	PI-EINT4		
	PI5	I/O	DIS		RGMII-RXCTL/RMII-CRS	UART2-TX	TS0-CLK	TWI0-SCK	PI-EINT5		
	PI6	I/O	DIS		RGMII-NUL/RMII-RXER	UART2-RX	TS0-ERR	TWI0-SDA	PI-EINT6		
	PI7	I/O	DIS		RGMII-TXD3/RMII-NUL	UART2-RTS	TS0-SYNC	TWI1-SCK	PI-EINT7		
	PI8	I/O	DIS		RGMII-TXD2/RMII-NUL	UART2-CTS	TS0-DVLD	TWI1-SDA	PI-EINT8		
	PI9	I/O	DIS		RGMII-TXD1/RMII-TXD1	UART3-TX	TS0-D0	TWI2-SCK	PI-EINT9		
	PI10	I/O	DIS		RGMII-TXD0/RMII-TXD0	UART3-RX	TS0-D1	TWI2-SDA	PI-EINT10		
	PI11	I/O	DIS		RGMII-TXCK/RMII-TXCK	UART3-RTS	TS0-D2	PWM1	PI-EINT11		
	PI12	I/O	DIS		RGMII-TXCTL/RMII-TXEN	UART3-CTS	TS0-D3	PWM2	PI-EINT12		
	PI13	I/O	DIS		RGMII-CLKIN/RMII-NUL	UART4-TX	TS0-D4	PWM3	PI-EINT13		
	PI14	I/O	DIS		MDC	UART4-RX	TS0-D5	PWM4	PI-EINT14		
	PI15	I/O	DIS		MDIO	UART4-RTS	TS0-D6	CLK-FANOUT0	PI-EINT15		
	PI16	I/O	DIS		EPHY-25M	UART4-CTS	TS0-D7	CLK-FANOUT1	PI-EINT16		
	VCC-PI	P									
PL	PL0	I/O	DIS	pull-up	RSB-SCK	S-TWI0-SCK				VCC-RTC	1.8V
	PL1	I/O	DIS	pull-up	RSB-SDA	S-TWI0-SDA					
MIPI-CSI	MCSI-D0N	A								VCC-MCSI	1.8V
	MCSI-D0P	A									
	MCSI-D1N	A									
	MCSI-D1P	A									
	MCSI-D2N	A									
	MCSI-D2P	A									
	MCSI-D3N	A									
	MCSI-D3P	A									
	MCSI-CKN	A									
	MCSI-CKP	A									
	VCC-MCSI	P									
TEST	TEST	I		pull-down							

IRQ	EXTIRQ	OD		pull-up					VCC-RTC	1.8V
NMI	NMI	I/O		no-pull						
RESET	RESET	I/O		no-pull						
UBOOT	FEL	I		pull-up						
BOOT-	BOOT-SEL	I		pull-up					VCC-IO	3.3V
JTAGSEL	JTAG-SEL	I		pull-up						
HDMI	HTX0P	A							VCC-HDMI	1.8V
	HTX0N	A								
	HTX1P	A								
	HTX1N	A								
	HTX2P	A								
	HTX2N	A								
	HTXCP	A								
	HTXCN	A								
	HSCL	A								
	HSDA	A								
	HCEC	A								
	HHPD	A								
VCC-HDMI	P									
audio codec	VRA1	A						AVCC	1.8V	
	VRA2	A								
	REXT	A								
	AVCC	P								
	LINEOUTL	A								
	LINEOUTR	A								
	LINEINR	A								
	LINEINL	A								
	FMINR	A								
	FMINL	A								
AGND	G									
TV-OUT	TV-OUT	A						VCC-TV	1.8V	
	VCC-TV	P								
USB	USB0-DM	A						VCC-USB/VCC-USB2	3.3V	
	USB0-DP	A								
	USB1-DM	A								
	USB1-DP	A								
	USB2-DM	A								
	USB2-DP	A								
	USB3-DM	A								
	USB3-DP	A								
	VCC-USB	P								
VCC-USB2	P									
ADC	LRADC	A						AVCC	1.8V	
	GPADC0	A								
	GPADC1	A								
	GPADC2	A								
	GPADC3	A								
VCC-PLL	P						VCC-PLL	1.8V		
	DXIN	A								
	DXOUT	A								

DCXO	WREQIN	A								VCC-DCXO	1.8V
	REFCLK-OUT	A									
	DXLDO-OUT	P									
	VCC-DCXO	P									
RTC	X32KIN	A								VCC-RTC	1.8V
	X32KOUT	A									
	VCC-RTC	P									0.9V
	RTC-VIO	P									
POWER	VDD-SYS	P									
	VDD-SYSFB										
	VDD-CPU	P									
	VDD-CPUFB										
	VDD-GPU	P									
	VDD-GPUFB										
	GND	G									

Draft

Draft