

	PIN#	Module Pin Name	i.MX6UL-R2	Port	BGA Pin	i.MX6UL-R1	Comment
System Control	100	GP_CS1	CSI_MCLK/EIM_CS0#	GPIO4_IO17	F5	EIM_CS0#/CSI_MCLK	
	98	GP_CS2	NAND_READY/EIM_CS1#	GPIO4_IO12	A3	EIM_CS1#/NAND_READY#	
	108	GP_CS3	LCD_CLK/EIM_CS2#	GPIO3_IO00	A8	EIM_CS2#/LCD_CLK	
	16	~RD/~OE	CSI_PIXCLK/EIM_OE	GPIO4_IO18	E5	EIM_OE/CSI_PIXCLK	
	83	~WR	CSI_SYNC/EIM_RW	GPIO4_IO19	F2	EIM_WR/CSI_VSYNC	
	6	~RST_IN	POR	N/A	P8	POR#	
	43	~RST_OUT	POR	N/A	P8	RST_OUT#	Not connected to MPU
	44	~EA	CCM_PMIC_STBY_REQ	N/A	U9	CCM_PMIC_STBY_REQ	
	85	Flash WP	FLASH_WP# (N25Q064)	N/C	3	FLASH_WP#	Not connected to MPU
	72	ALE/~TS	SNVS_PMIC_ON_REQ	N/A	T9	SNVS_PMIC_ON_REQ	
System Bus	26	A0	CSI_DATA00/EIM_AD0	GPIO4_IO21	E4	EIM_AD0/CSIDATA00	
	35	A1	CSI_DATA01/EIM_AD1	GPIO4_IO22	E3	EIM_AD1CSI_DATA01	
	33	A2	CSI_DATA02/EIM_AD2	GPIO4_IO23	E2	EIM_AD2/CSI_DATA02	
	31	A3	CSI_DATA03/EIM_AD3	GPIO4_IO24	E1	EIM_AD3/CSI_DATA03	
	28	A4	CSI_DATA04/EIM_AD4	GPIO4_IO25	D4	EIM_AD4/CSI_DATA04	
	109	A5	CSI_DATA05/EIM_AD5	GPIO4_IO26	D3	EIM_AD5/CSI_DATA05	
	111	A6	CSI_DATA06/EIM_AD6	GPIO4_IO27	D2	EIM_AD6/CSI_DATA06	
	113	A7	CSI_DATA07/EIM_AD7	GPIO4_IO28	D1	EIM_AD7/CSI_DATA07	
	10	A8	N/C			N/A	
	12	A9	N/C			N/A	
	18	A10	N/C			N/A	
	14	A11	N/C			N/A	
	37	A12	N/C			N/A	
	5	A13	N/C			N/A	
	11	A14	N/C			N/A	
	9	A15	N/C			N/A	
	7	A16	N/C			N/A	
	13	A17	N/C			N/A	
	97	A18	N/C			N/A	
	17	A19	N/C			N/A	
	15	A20	N/C			N/A	
	104	A21	N/C			N/A	
	29	D0	LCD_DATA08/EIM_DATA0	GPIO3_IO13	B11	EIM_DATA0/LCD_DATA08	
	27	D1	LCD_DATA09/EIM_DATA1	GPIO3_IO14	A11	EIM_DATA1/LCD_DATA09	
	25	D2	LCD_DATA10/EIM_DATA2	GPIO3_IO15	E12	EIM_DATA2/LCD_DATA10	
	22	D3	LCD_DATA11/EIM_DATA3	GPIO3_IO16	D12	EIM_DATA3/LCD_DATA11	
	23	D4	LCD_DATA12/EIM_DATA4	GPIO3_IO17	C12	EIM_DATA4/LCD_DATA12	
	21	D5	LCD_DATA13/EIM_DATA5	GPIO3_IO18	B12	EIM_DATA5/LCD_DATA13	
	19	D6	LCD_DATA14/EIM_DATA6	GPIO3_IO19	A12	EIM_DATA6/LCD_DATA14	
	20	D7	LCD_DATA15/EIM_DATA7	GPIO3_IO20	D13	EIM_DATA7/LCD_DATA08	
	8	D8	LCD_DATA16/EIM_DATA8	GPIO3_IO21	C13	EIM_DATA8/LCD_DATA08	
	24	D9	LCD_DATA17/EIM_DATA9	GPIO3_IO22	B13	EIM_DATA9/LCD_DATA08	
	34	D10	LCD_DATA18/EIM_DATA10	GPIO3_IO23	A13	EIM_DATA10/LCD_DATA08	

	70	D11	LCD_DATA19/EIM_DATA11	GPIO3_IO24	D14	EIM_DATA11/LCD_DATA08
	77	D12	LCD_DATA20/EIM_DATA12	GPIO3_IO25	C14	EIM_DATA12/LCD_DATA08
	81	D13	LCD_DATA21/EIM_DATA13	GPIO3_IO26	B14	EIM_DATA13/LCD_DATA08
	84	D14	LCD_DATA22/EIM_DATA14	GPIO3_IO27	A14	EIM_DATA14/LCD_DATA08
	86	D15	LCD_DATA23/EIM_DATA15	GPIO3_IO28	B16	EIM_DATA15/LCD_DATA08
SDIO	50	MMC/SD 4-Bit DA0	NAND_DATA00/SD2_DATA0	GPIO4_IO02	D7	SD2_DATA0/NAND_DATA00
	51	MMC/SD 4-Bit CMD	NAND_WE#/SD2_CMD	GPIO4_IO01	C8	SD2_CMD/NAND_WE#
	54	MMC/SD 4-Bit CLK	NAND_RE#/SD2_CLK	GPIO4_IO00	D8	SD2_CLK/NAND_RE#
	55	MMC/SD 4-Bit DA1	NAND_DATA01/SD2_DATA1	GPIO4_IO03	B7	SD2_DATA1/NAND_DATA01
	56	MMC/SD 4-Bit DA2	NAND_DATA02/SD2_DATA2	GPIO4_IO04	A7	SD2_DATA2/NAND_DATA02
	57	MMC/SD 4-Bit DA3	NAND_DATA03/SD2_DATA3	GPIO4_IO05	D6	SD2_DATA3/NAND_DATA03
	42	SD_Card_Detect	NAND_WP#	GPIO4_IO11	D5	GPIO4_IO11/NAND_WP#
USB	45	Vbus	N/C			USB_OTG_VBUS connects to OTG1 and OT
	60	USB Device -	HSD2- (FSUSB43L10x)	N/C	4	USB_OTG1_DN
	61	USB Device +	HSD2+ (FSUSB43L10x)	N/C	3	USB_OTG1_DP
	64	USB Host A+	USB_OTG2_DP	N/A	U13	USB_OTG2_DP
	66	USB Host A-	USB_OTG2_DN	N/A	T13	USB_OTG2_DN
	65	USB Host B+	HSD1+ (FSUSB43L10x)	N/C	1	N/A
	67	USB Host B-	HSD1- (FSUSB43L10x)	N/C	2	N/A
POWER/GND	3	3.3VCC	3.3V_VCC	N/A		3.3VCC
	4	3.3VCC	3.3V_VCC	N/A		3.3VCC
	141	3.3VCC	3.3V_VCC	N/A		3.3VCC
	142	3.3VCC	3.3V_VCC	N/A		3.3VCC
	1	GND	GND	N/A		GND
	2	GND	GND	N/A		GND
	52	GND	GND	N/A		GND
	53	GND	GND	N/A		GND
	58	GND	GND	N/A		GND
	59	GND	GND	N/A		GND
	62	GND	GND	N/A		GND
	63	GND	GND	N/A		GND
	68	GND	GND	N/A		GND
	69	GND	GND	N/A		GND
	143	GND	GND	N/A		GND
	144	GND	GND	N/A		GND
	119	VSTBY	3.3V_STBY	N/A		VBAT(3.0v)
	118	ALT_VCC	USB_OTGx_VBUS (Optional)	N/A	T12/U12	5.0VCC
	101	AV_VCC	VDD_SNV5_IN (Optional)	N/A	P12	VDD_SNV5_IN
	99	V_REF	ADC_VREFH (Optional)	N/A	M13	ADC_VREFH
JTAG/GPIO	139	JTAG_TCK	JTAG_TCK (Optional)	GPIO1_IO14	M14	JTAG_TCK
	137	JTAG_TDI	JTAG_TDI (Optional)	GPIO1_IO13	N16	JTAG_TDI
	138	JTAG_TDO	JTAG_TDO (Optional)	GPIO1_IO12	N15	JTAG_TDO
	140	JTAG_TMS	JTAG_TMS (Optional)	GPIO1_IO11	P14	JTAG_TMS
	112	JTAG_TRST	JTAG_TRST (Optional)	GPIO1_IO15	N14	JTAG_TRST#
I2C	116	LOCAL1W/SCL	GPIO1_IO02/I2C1_SCL	GPIO1_IO02	L14	I2C1_SCL/OTG2_PWR/GPIO1_IO2
	88	SDA	GPIO1_IO03/I2C1_SDA	GPIO1_IO03	L17	I2C1_SDA/OTG2_OC/GPIO1_IO3
ETH/MAGNETICS	89	LED_LINK/CFG_1	LED0/NWAYEN (KSZ8081)	N/A	30	LED_LINK

	90	LED_RX/CFG_2	LED1/SPEED (KSZ8081)	N/A	31	LED_ACT
	94	Ethernet_Rx-	RXM (KSZ8081)	N/A	4	MDI_RX-
	92	Ethernet_Rx+	RXP (KSZ8081)	N/A	5	MDI_RX+
	93	Ethernet_Tx-	TXN (KSZ8081)	N/A	6	MDI_TX-
	91	Ethernet_Tx+	TXP (KSZ8081)	N/A	7	MDI_TX+
SPI	122	SPI_MI	ENET2_TX_CLK/SPI4_MISO	GPIO2_IO14	D17	SPI4_MISO/ENET2_TX_CLK
	121	SPI_MO	ENET2_TX_EN/SPI4_MOSI	GPIO2_IO13	B15	SPI4_MOSI/ENET2_TX_EN
	120	SPI_SCK	ENET2_TX_DATA1/SPI4_SCLK	GPIO2_IO12	A16	SPI4_SCLK/ENET2_TX_DATA1
	123	SPI_CS0	ENET2_RX_EN	GPIO2_IO10	B17	GPIO2_IO10/ENET2_RX_EN
	124	SPI_CS1	ENET2_TX_DATA0	GPIO2_IO11	A15	GPIO2_IO11/ENET2_TX_DATA0
	110	SPI_CS2	LCD_DATA04	GPIO3_IO09	C10	GPIO3_IO9/LCD_DATA04
SERIAL PORTS	71	COMA_RXD	UART3_RX_DATA	GPIO1_IO25	H16	UART3_RXD
	73	COMA_TXD	UART3_TX_DATA	GPIO1_IO24	H17	UART3_TXD
	38	COMB_RXD	UART2_RX_DATA	GPIO1_IO21	J16	UART2_RXD
	36	COMB_TXD	UART2_TX_DATA	GPIO1_IO20	J17	UART2_TXD
	82	COMB_RTS/GPIO	UART2_CTS_B	GPIO1_IO22	J15	CAN2_RX/UART2_RTS
	78	COMB_CTS/GPIO	UART2_RTS_B	GPIO1_IO23	H14	CAN2_TX/UART2_CTS
	103	COMC_RXD_	UART1_RX_DATA	GPIO1_IO17	K16	UART1_RXD
	102	COMC_TXD	UART1_TX_DATA	GPIO1_IO16	K14	UART1_TXD
	107	COMC_DSR/GPIO	NAND_DATA05	GPIO4_IO07	B6	GPIO4_IO7/NAND_DATA05
	106	COMC_DTR/GPIO	NAND_DATA06	GPIO4_IO08	A6	GPIO4_IO8/NAND_DATA06
	76	COMC_RI/GPIO	NAND_DATA07	GPIO4_IO09	A5	GPIO4_IO9/NAND_DATA07
	30	COMC_DCD/GPIO	NAND_DATA04	GPIO4_IO06	C6	GPIO4_IO6/NAND_DATA04
	39	COMC_RTS/GPIO	UART1_CTS_B	GPIO1_IO18	K15	UART1_RTS
	79	COMC_CTS/GPIO	UART1_RTS_B	GPIO1_IO19	J14	UART1_CTS
	48	COMD TX	UART4_TX_DATA	GPIO1_IO28	G17	I2C1_SCL/UART4_TXD
	49	COMD RX	UART4_RX_DATA	GPIO1_IO29	G16	I2C1_SDA/UART4_RXD
Debug	46	COME RX	UART5_RX_DATA	GPIO1_IO31	G13	I2C2_SDA/UART5_RXD
Debug	47	COME TX	UART5_TX_DATA	GPIO1_IO30	F17	I2C2_SCL/UART5_TXD
GPIO	40	GPIO0	GPIO1_IO00/OTG1_ID	GPIO1_IO00	K13	OTG1_ID/GPIO1_IO0
IRQ	75	GPIO1	LCD_VSYNC	GPIO3_IO03	C9	GPIO3_IO3/LCD_VSYNC
IRQ	32	GPIO2	LCD_RESET	GPIO3_IO04	E9	GPIO3_IO4/LCD_RESET
	117	GPIO3	GPIO1_IO04/OTG1_PWR	GPIO1_IO04	M16	OTG1_PWR/GPIO1_IO04
	127	GPIO4	GPIO1_IO05/OTG2_ID	GPIO1_IO05	M17	OTG2_ID/GPIO1_IO05
A/D	129	GPIO5	GPIO1_IO06/ADC_IN6	GPIO1_IO06	K17	ADC_IN6/GPIO1_IO06
A/D	130	GPIO6	GPIO1_IO07/ADC_IN7	GPIO1_IO07	L16	ADC_IN7/GPIO1_IO07
A/D	131	GPIO7	GPIO1_IO08/ADC_IN8	GPIO1_IO08	N17	ADC_IN8/GPIO1_IO08
A/D	132	GPIO8	GPIO1_IO09/ADC_IN9	GPIO1_IO09	M15	ADC_IN9/GPIO1_IO09
SPI	133	GPIO9	NAND_CLE/SPI3_MISO	GPIO4_IO15	A4	SPI3_MISO/NAND_CLE
SPI	134	GPIO10	NAND_CE1#/SPI3_MOSI	GPIO4_IO14	B5	SPI3_MOSI/NAND_CE1#
SPI	135	GPIO11	NAND_CE0#/SPI3_SCLK	GPIO4_IO13	C5	SPI3_SCLK/NAND_CE0#
SPI	136	GPIO12	NAND_ALE/SPI3_CS1#	GPIO4_IO10	B4	SPI3_CS1#/NAND_ALE
SPI	105	GPIO13	GPIO1_IO01/OTG1_OC	GPIO1_IO01	L15	OTG1_OC/GPIO1_IO01
Cik/PWM	114	GPIO14	LCD_DATA00/PWM1_OUT	GPIO3_IO05	B9	PWM1_OUT/LCD_DATA00
Cik/PWM	115	GPIO15	LCD_DATA01/PWM2_OUT	GPIO3_IO06	A9	PWM2_OUT/LCD_DATA01
BOOT OPTIONS	41	BOOT_OPTION1	LCD_DATA05	GPIO3_IO10	B10	GPIO3_IO10/LCD_DATA05
	74	BOOT_OPTION2	LCD_DATA06	GPIO3_IO11	A10	GPIO3_IO11/LCD_DATA06

CAN	96	CANTX	UART3_CTS_B/CAN1_TX	GPIO1_IO26	H15	CAN1_TX/UART3_CTS
	95	CANRX	UART3_RTS_B/CAN1_RX	GPIO1_IO27	G14	CAN1_RX/UART3_RTS
Audio	87	Audio SCLK	JTAG_TDI/I2S2_BCLK	GPIO1_IO13	N16	I2S2_BCLK/JTAG_TDI
	80	Audio LRCK/TF	JTAG_TDO/I2S2_SYNC	GPIO1_IO12	N15	I2S2_SYNC/JTAG_TDO
	125	Audio SDIN	JTAG_TRST/I2S2_TXD	GPIO1_IO15	N14	I2S2_TXD/JTAG_TRST#
	126	Audio SDOOUT	JTAG_TCK/I2S2_RXD	GPIO4_IO14	M14	I2S2_RXD/JTAG_TCK
	128	Audio RF	JTAG_TMS/I2S2_MCLK	GPIO1_IO11	P14	I2S2_MCLK/JTAG_TMS